



## **Cisco Nexus 9000 Series NX-OS Command Reference (Configuration Commands), Release 7.0(3)I6(1)**

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**N Commands 2877**

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| no                                  | 2929 |      |
| no                                  | 2930 |      |
| no                                  | 2933 |      |
| no                                  | 2938 |      |
| no                                  | 2942 |      |
| no                                  | 2945 |      |
| no                                  | 2948 |      |
| no                                  | 2952 |      |
| no                                  | 2955 |      |
| no                                  | 2958 |      |
| no                                  | 2961 |      |
| no                                  | 2963 |      |
| no                                  | 2964 |      |
| no                                  | 2965 |      |
| no                                  | 2966 |      |
| no                                  | 2967 |      |
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**CHAPTER 16**
**O Commands 3003**

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**CHAPTER 21**
**T Commands 4093**

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**CHAPTER 22**
**U Commands 4293**

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## Preface

This preface includes the following sections:

- [Audience, on page cxxxı](#)
- [Documentation Conventions, on page cxxxı](#)
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- [Communications, Services, and Additional Information, on page cxxxıı](#)

## Audience

This publication is for network administrators who install, configure, and maintain Cisco Nexus switches.

## Documentation Conventions

Command descriptions use the following conventions:

| Convention    | Description   |
|---------------|---|
| <b>bold</b>   | Bold text indicates the commands and keywords that you enter literally as shown.  |
| <i>Italic</i> | Italic text indicates arguments for which the user supplies the values.   |
| [x]           | Square brackets enclose an optional element (keyword or argument).  |
| [x   y]       | Square brackets enclosing keywords or arguments separated by a vertical bar indicate an optional choice.  |
| {x   y}       | Braces enclosing keywords or arguments separated by a vertical bar indicate a required choice.  |
| [x {y   z}]   | Nested set of square brackets or braces indicate optional or required choices within optional or required elements. Braces and a vertical bar within square brackets indicate a required choice within an optional element. |
| variable      | Indicates a variable for which you supply values, in context where italics cannot be used.  |

| Convention | Description   |
|------------|---|
| string     | A nonquoted set of characters. Do not use quotation marks around the string or the string will include the quotation marks. |

Examples use the following conventions:

| Convention                  | Description   |
|-----------------------------|---|
| <code>screen font</code>    | Terminal sessions and information the switch displays are in screen font.                                 |
| <b>boldface screen font</b> | Information you must enter is in boldface screen font.  |
| <i>italic screen font</i>   | Arguments for which you supply values are in italic screen font.  |
| <>                          | Nonprinting characters, such as passwords, are in angle brackets.   |
| [ ]                         | Default responses to system prompts are in square brackets.   |
| !, #                        | An exclamation point (!) or a pound sign (#) at the beginning of a line of code indicates a comment line. |

## Documentation Feedback

To provide technical feedback on this document, or to report an error or omission, please send your comments to [. We appreciate your feedback.](#)

## Communications, Services, and Additional Information

- To receive timely, relevant information from Cisco, sign up at [Cisco Profile Manager](#).
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- To discover and browse secure, validated enterprise-class apps, products, solutions and services, visit [Cisco Marketplace](#).
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- To find warranty information for a specific product or product family, access [Cisco Warranty Finder](#).

### Cisco Bug Search Tool

[Cisco Bug Search Tool](#) (BST) is a web-based tool that acts as a gateway to the Cisco bug tracking system that maintains a comprehensive list of defects and vulnerabilities in Cisco products and software. BST provides you with detailed defect information about your products and software.



## Notice

---

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# Notice



---

**Warning**

This document should be used only as a glossary reference for possible commands. The listing of a command in this document does not guarantee that the command is available or supported for your platform or application.

The command information in this reference document is auto-generated from the NX-OS source code. While we attempt to manually remove unsupported, deprecated, or internal-use commands, such commands may occasionally appear in this document. Also, with the large variety of hardware platform combinations using NX-OS software, some listed commands may not be applicable or recommended for a specific platform. Platform-based dependency information is not provided in this command reference.

We strongly encourage you to refer to the configuration guides for appropriate commands to configure and operate a feature. Command limitations, restrictions, and recommendations are documented only in the configuration guides. When in doubt, please consult your Cisco representative.

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# aaa accounting default

```
[no] aaa accounting default { group <s0> [ <s1> [ <s2> [ <s3> [ <s4> [ <s5> [ <s6> [ <s7> ] ] ] ] ] ] ] [ local1
| none ] | local [ none1 ] | none2 }
```

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults       |  |
| aaa                | Configure aaa functions                               |  |
| accounting         | Configure accounting methods                          |  |
| default            | Configure default methods                             |  |
| group              | Specify server groups to redirect the accounting logs |  |
| s0                 | Server group name                                     |  |
| s1                 | (Optional) Server group name                          |  |
| s2                 | (Optional) Server group name                          |  |
| s3                 | (Optional) Server group name                          |  |
| s4                 | (Optional) Server group name                          |  |
| s5                 | (Optional) Server group name                          |  |
| s6                 | (Optional) Server group name                          |  |
| s7                 | (Optional) Server group name                          |  |
| none               | (Optional) No accounting                              |  |
| none1              | (Optional) No accounting                              |  |
| none2              | No accounting   |  |
| local              | Use local accounting                                  |  |
| local1             | (Optional) Use local accounting                       |  |

## Command Mode

- /exec/configure

# aaa accounting dot1x default group

[no] aaa accounting dot1x default group <grp\_name> +

## Syntax Description

| Syntax Description |                              |
|--------------------|------------------------------|
| aaa                | Configure aaa functions      |
| accounting         | Configure accounting methods |
| dot1x              | accounting methods for dot1x |
| default            | default aaa methods          |
| <i>grp_name</i>    | server group name            |

## Command Mode

- /exec/configure

# aaa accounting onep default group

[no] aaa accounting onep default group <grp\_name> +

## Syntax Description

|                           |                 |                              |
|---------------------------|-----------------|------------------------------|
| <b>Syntax Description</b> | aaa             | Configure aaa functions      |
|                           | accounting      | configure accounting methods |
|                           | <i>grp_name</i> | server group name            |

## Command Mode

- /exec/configure

# aaa authentication dot1x default group

[no] aaa authentication dot1x default group <grp\_name> +

## Syntax Description

|                           |                 |                                  |
|---------------------------|-----------------|----------------------------------|
| <b>Syntax Description</b> | aaa             | Configure aaa functions          |
|                           | authentication  | Configure authentication methods |
|                           | <i>grp_name</i> | server group name                |

## Command Mode

- /exec/configure

# aaa authentication login ascii-authentication

[no] aaa authentication login ascii-authentication

## Syntax Description

| Syntax Description |                      |   |
|--------------------|----------------------|---|
|                    | no                   | (Optional) Negate a command or set its defaults |
|                    | aaa                  | Configure aaa functions                         |
|                    | authentication       | Configure authentication methods                |
|                    | login                | Configure methods for login                     |
|                    | ascii-authentication | enable ascii authentication                     |

## Command Mode

- /exec/configure



## aaa authentication login console

```
[no] aaa authentication login console { group <s0> [ { local1 | none | <s1> [ { local1 | none | <s2> [ { local1 | none | <s3> [ { local1 | none | <s4> [ { local1 | none | <s5> [ { local1 | none | <s6> [ { local1 | none | <s7> [ { local1 | none } ] ] ] ] ] ] ] ] ] ] ] ] ] ] ] | local | none }
```

### Syntax Description

#### Syntax Description

|                |   |
|----------------|---|
| no             | (Optional) Negate a command or set its defaults |
| aaa            | Configure aaa functions                         |
| authentication | Configure authentication methods                |
| login          | Configure methods for login                     |
| console        | Configure console methods                       |
| group          | Specify server groups                           |
| s0             | Server group name                               |
| none           | (Optional) No authentication                    |
| s1             | (Optional) Server group name                    |
| none           | (Optional) No authentication                    |
| s2             | (Optional) Server group name                    |
| none           | (Optional) No authentication                    |
| s3             | (Optional) Server group name                    |
| none           | (Optional) No authentication                    |
| s4             | (Optional) Server group name                    |
| none           | (Optional) No authentication                    |
| s5             | (Optional) Server group name                    |
| none           | (Optional) No authentication                    |
| s6             | (Optional) Server group name                    |
| none           | (Optional) No authentication                    |
| s7             | (Optional) Server group name                    |
| none           | (Optional) No authentication                    |
| local          | Use local username authentication               |
| local1         | (Optional) Use local username authentication    |

---

|      |                   |
|------|-------------------|
| none | No authentication |
|------|-------------------|

---

**Command Mode**

- /exec/configure

## aaa authentication login default

```
[no] aaa authentication login default { group <s0> [ { local1 | none | <s1> [ { local1 | none | <s2> [ { local1 | none | <s3> [ { local1 | none | <s4> [ { local1 | none | <s5> [ { local1 | none | <s6> [ { local1 | none | <s7> [ { local1 | none } ] ] ] ] ] ] ] ] ] ] ] ] ] ] ] ] | local | none }
```

### Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| aaa                |            | Configure aaa functions              |
| authentication     |            | Configure authentication methods     |
| login              |            | Configure methods for login          |
| default            |            | Configure default methods            |
| group              |            | Specify server groups                |
| <i>s0</i>          |            | Server group name                    |
| none               | (Optional) | No authentication                    |
| <i>s1</i>          | (Optional) | Server group name                    |
| none               | (Optional) | No authentication                    |
| <i>s2</i>          | (Optional) | Server group name                    |
| none               | (Optional) | No authentication                    |
| <i>s3</i>          | (Optional) | Server group name                    |
| none               | (Optional) | No authentication                    |
| <i>s4</i>          | (Optional) | Server group name                    |
| none               | (Optional) | No authentication                    |
| <i>s5</i>          | (Optional) | Server group name                    |
| none               | (Optional) | No authentication                    |
| <i>s6</i>          | (Optional) | Server group name                    |
| none               | (Optional) | No authentication                    |
| <i>s7</i>          | (Optional) | Server group name                    |
| none               | (Optional) | No authentication                    |
| local              |            | Use local username authentication    |
| local1             | (Optional) | Use local username authentication    |

---

|      |                   |
|------|-------------------|
| none | No authentication |
|------|-------------------|

---

**Command Mode**

- /exec/configure

# aaa authentication login default fallback error local

[no] aaa authentication login { default | console } fallback error local

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults   |
| aaa                |            | Configure aaa functions  |
| authentication     |            | Configure authentication methods   |
| login              |            | Configure methods for login  |
| default            |            | Configure default methods  |
| console            |            | Configure console methods  |
| fallback           |            | Configure fallback behavior  |
| error              |            | Fallback in case all AAA servers configured for remote authentication are unreachable (Authentication error) |
| local              |            | Fallback to local authentication   |

## Command Mode

- /exec/configure

# aaa authentication login enable

[no] aaa authentication login { mschap | mschapv2 | chap } enable

## Syntax Description

| Syntax Description | no             | (Optional) Negate a command or set its defaults |
|--------------------|----------------|---|
|                    | aaa            | Configure aaa functions                         |
|                    | authentication | Configure authentication methods                |
|                    | login          | Configure methods for login                     |
|                    | mschap         | MSCHAP authentication for login                 |
|                    | mschapv2       | MSCHAP V2 authentication for login              |
|                    | chap           | CHAP authentication for login                   |
|                    | enable         | enable the authentication for login             |

## Command Mode

- /exec/configure

# aaa authentication login error-enable

[no] aaa authentication login error-enable

## Syntax Description

| Syntax Description |            |   |
|--------------------|------------|---|
| no                 | (Optional) | Negate a command or set its defaults              |
| aaa                |            | Configure aaa functions                           |
| authentication     |            | Configure authentication methods                  |
| login              |            | Configure methods for login                       |
| error-enable       |            | enable display of error message on login failures |

## Command Mode

- /exec/configure

# aaa authentication login invalid-username-log

[no] aaa authentication login invalid-username-log

## Syntax Description

| Syntax Description   |            |                                      |
|----------------------|------------|--------------------------------------|
| no                   | (Optional) | Negate a command or set its defaults |
| aaa                  |            | Configure aaa functions              |
| authentication       |            | Configure authentication methods     |
| login                |            | Configure methods for login          |
| invalid-username-log | enable     | invalid username log                 |

## Command Mode

- /exec/configure



# aaa authentication login password-aging enable

[no] aaa authentication login password-aging enable

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| aaa                | Configure aaa functions                         |  |
| authentication     | Configure authentication methods                |  |
| login              | Configure methods for login                     |  |
| password-aging     | password-aging authentication for login         |  |
| enable             | enable password-aging notification              |  |

## Command Mode

- /exec/configure

# aaa authentication onep default group

[no] aaa authentication onep default group <grp\_name> +

## Syntax Description

|                           |                 |                                  |
|---------------------------|-----------------|----------------------------------|
| <b>Syntax Description</b> | aaa             | Configure aaa functions          |
|                           | authentication  | Configure authentication methods |
|                           | <i>grp_name</i> | server group name                |

## Command Mode

- /exec/configure

# aaa authentication rejected

[no] aaa authentication rejected

## Syntax Description

| Syntax Description |                |                                      |
|--------------------|----------------|--------------------------------------|
|                    | no             | Negate a command or set its defaults |
|                    | aaa            | Configure aaa functions              |
|                    | authentication | Configure authentication methods     |
|                    | rejected       | Set max number of fail attempts      |

## Command Mode

- /exec/configure

# aaa authentication rejected in ban

aaa authentication rejected <i1> in <i2> ban <i3>

## Syntax Description

| Syntax Description |                                  |  |
|--------------------|----------------------------------|--|
| aaa                | Configure aaa functions          |  |
| authentication     | Configure authentication methods |  |
| rejected           | Set max number of fail attempts  |  |
| <i>i1</i>          | Fail attempts max value          |  |
| in                 | Watch period for fail attempts   |  |
| <i>i2</i>          | Time period in seconds           |  |
| ban                | Block time period                |  |
| <i>i3</i>          | Time period in seconds           |  |

## Command Mode

- /exec/configure

## aaa authorization commands console

```
[no] aaa authorization { commands | config-commands } console { group <s0> [ { local | none | <s1> [ { local | none | <s2> [ { local | none | <s3> [ { local | none | <s4> [ { local | none | <s5> [ { local | none | <s6> [ { local | none | <s7> [ { local | none } ] ] ] ] ] ] ] ] ] ] ] ] ] ] ] | local | none }
```

### Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults     |
| aaa                |            | Configure aaa functions                  |
| authorization      |            | Configure authorization methods          |
| commands           |            | Authorization for all exec-mode commands |
| config-commands    |            | Authorization for config commands        |
| console            |            | Configure methods console                |
| group              |            | Specify server groups                    |
| s0                 |            | Server group name                        |
| s1                 | (Optional) | Server group name                        |
| s2                 | (Optional) | Server group name                        |
| s3                 | (Optional) | Server group name                        |
| s4                 | (Optional) | Server group name                        |
| s5                 | (Optional) | Server group name                        |
| s6                 | (Optional) | Server group name                        |
| s7                 | (Optional) | Server group name                        |
| local              | (Optional) | Use local RBACL based authorization      |
| none               | (Optional) | No authorization                         |

### Command Mode

- /exec/configure

## aaa authorization commands default

```
[no] aaa authorization { commands | config-commands } default { group <s0> [ { local | none | <s1> [ { local | none | <s2> [ { local | none | <s3> [ { local | none | <s4> [ { local | none | <s5> [ { local | none | <s6> [ { local | none | <s7> [ { local | none } ] ] ] ] ] ] ] ] ] ] ] ] ] ] ] | local | none }
```

### Syntax Description

#### Syntax Description

|                 |   |
|-----------------|---|
| no              | (Optional) Negate a command or set its defaults |
| aaa             | Configure aaa functions                         |
| authorization   | Configure authorization methods                 |
| commands        | Authorization for all exec-mode commands        |
| config-commands | Authorization for config commands               |
| default         | Configure default methods                       |
| group           | Specify server groups                           |
| s0              | Server group name                               |
| s1              | (Optional) Server group name                    |
| s2              | (Optional) Server group name                    |
| s3              | (Optional) Server group name                    |
| s4              | (Optional) Server group name                    |
| s5              | (Optional) Server group name                    |
| s6              | (Optional) Server group name                    |
| s7              | (Optional) Server group name                    |
| local           | (Optional) Use local RBACL based authorization  |
| none            | (Optional) No authorization                     |

### Command Mode

- /exec/configure

# aaa authorization cts default group

[no] aaa authorization cts default group <grp\_name> +

## Syntax Description

| Syntax Description |  |                                 |
|--------------------|--|---------------------------------|
| aaa                |  | Configure aaa functions         |
| authorization      |  | Configure authorization methods |
| cts                |  | authorization methods for cts   |
| default            |  | default aaa methods             |
| group              |  | server group                    |
| <i>grp_name</i>    |  | server group name               |

## Command Mode

- /exec/configure

## aaa authorization ssh default group

```
[no] aaa authorization { ssh-publickey | ssh-certificate } default { group <s0> [ { local1 | <s1> [ { local1 | <s2> [ { local1 | <s3> [ { local1 | <s4> [ { local1 | <s5> [ { local1 | <s6> [ { local1 | <s7> [ { local1 } ] ] ] ] ] ] ] ] ] ] ] ] ] ] ] ] ] ] | local }
```

### Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| aaa                |            | Configure aaa functions              |
| authorization      |            | Configure authorization methods      |
| ssh-publickey      |            | Configure ssh publickey              |
| ssh-certificate    |            | Configure ssh certificate            |
| default            |            | Configure default ssh methods        |
| group              |            | Specify server groups                |
| s0                 |            | Server group name                    |
| s1                 | (Optional) | Server group name                    |
| s2                 | (Optional) | Server group name                    |
| s3                 | (Optional) | Server group name                    |
| s4                 | (Optional) | Server group name                    |
| s5                 | (Optional) | Server group name                    |
| s6                 | (Optional) | Server group name                    |
| s7                 | (Optional) | Server group name                    |
| local              |            | Use local username authentication    |
| local1             | (Optional) | Use local username authentication    |

### Command Mode

- /exec/configure



# aaa group server ldap

[no] aaa group server ldap <s0>

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <b>no</b> (Optional) Negate a command or set its defaults |
|                           | <b>aaa</b> Configure aaa functions                        |
|                           | <b>group</b> Configure aaa server group                   |
|                           | <b>server</b> Configure aaa server group                  |
|                           | <b>ldap</b> LDAP server group name                        |
|                           | <b>s0</b> LDAP server group name                          |

## Command Mode

- /exec/configure

## aaa group server radius

[no] aaa group server radius <s0>

### Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| aaa                | Configure aaa functions                         |
| group              | Configure aaa server group                      |
| server             | Configure aaa server group                      |
| radius             | RADIUS server group name                        |
| s0                 | RADIUS server group name                        |

### Command Mode

- /exec/configure

## aaa group server tacacs

[no] aaa group server tacacs <s0>

### Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| aaa                | Configure aaa functions                         |
| group              | Configure aaa server group                      |
| server             | Configure aaa server group                      |
| tacacs             | TACACS+ server group name                       |
| s0                 | TACACS+ server group name                       |

### Command Mode

- /exec/configure

# aaa test-authentication

[no] aaa test-authentication

## Syntax Description

| Syntax Description  |   |
|---------------------|---|
| no                  | (Optional) Negate a command or set its defaults |
| aaa                 | Configure aaa functions                         |
| test-authentication | Test aaa authentication                         |

## Command Mode

- /exec/configure

# aaa test-radius-authentication

[no] aaa test-radius-authentication

## Syntax Description

| Syntax Description         |   |
|----------------------------|---|
| no                         | (Optional) Negate a command or set its defaults |
| aaa                        | Configure aaa functions                         |
| test-radius-authentication | Test aaa radius authentication                  |

## Command Mode

- /exec/configure

# aaa user default-role

[no] aaa user default-role

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults              |
| aaa                | Configure aaa functions                                      |
| user               | Remotely authenticated user                                  |
| default-role       | Default role assigned by aaa-admin for remote authentication |

## Command Mode

- /exec/configure

# abort

abort

## Syntax Description

---

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <code>abort</code> Exit region configuration mode, aborting changes |
|---------------------------|---|

---

## Command Mode

- /exec/configure/spanning-tree/mst/configuration

# abort

abort

## Syntax Description

---

### Syntax Description

---

abort abort itd  
session

---

## Command Mode

- /exec/configure/itd-session-device-group



# abort

abort

## Syntax Description

---

### Syntax Description

---

`abort` Abort the current configuration session

---

## Command Mode

- /exec/configure

# abort

abort

## Syntax Description

---

### Syntax Description

---

abort abort plb  
session

---

## Command Mode

- /exec/configure/plb-session-device-group

# absolute-timeout

{ absolute-timeout <i0> | no absolute-timeout [ <i0> ] }

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults   |
| absolute-timeout   |  | Configure absolute timeout             |
| <i>i0</i>          |  | Enter timeout in minutes, 0 to disable |

## Command Mode

- /exec/configure/line

# absolute start

```
{ [ <seqno> ] | no } absolute { start <stime> <sday> <smoth> <syar> [ end <etime> <eday> <emonth>
<eyear> ] | end <etime> <eday> <emonth> <eyear> }
```

## Syntax Description

| Syntax Description |                                      |
|--------------------|--------------------------------------|
| <i>seqno</i>       | (Optional) Sequence number           |
| no                 | Negate a command or set its defaults |
| absolute           | Absolute time and date               |
| start              | Starting time and date               |
| <i>stime</i>       | Starting time                        |
| <i>sday</i>        | Day of the month                     |
| <i>smoth</i>       | Month                                |
| <i>syar</i>        | Year                                 |
| end                | (Optional) Ending time and date      |
| <i>etime</i>       | (Optional) Ending time               |
| <i>eday</i>        | (Optional) Day of the month          |
| <i>emonth</i>      | (Optional) Month                     |
| <i>eyear</i>       | (Optional) Year                      |

## Command Mode

- /exec/configure/timerange

# accept-lifetime month\_a month\_b month\_c month\_d month\_e month\_f month\_g month\_h month\_i month\_j month\_k month\_l duration infinite month\_a month\_b month\_c month\_d month\_e month\_f month\_g month\_h month\_i month\_j month\_k month\_l

```
{ { accept-lifetime [ local ] <stime> { month_a | month_b | month_c | month_d | month_e | month_f | month_g | month_h | month_i | month_j | month_k | month_l } <sday> <syear> { duration <dsec> | infinite | <etime> { month_a | month_b | month_c | month_d | month_e | month_f | month_g | month_h | month_i | month_j | month_k | month_l } <eday> <eyear> } } | { no accept-lifetime [ [ local ] <stime> { month_a | month_b | month_c | month_d | month_e | month_f | month_g | month_h | month_i | month_j | month_k | month_l } <sday> <syear> { duration <dsec> | infinite | <etime> { month_a | month_b | month_c | month_d | month_e | month_f | month_g | month_h | month_i | month_j | month_k | month_l } <eday> <eyear> } ] } }
```

## Syntax Description

### Syntax Description

|                 |   |
|-----------------|---|
| no              | Negate a command or set its defaults        |
| accept-lifetime | Set accept lifetime of key                  |
| local           | (Optional) Specify time in local timezone   |
| <i>stime</i>    | HH:MM:SS Time to start <0-23>:<0-59>:<0-59> |
| <i>etime</i>    | HH:MM:SS Time to end <0-23>:<0-59>:<0-59>   |
| month_a         |   |
| month_b         |   |
| month_c         |   |
| month_d         |   |
| month_e         |   |
| month_f         |   |
| month_g         |   |
| month_h         |   |
| month_i         |   |
| month_j         |   |
| month_k         |   |
| month_l         |   |
| <i>sday</i>     | Day of the month to start                   |

accept-lifetime month\_a month\_b month\_c month\_d month\_e month\_f month\_g month\_h month\_i month\_j month\_k month\_l duration infinite month\_a month\_b month\_c month\_d month\_e month\_f month\_g month\_h month\_i month\_j month\_k month\_l

|              |                           |
|--------------|---------------------------|
| <i>eday</i>  | Day of the month to end   |
| <i>syear</i> | Year to start             |
| <i>eyear</i> | Year to start             |
| duration     | Set key lifetime duration |
| <i>dsec</i>  | Duration in seconds       |
| infinite     | Never Expires             |

### Command Mode

- /exec/configure/keychain-key

# access-class

```
{ access-class <aclname> } | { no access-class [ <aclname-ignore> ] }
```

## Syntax Description

| Syntax Description |                       |  |
|--------------------|-----------------------|--|
|                    | no                    | Negate a command or set its defaults     |
|                    | access-class          | Filter incoming connections based on ACL |
|                    | <i>aclname</i>        | ACL name                                 |
|                    | <i>aclname-ignore</i> | (Optional) ACL name                      |

## Command Mode

- /exe/configure/onep/tls

# access-class

[no] access-class <name> <inout>

## Syntax Description

|                           |                     |   |
|---------------------------|---------------------|---|
| <b>Syntax Description</b> | <b>no</b>           | (Optional) Negate a command or set its defaults |
|                           | <b>access-class</b> | Specify IPv4 access control for packets         |
|                           | <i>name</i>         | List name                                       |
|                           | <i>inout</i>        | Traffic direction                               |

## Command Mode

- /exec/configure/line



# access-list

[no] access-list <acl-name>

## Syntax Description

---

|                           |    |   |
|---------------------------|----|---|
| <b>Syntax Description</b> | no | (Optional) Negate a command or set its defaults |
|---------------------------|----|---|

---

|             |                      |
|-------------|----------------------|
| access-list | ITD access-list name |
|-------------|----------------------|

---

|                 |                   |
|-----------------|-------------------|
| <i>acl-name</i> | ITD user ACL name |
|-----------------|-------------------|

---

## Command Mode

- /exec/configure/itd

# access-list

[no] access-list <acl-name>

## Syntax Description

---

|                           |    |   |
|---------------------------|----|---|
| <b>Syntax Description</b> | no | (Optional) Negate a command or set its defaults |
|---------------------------|----|---|

---

|             |     |                  |
|-------------|-----|------------------|
| access-list | ITD | access-list name |
|-------------|-----|------------------|

---

|                 |     |               |
|-----------------|-----|---------------|
| <i>acl-name</i> | ITD | user ACL name |
|-----------------|-----|---------------|

---

## Command Mode

- /exec/configure/itd

# access-list

[no] access-list <acl-name>

## Syntax Description

|                           |                 |   |
|---------------------------|-----------------|---|
| <b>Syntax Description</b> | no              | (Optional) Negate a command or set its defaults |
|                           | access-list     | PLB access-list name                            |
|                           | <i>acl-name</i> | PLB user ACL name                               |

## Command Mode

- /exec/configure/plb

# access vlan

[no] access vlan <vlan>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| access             | access  |
| vlan               | vlan  |
| <i>vlan</i>        | Vlan  |

## Command Mode

- /exec/configure/smartc /exec/configure/smartc

# action

[no] action { drop [ log ] | forward | redirect <intf> }

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults        |
| action             | Specify the action clause                              |
| drop               | Drop matched packets                                   |
| log                | (Optional) Log matched packets                         |
| forward            | Forward matched packets                                |
| redirect           | Redirect matched packets to the specified interface(s) |
| <i>intf</i>        | Interface traffic is redirected to                     |

## Command Mode

- /exec/configure/vacli

# action

[no] action <label>

## Syntax Description

---

### Syntax Description

**no** Negate a command or set its defaults

---

**action** Configure the actions to be executed

---

*label* Enter the label <num1>[.<num2>] for action order num2 must be 0-9

---

## Command Mode

- /exec/configure/event-manager-applet

# action cli

action <label> cli [ local ] <vsh\_cmd>

## Syntax Description

### Syntax Description

|                |   |
|----------------|---|
| <i>action</i>  | Configure the actions to be executed                                      |
| <i>label</i>   | Enter the label <num1>[.<num2>] for action order num2 must be 0-9         |
| <i>cli</i>     | Configure a VSH CLI action  |
| <i>local</i>   | (Optional) Execute the action in the same card on which the event happens |
| <i>vsh_cmd</i> | Enter the vsh command   |

## Command Mode

- /exec/configure/event-manager-applet

## action counter name value op

action <label> counter name <counter-name> value <counter-value> op <op-val>

### Syntax Description

#### Syntax Description

|                      |   |
|----------------------|---|
| action               | Configure the actions to be executed                                  |
| <i>label</i>         | Enter the label <num1>[.<num2>] for action order num2 must be 0-9     |
| counter              | Specify the name of the counter                                       |
| name                 | Specify the name of the counter                                       |
| <i>counter-name</i>  | Name of the counter   |
| value                | Specify the value to be applied to the counter                        |
| <i>counter-value</i> | Enter an integer value or a \$ prefixed name (parameter substitution) |
| op                   | Specify the operator to be applied                                    |
| <i>op-val</i>        | Enter the value of the operator                                       |

### Command Mode

- /exec/configure/event-manager-applet



# action eem test

action <label> eem test <param>

## Syntax Description

---

### Syntax Description

---

*action* Configure the actions to be executed

---

*label* Enter the label <num1>[.<num2>] for action order num2 must be 0-9

---

*eem* Event Manager command

---

*test* Do test action

---

*param* Test action parameter (dummy value)

---

## Command Mode

- /exec/configure/event-manager-applet

# action event-default

action <label> event-default

## Syntax Description

---

### Syntax Description

---

*action*      Configure the actions to be executed

---

*label*        Enter the label <num1>[.<num2>] for action order num2 must be 0-9

---

*event-default* Do default action for the event

---

## Command Mode

- /exec/configure/event-manager-applet

# action exceptionlog module syserr devid errtype errcode phylayer ports harderror

[no] action <label> exceptionlog module <mod> syserr <syserr> devid <id> errtype <type> errcode <code>  
phylayer <phy> ports <list> harderror <hard> [ { desc <str> } ]

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults                     |
| action             | Configure the actions to be executed                                |
| label              | Enter the label <num1>[.<num2>] for action order num2 must be 0-9   |
| exceptionlog       | Exception log   |
| module             | Enter a module number   |
| mod                | Enter module number (integer value) or a \$ prefixed parameter name |
| syserr             | Enter syserr  |
| syserr             | Enter syserr code (hex value) or a \$ prefixed parameter name       |
| devid              | Enter device id   |
| id                 | Enter device id (integer value) or a \$ prefixed parameter name     |
| errtype            | Enter error type  |
| type               | Error error type (integer value) or a \$ prefixed parameter name    |
| errcode            | Enter error code  |
| code               | Enter error code (hex value) or a \$ prefixed parameter name        |
| phylayer           | Enter phy layer   |
| phy                | Enter phy layer (integer value) or a \$ prefixed parameter name     |
| ports              | Enter failed ports  |
| list               | List of ports. Example: 1,3,7-15                                    |
| harderror          | Irrecoverable error?  |
| hard               | Error sub-category  |
| desc               | (Optional) Enter error description                                  |
| str                | (Optional) Error description  |

## Command Mode

- /exec/configure/event-manager-applet

## action forceshut reset-reason

```
[no] action <label2> forceshut [ { module { <module> | <mod-str> } | <s0> { <santa-cruz-range> | <santa-cruz-string> } } ] reset-reason <reset_reason_string>
```

### Syntax Description

#### Syntax Description

|                            |  |
|----------------------------|--|
| <i>no</i>                  | (Optional) Negate a command or set its defaults                                    |
| <i>action</i>              | Configure the actions to be executed   |
| <i>label2</i>              | Enter the label <num1>[.<num2>] for action order num2 must be 0-9                  |
| <i>forceshut</i>           | Force the entire switch to shut down   |
| <i>module</i>              | (Optional) Optional. Module to be forced to shut down(optional argument)           |
| <i>module</i>              | (Optional) please enter the module number  |
| <i>mod-str</i>             | (Optional) Enter the module number (integer value) or a \$ prefixed parameter name |
| <i>s0</i>                  | (Optional) Optional. Xbar to be forced to shut down(optional argument)             |
| <i>santa-cruz-range</i>    | (Optional) please enter the xbar number  |
| <i>santa-cruz-string</i>   | (Optional) Enter the xbar number (integer value) or a \$ prefixed parameter name   |
| <i>reset-reason</i>        | Shut down (with reset-reason)  |
| <i>reset_reason_string</i> | please enter reset_reason_string in quotes   |

### Command Mode

- /exec/configure/event-manager-applet

## action overbudgetshut

[no] action <label> overbudgetshut [ module { <module> | <mod-str> } ]

### Syntax Description

#### Syntax Description

|                |  |
|----------------|--|
| no             | (Optional) Negate a command or set its defaults                                    |
| action         | Configure the actions to be executed   |
| label          | Enter the label <num1>[.<num2>] for action order num2 must be 0-9                  |
| overbudgetshut | Shut down the specified LCs due to power over budget                               |
| module         | (Optional) Optional. Module to be force-shut(optional arg)                         |
| module         | (Optional) please enter the module number  |
| mod-str        | (Optional) Enter the module number (integer value) or a \$ prefixed parameter name |

### Command Mode

- /exec/configure/event-manager-applet

# action policy-default

action <label> policy-default

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| action             | Configure the actions to be executed                              |
| <i>label</i>       | Enter the label <num1>[.<num2>] for action order num2 must be 0-9 |
| policy-default     | Do default action(s) of the policy being overridden               |

## Command Mode

- /exec/configure/event-manager-applet

## action publish-event sub-system type

```
action <label> publish-event sub-system <sub-system-id> type <event-type> { [ arg1 <data1> ] [ arg2 <data2> ] [ arg3 <data3> ] [ arg4 <data4> ] }
```

### Syntax Description

#### Syntax Description

|                      |   |
|----------------------|---|
| <i>action</i>        | Configure the actions to be executed                                    |
| <i>label</i>         | Enter the label <num1>[.<num2>] for action order num2 must be 0-9       |
| <i>publish-event</i> | Publish an application specific event                                   |
| <i>sub-system</i>    | Sub-system ID to which the application event belongs                    |
| <i>sub-system-id</i> | Sub-system ID value   |
| <i>type</i>          | Event type value  |
| <i>event-type</i>    | Event type value  |
| <i>arg1</i>          | (Optional) User specified data to be passed when the event is published |
| <i>data1</i>         | (Optional) User specified data value                                    |
| <i>arg2</i>          | (Optional) User specified data to be passed when the event is published |
| <i>data2</i>         | (Optional) User specified data value                                    |
| <i>arg3</i>          | (Optional) User specified data to be passed when the event is published |
| <i>data3</i>         | (Optional) User specified data value                                    |
| <i>arg4</i>          | (Optional) User specified data to be passed when the event is published |
| <i>data4</i>         | (Optional) User specified data value                                    |

### Command Mode

- /exec/configure/event-manager-applet



# action reload

[no] action <label> reload [ module { <module> | <mod-str> } ]

## Syntax Description

### Syntax Description

|                |  |
|----------------|--|
| <b>no</b>      | (Optional) Negate a command or set its defaults                                    |
| <b>action</b>  | Configure the actions to be executed   |
| <i>label</i>   | Enter the label <num1>[.<num2>] for action order num2 must be 0-9                  |
| <b>reload</b>  | Reload the system or a specific module   |
| <b>module</b>  | (Optional) Reload a specific module  |
| <i>module</i>  | (Optional) please enter the module number  |
| <i>mod-str</i> | (Optional) Enter the module number (integer value) or a \$ prefixed parameter name |

## Command Mode

- /exec/configure/event-manager-applet

## action snmp-trap

```
action <label> snmp-trap [ intdata1 <integer-data1> ] [ intdata2 <integer-data2> ] [ strdata <string-data> ]
```

### Syntax Description

| Syntax Description         |            |   |
|----------------------------|------------|---|
| <code>action</code>        |            | Configure the actions to be executed                              |
| <code>label</code>         |            | Enter the label <num1>[.<num2>] for action order num2 must be 0-9 |
| <code>snmp-trap</code>     |            | Send  |
| <code>intdata1</code>      | (Optional) | Enter   |
| <code>integer-data1</code> | (Optional) | Integer   |
| <code>intdata2</code>      | (Optional) | Enter   |
| <code>integer-data2</code> | (Optional) | Integer   |
| <code>strdata</code>       | (Optional) | Enter   |
| <code>string-data</code>   | (Optional) | String  |

### Command Mode

- /exec/configure/event-manager-applet

## action syslog msg

action <label> syslog [ priority { <prio> | <prio-str> } ] msg <msg-text>

### Syntax Description

#### Syntax Description

|                 |   |
|-----------------|---|
| <i>action</i>   | Configure the actions to be executed                                  |
| <i>label</i>    | Enter the label <num1>[.<num2>] for action order num2 must be 0-9     |
| <i>syslog</i>   | Generate a syslog message   |
| <i>priority</i> | (Optional) Priority of the syslog message                             |
| <i>prio</i>     | (Optional) Enter the priority   |
| <i>prio-str</i> | (Optional) Enter a valid \$ prefixed name, for parameter substitution |
| <i>msg</i>      | Enter the message for the syslog                                      |
| <i>msg-text</i> | The message text  |

### Command Mode

- /exec/configure/event-manager-applet

# activate

[no] activate

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| activate           | Activate configured virtual service             |

## Command Mode

- /exec/configure/virt-serv

# activate mode-100M

[no] activate mode-100M

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| activate           | Activate new mode                               |
| mode-100M          | Activate mode-100M                              |

## Command Mode

- /exec/configure

# activity-timer

```
{ [ no ] activity-timer <seconds> }
```

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults            |
| activity-timer     | Number of seconds where a dynamic-EID is considered active |
| <i>seconds</i>     | Timeout value in seconds                                   |

## Command Mode

- /exec/configure/lisp-dynamic-eid /exec/configure/vrf/lisp-dynamic-eid

# add cli commands

add cli commands <filename>

## Syntax Description

| Syntax Description |
|--------------------|
| add                |
| cli                |
| commands           |
| <i>filename</i>    |

|     |     |
|-----|-----|
| add | add |
|-----|-----|

|     |     |
|-----|-----|
| cli | cli |
|-----|-----|

|          |          |
|----------|----------|
| commands | commands |
|----------|----------|

|                 |          |
|-----------------|----------|
| <i>filename</i> | filename |
|-----------------|----------|

## Command Mode

- /exec

# additional-paths install backup

[no] additional-paths install backup

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| additional-paths   | Additional paths configuration                  |
| install            | Install backup path                             |
| backup             | Install backup path                             |

## Command Mode

- /exec/configure/router-bgp/router-bgp-af-ipv4 /exec/configure/router-bgp/router-bgp-vrf-af-ipv4



# additional-paths receive

[no] additional-paths receive

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| additional-paths   | Additional paths configuration                  |
| receive            | Additional paths Receive capability             |

## Command Mode

- /exec/configure/router-bgp/router-bgp-af /exec/configure/router-bgp/router-bgp-af-ipv4-mvpn  
/exec/configure/router-bgp/router-bgp-af-ipv6-mvpn /exec/configure/router-bgp/router-bgp-af-vpn4  
/exec/configure/router-bgp/router-bgp-af-vpn6 /exec/configure/router-bgp/router-bgp-af-ipv4-label  
/exec/configure/router-bgp/router-bgp-af-ipv6-label

## additional-paths selection route-map

[no] additional-paths selection route-map <rmap-name>

### Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| additional-paths   | Additional paths configuration                  |  |
| selection          | Additional paths selection                      |  |
| route-map          | Route-map for additional paths selection        |  |
| <i>rmap-name</i>   | Route-map name                                  |  |

### Command Mode

- /exec/configure/router-bgp/router-bgp-af /exec/configure/router-bgp/router-bgp-af-ipv4-mvpn  
/exec/configure/router-bgp/router-bgp-af-ipv6-mvpn /exec/configure/router-bgp/router-bgp-af-vpn4  
/exec/configure/router-bgp/router-bgp-af-vpn6 /exec/configure/router-bgp/router-bgp-af-ipv4-label  
/exec/configure/router-bgp/router-bgp-af-ipv6-label

# additional-paths send

[no] additional-paths send

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| additional-paths   | Additional paths configuration                  |
| send               | Additional paths Send capability                |

## Command Mode

- /exec/configure/router-bgp/router-bgp-af /exec/configure/router-bgp/router-bgp-af-ipv4-mvpn  
/exec/configure/router-bgp/router-bgp-af-ipv6-mvpn /exec/configure/router-bgp/router-bgp-af-vpn4  
/exec/configure/router-bgp/router-bgp-af-vpn6 /exec/configure/router-bgp/router-bgp-af-ipv4-label  
/exec/configure/router-bgp/router-bgp-af-ipv6-label

# address-family ip address port

[no] { address-family | ip address } <ip4> port <portnum> [ protocol <proto> encoding <encoder> ]

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| address-family     | Set destination IP address                      |
| ip                 | Set destination IPv4 address                    |
| address            | IP address                                      |
| port               | Set destination port                            |
| protocol           | (Optional) Set transport protocol               |
| encoding           | (Optional) Set encoding format                  |
| <i>ip4</i>         | Destination IPv4 Address                        |
| <i>portnum</i>     | Destination port                                |
| <i>proto</i>       | (Optional)                                      |
| <i>encoder</i>     | (Optional)                                      |

## Command Mode

- /exec/configure/telemetry/destination-group

# address-family ipv4 labeled-unicast

[no] address-family ipv4 labeled-unicast

## Syntax Description

|                           |                 |   |
|---------------------------|-----------------|---|
| <b>Syntax Description</b> | no              | (Optional) Negate a command or set its defaults |
|                           | address-family  | Configure an address-family                     |
|                           | ipv4            | Configure IPv4 address-family                   |
|                           | labeled-unicast | Configure labeled unicast sub-address-family    |

## Command Mode

- /exec/configure/router-bgp

# address-family ipv4 labeled-unicast

{ [ no | default ] } address-family ipv4 labeled-unicast

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults         |
| default            | (Optional) | Inherit values from a peer template          |
| address-family     |            | Configure an address-family for peer         |
| ipv4               |            | Configure IPv4 address-family                |
| labeled-unicast    |            | Configure labeled unicast sub-address-family |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor /exec/configure/router-bgp/router-bgp-template-neighbor /exec/configure/router-bgp/router-bgp-prefixneighbor

# address-family ipv4 mdt

[no] address-family ipv4 mdt

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| address-family     | Configure an address-family                     |
| ipv4               | Configure IPv4 address-family                   |
| mdt                | Configure Multicast Distribution Tree           |

## Command Mode

- /exec/configure/router-bgp

## address-family ipv4 mdt

{ [ no | default ] } address-family ipv4 mdt

### Syntax Description

| Syntax Description |            |                                       |
|--------------------|------------|---------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults  |
| default            | (Optional) | Inherit values from a peer template   |
| address-family     |            | Configure an address-family           |
| ipv4               |            | Configure IPv4 address-family         |
| mdt                |            | Configure Multicast Distribution Tree |

### Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor /exec/configure/router-bgp/router-bgp-template-neighbor /exec/configure/router-bgp/router-bgp-prefixneighbor



# address-family ipv4 mvpn

[no] address-family ipv4 mvpn

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| address-family     | Configure an address-family                     |
| ipv4               | Configure IPv4 address-family                   |
| mvpn               | Configure Multicast VPN                         |

## Command Mode

- /exec/configure/router-bgp

# address-family ipv4 mvpn

{ [ no | default ] } address-family ipv4 mvpn

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| default            | (Optional) | Inherit values from a peer template  |
| address-family     |            | Configure an address-family          |
| ipv4               |            | Configure IPv4 address-family        |
| mvpn               |            | Configure Multicast VPN              |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor /exec/configure/router-bgp/router-bgp-template-neighbor /exec/configure/router-bgp/router-bgp-prefixneighbor

# address-family ipv4 unicast

[no] address-family ipv4 unicast

## Syntax Description

|                           |                |   |
|---------------------------|----------------|---|
| <b>Syntax Description</b> | no             | (Optional) Negate a command or set its defaults |
|                           | address-family | Configure an address-family                     |
|                           | ipv4           | Configure IPv4 address-family                   |
|                           | unicast        | Configure unicast address-family                |

## Command Mode

- /exec/configure/router-rip

# address-family ipv4 unicast

[no] address-family ipv4 unicast

## Syntax Description

|                           |                |   |
|---------------------------|----------------|---|
| <b>Syntax Description</b> | no             | (Optional) Negate a command or set its defaults |
|                           | address-family | Configure an address-family                     |
|                           | ipv4           | Configure IPv4 address-family                   |
|                           | unicast        | Configure unicast address-family                |

## Command Mode

- /exec/configure/router-rip/router-rip-vrf

# address-family ipv4 unicast

[no] address-family ipv4 { unicast | multicast }

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| address-family     | Configure an address-family                     |
| ipv4               | Configure IPv4 address-family                   |
| unicast            | Configure unicast address-family                |
| multicast          | Configure multicast address-family              |

## Command Mode

- /exec/configure/router-bgp

# address-family ipv4 unicast

[no] address-family ipv4 { unicast | multicast }

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| address-family     |            | Configure an address-family          |
| ipv4               |            | Configure IPv4 address-family        |
| unicast            |            | Configure unicast address-family     |
| multicast          |            | Configure multicast address-family   |

## Command Mode

- /exec/configure/router-bgp/router-bgp-vrf

# address-family ipv4 unicast

{ [ no | default ] } address-family ipv4 { unicast | multicast }

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults   |
| default            | (Optional) | Inherit values from a peer template    |
| address-family     |            | Configure an address-family for peer   |
| ipv4               |            | Configure IPv4 address-family          |
| unicast            |            | Configure Unicast sub-address-family   |
| multicast          |            | Configure Multicast sub-address-family |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor /exec/configure/router-bgp/router-bgp-template-neighbor /exec/configure/router-bgp/router-bgp-prefixneighbor

# address-family ipv4 unicast

[ no | default ] address-family ipv4 { unicast | multicast }

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults   |
| default            | (Optional) | Inherit values from a peer template    |
| address-family     |            | Configure an address-family for peer   |
| ipv4               |            | Configure IPv4 address-family          |
| unicast            |            | Configure Unicast sub-address-family   |
| multicast          |            | Configure Multicast sub-address-family |

## Command Mode

- /exec/configure/router-bgp/router-bgp-vrf-neighbor
- /exec/configure/router-bgp/router-bgp-vrf-prefixneighbor



# address-family ipv4 unicast

[no] { address-family ipv4 unicast }

## Syntax Description

|                           |                |   |
|---------------------------|----------------|---|
| <b>Syntax Description</b> | no             | (Optional) Negate a command or set its defaults |
|                           | address-family | Configure Address Family and its parameters     |
|                           | ipv4           | Configure IPv4 Address Family parameters        |
|                           | unicast        | Unicast   |

## Command Mode

- /exec/configure/mpls\_static

# address-family ipv4 unicast

[no] address-family ipv4 unicast

## Syntax Description

|                           |                |   |
|---------------------------|----------------|---|
| <b>Syntax Description</b> | no             | (Optional) Negate a command or set its defaults |
|                           | address-family | Configure an address-family                     |
|                           | ipv4           | Configure IPv4 address-family                   |
|                           | unicast        | Configure unicast address-family                |

## Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

# address-family ipv4 unicast

[no] address-family ipv4 unicast

## Syntax Description

|                           |                |   |
|---------------------------|----------------|---|
| <b>Syntax Description</b> | no             | (Optional) Negate a command or set its defaults |
|                           | address-family | Configure address family                        |
|                           | ipv4           | Configure IPv4 address family                   |
|                           | unicast        | Configure Unicast address family                |

## Command Mode

- /exec/configure/vrf

# address-family ipv4 unicast

[no] address-family ipv4 unicast

## Syntax Description

|                           |                |   |
|---------------------------|----------------|---|
| <b>Syntax Description</b> | no             | (Optional) Negate a command or set its defaults |
|                           | address-family | Configure an address-family                     |
|                           | ipv4           | Configure IPv4 address-family                   |
|                           | unicast        | Configure unicast address-family                |

## Command Mode

- /exec/configure/router-eigrp/router-eigrp-vrf-common

# address-family ipv6 labeled-unicast

[no] address-family ipv6 labeled-unicast

## Syntax Description

|                           |                 |   |
|---------------------------|-----------------|---|
| <b>Syntax Description</b> | no              | (Optional) Negate a command or set its defaults |
|                           | address-family  | Configure an address-family                     |
|                           | ipv6            | Configure IPv6 address-family                   |
|                           | labeled-unicast | Configure labeled unicast sub-address-family    |

## Command Mode

- /exec/configure/router-bgp

# address-family ipv6 labeled-unicast

{ [ no | default ] } address-family ipv6 labeled-unicast

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults         |
| default            | (Optional) | Inherit values from a peer template          |
| address-family     |            | Configure an address-family for peer         |
| ipv6               |            | Configure IPv6 address-family                |
| labeled-unicast    |            | Configure labeled unicast sub-address-family |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor /exec/configure/router-bgp/router-bgp-template-neighbor /exec/configure/router-bgp/router-bgp-prefixneighbor

# address-family ipv6 mvpn

[no] address-family ipv6 mvpn

## Syntax Description

|                           |                |   |
|---------------------------|----------------|---|
| <b>Syntax Description</b> | no             | (Optional) Negate a command or set its defaults |
|                           | address-family | Configure an address-family                     |
|                           | ipv6           | Configure IPv6 address-family                   |
|                           | mvpn           | Configure Multicast VPN                         |

## Command Mode

- /exec/configure/router-bgp

# address-family ipv6 mvpn

{ [ no | default ] } address-family ipv6 mvpn

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| default            | (Optional) | Inherit values from a peer template  |
| address-family     |            | Configure an address-family          |
| ipv6               |            | Configure IPv6 address-family        |
| mvpn               |            | Configure Multicast VPN              |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor /exec/configure/router-bgp/router-bgp-template-neighbor /exec/configure/router-bgp/router-bgp-prefixneighbor



# address-family ipv6 unicast

[no] address-family ipv6 unicast

## Syntax Description

|                           |                |   |
|---------------------------|----------------|---|
| <b>Syntax Description</b> | no             | (Optional) Negate a command or set its defaults |
|                           | address-family | Configure an address-family                     |
|                           | ipv6           | Configure IPv6 address-family                   |
|                           | unicast        | Configure unicast address-family                |

## Command Mode

- /exec/configure/router-rip

# address-family ipv6 unicast

[no] address-family ipv6 unicast

## Syntax Description

|                           |                |   |
|---------------------------|----------------|---|
| <b>Syntax Description</b> | no             | (Optional) Negate a command or set its defaults |
|                           | address-family | Configure an address-family                     |
|                           | ipv6           | Configure IPv6 address-family                   |
|                           | unicast        | Configure unicast address-family                |

## Command Mode

- /exec/configure/router-rip/router-rip-vrf

# address-family ipv6 unicast

[no] address-family ipv6 { unicast | multicast }

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| address-family     | Configure an address-family                     |
| ipv6               | Configure IPv6 address-family                   |
| unicast            | Configure unicast address-family                |
| multicast          | Configure multicast address-family              |

## Command Mode

- /exec/configure/router-bgp

# address-family ipv6 unicast

[no] address-family ipv6 { unicast | multicast }

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| address-family     |            | Configure an address-family          |
| ipv6               |            | Configure IPv6 address-family        |
| unicast            |            | Configure unicast address-family     |
| multicast          |            | Configure multicast address-family   |

## Command Mode

- /exec/configure/router-bgp/router-bgp-vrf

# address-family ipv6 unicast

{ [ no | default ] } address-family ipv6 { unicast | multicast }

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults   |
| default            | (Optional) | Inherit values from a peer template    |
| address-family     |            | Configure an address-family for peer   |
| ipv6               |            | Configure IPv6 address-family          |
| unicast            |            | Configure Unicast sub-address-family   |
| multicast          |            | Configure Multicast sub-address-family |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor /exec/configure/router-bgp/router-bgp-template-neighbor /exec/configure/router-bgp/router-bgp-prefixneighbor

# address-family ipv6 unicast

[ no | default ] address-family ipv6 { unicast | multicast }

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults   |
| default            | (Optional) | Inherit values from a peer template    |
| address-family     |            | Configure an address-family for peer   |
| ipv6               |            | Configure IPv6 address-family          |
| unicast            |            | Configure Unicast sub-address-family   |
| multicast          |            | Configure Multicast sub-address-family |

## Command Mode

- /exec/configure/router-bgp/router-bgp-vrf-neighbor
- /exec/configure/router-bgp/router-bgp-vrf-prefixneighbor

# address-family ipv6 unicast

[no] { address-family ipv6 unicast }

## Syntax Description

|                           |                |   |
|---------------------------|----------------|---|
| <b>Syntax Description</b> | no             | (Optional) Negate a command or set its defaults |
|                           | address-family | Configure Address Family and its parameters     |
|                           | ipv6           | Configure IPv6 Address Family parameters        |
|                           | unicast        | Unicast   |

## Command Mode

- /exec/configure/mpls\_static

# address-family ipv6 unicast

[no] address-family ipv6 unicast

## Syntax Description

|                           |                |   |
|---------------------------|----------------|---|
| <b>Syntax Description</b> | no             | (Optional) Negate a command or set its defaults |
|                           | address-family | Configure an address-family                     |
|                           | ipv6           | Configure IPv6 address-family                   |
|                           | unicast        | Configure unicast address-family                |

## Command Mode

- /exec/configure/router-isis/router-isis-vrf-common



# address-family ipv6 unicast

[no] address-family ipv6 unicast

## Syntax Description

|                           |                |   |
|---------------------------|----------------|---|
| <b>Syntax Description</b> | no             | (Optional) Negate a command or set its defaults |
|                           | address-family | Configure an address-family                     |
|                           | ipv6           | Configure IPv6 address-family                   |
|                           | unicast        | Configure IPv6 unicast address-family           |

## Command Mode

- /exec/configure/router-ospf3

# address-family ipv6 unicast

[no] address-family ipv6 unicast

## Syntax Description

|                           |                |   |
|---------------------------|----------------|---|
| <b>Syntax Description</b> | no             | (Optional) Negate a command or set its defaults |
|                           | address-family | Configure an address-family                     |
|                           | ipv6           | Configure IPv6 address-family                   |
|                           | unicast        | Configure IPv6 unicast address-family           |

## Command Mode

- /exec/configure/router-ospf3/vrf

# address-family ipv6 unicast

[no] address-family ipv6 unicast

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| address-family     | Configure address family                        |
| ipv6               | Configure IPv6 address family                   |
| unicast            | Configure Unicast address family                |

## Command Mode

- /exec/configure/vrf

# address-family ipv6 unicast

[no] address-family ipv6 unicast

## Syntax Description

|                           |                |   |
|---------------------------|----------------|---|
| <b>Syntax Description</b> | no             | (Optional) Negate a command or set its defaults |
|                           | address-family | Configure an address-family                     |
|                           | ipv6           | Configure IPv6 address-family                   |
|                           | unicast        | Configure unicast address-family                |

## Command Mode

- /exec/configure/router-eigrp/router-eigrp-vrf-common

# address-family l2vpn evpn

[no] address-family l2vpn evpn

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| address-family     | Configure an address-family                     |
| l2vpn              | Configure L2VPN address-family                  |
| evpn               | Configure L2VPN EVPN address-family             |

## Command Mode

- /exec/configure/router-bgp

# address-family l2vpn evpn

{ [ no | default ] } address-family l2vpn evpn

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| default            | (Optional) | Inherit values from a peer template  |
| address-family     |            | Configure an address-family          |
| l2vpn              |            | Configure L2VPN address-family       |
| evpn               |            | Configure L2VPN EVPN address-family  |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor /exec/configure/router-bgp/router-bgp-template-neighbor /exec/configure/router-bgp/router-bgp-prefixneighbor

# address-family l2vpn vpls

[no] address-family l2vpn vpls

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| address-family     | Configure an address-family                     |
| l2vpn              | Configure L2VPN address-family                  |
| vpls               | Configure L2VPN VPLS address-family             |

## Command Mode

- /exec/configure/router-bgp

# address-family l2vpn vpls

{ [ no | default ] } address-family l2vpn vpls

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| default            | (Optional) | Inherit values from a peer template  |
| address-family     |            | Configure an address-family          |
| l2vpn              |            | Configure L2VPN address-family       |
| vpls               |            | Configure L2VPN VPLS address-family  |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor /exec/configure/router-bgp/router-bgp-template-neighbor /exec/configure/router-bgp/router-bgp-prefixneighbor



# address-family link-state

[no] address-family link-state

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| address-family     | Configure an address-family                     |
| link-state         | Configure link-state address-family             |

## Command Mode

- /exec/configure/router-bgp

# address-family link-state

{ [ no | default ] } address-family link-state

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| default            | (Optional) | Inherit values from a peer template  |
| address-family     |            | Configure an address-family          |
| link-state         |            | Configure link-state address-family  |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor /exec/configure/router-bgp/router-bgp-template-neighbor /exec/configure/router-bgp/router-bgp-prefixneighbor

# address-family vpnv4 unicast

[no] address-family vpnv4 unicast

## Syntax Description

|                           |                |   |
|---------------------------|----------------|---|
| <b>Syntax Description</b> | no             | (Optional) Negate a command or set its defaults |
|                           | address-family | Configure an address-family                     |
|                           | vpnv4          | Configure IPv4 VPN address-family               |
|                           | unicast        | Configure Unicast sub-address-family            |

## Command Mode

- /exec/configure/router-bgp

# address-family vpnv4 unicast

{ [ no | default ] } address-family vpnv4 unicast

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| default            | (Optional) | Inherit values from a peer template  |
| address-family     |            | Configure an address-family for peer |
| vpnv4              |            | Configure IPv4 VPN address-family    |
| unicast            |            | Configure Unicast sub-address-family |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor /exec/configure/router-bgp/router-bgp-template-neighbor /exec/configure/router-bgp/router-bgp-prefixneighbor

# address-family vpnv6 unicast

[no] address-family vpnv6 unicast

## Syntax Description

|                           |                |   |
|---------------------------|----------------|---|
| <b>Syntax Description</b> | no             | (Optional) Negate a command or set its defaults |
|                           | address-family | Configure an address-family                     |
|                           | vpnv6          | Configure IPv6 VPN address-family               |
|                           | unicast        | Configure Unicast sub-address-family            |

## Command Mode

- /exec/configure/router-bgp

# address-family vpnv6 unicast

{ [ no | default ] } address-family vpnv6 unicast

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| default            | (Optional) | Inherit values from a peer template  |
| address-family     |            | Configure an address-family for peer |
| vpnv6              |            | Configure IPv6 VPN address-family    |
| unicast            |            | Configure Unicast sub-address-family |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor /exec/configure/router-bgp/router-bgp-template-neighbor /exec/configure/router-bgp/router-bgp-prefixneighbor

# address

[no] address <ip\_addr> [ primary ]

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | no (Optional) Negate a command or set its defaults |
|                           | address IP Address                                 |
|                           | primary (Optional) Primary Address                 |
|                           | <i>ip_addr</i> IPv4 Address                        |

## Command Mode

- /exec/configure/if-eth-any/vrrpv3\_ipv4

# address

[no] address <ipv6\_addr>

## Syntax Description

|                           |         |   |
|---------------------------|---------|---|
| <b>Syntax Description</b> | no      | (Optional) Negate a command or set its defaults |
|                           | address | IP Address                                      |

## Command Mode

- /exec/configure/if-eth-any/vrrpv3\_ipv6



# address

[no] address <ip\_addr>

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

address IP Address configuration

---

*ip\_addr* IP Address

---

## Command Mode

- /exec/configure/if-eth-any/vrrs

# address

[no] address <ipv6\_addr>

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | no (Optional) Negate a command or set its defaults |
|                           | address IP Address configuration                   |

## Command Mode

- /exec/configure/if-eth-any/vrrs

# address

```
{ address <ip_address> | no address [ <ip_address> ] }
```

## Syntax Description

|                           |                   |                                      |
|---------------------------|-------------------|--------------------------------------|
| <b>Syntax Description</b> | no                | Negate a command or set its defaults |
|                           | address           | Add an IP address to the vr          |
|                           | <i>ip_address</i> | ip address                           |

## Command Mode

- /exec/configure/if-eth-any/vrrp

# address

[no] address <start-ip> <end-ip>

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <i>no</i> (Optional) Negate a command or set its defaults |
|                           | <i>address</i> Address range for the pool                 |
|                           | <i>start-ip</i> Start IP address                          |
|                           | <i>end-ip</i> End IP address                              |

## Command Mode

- /exec/configure/ipnat-pool

# address port-number

address { <ipv4-addr> | <ipv6-addr> } port-number <port-number> | no address

## Syntax Description

| Syntax Description |  |                                       |
|--------------------|--|---------------------------------------|
| no                 |  | Negate a command or set its defaults  |
| address            |  | Configure IPv4 or IPv6 address        |
| <i>ipv4-addr</i>   |  | IPv4 address of the BMP server        |
| port-number        |  | Configure the port for the BMP server |
| <i>port-number</i> |  | Port number value                     |

## Command Mode

- /exec/configure/router-bgp/router-bgp-bmp-server

# address primary

[no] address <ipv6\_addr> primary

## Syntax Description

|                           |         |   |
|---------------------------|---------|---|
| <b>Syntax Description</b> | no      | (Optional) Negate a command or set its defaults |
|                           | address | IP Address                                      |
|                           | primary | Primary Address                                 |

## Command Mode

- /exec/configure/if-eth-any/vrrpv3\_ipv6

# address secondary

[no] address <ip\_addr> secondary

## Syntax Description

|                           |                |   |
|---------------------------|----------------|---|
| <b>Syntax Description</b> | no             | (Optional) Negate a command or set its defaults |
|                           | address        | IP Address                                      |
|                           | secondary      | Secondary Address                               |
|                           | <i>ip_addr</i> | IPv4 Address                                    |

## Command Mode

- /exec/configure/if-eth-any/vrrpv3\_ipv4

# address secondary

```
{ address <ip_address> secondary | no address <ip_address> secondary }
```

## Syntax Description

|                           |                   |                                      |
|---------------------------|-------------------|--------------------------------------|
| <b>Syntax Description</b> | no                | Negate a command or set its defaults |
|                           | address           | Add an IP address to the vr          |
|                           | <i>ip_address</i> | ip address                           |
|                           | secondary         | a virtual IP address without owner   |

## Command Mode

- /exec/configure/if-eth-any/vrrp



# adjacency-check

[no] adjacency-check

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| adjacency-check    | Adjacency's protocol support consistency check  |

## Command Mode

- /exec/configure/router-isis/router-isis-af-common

# adjacency-resolve

[no] adjacency-resolve

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| adjacency-resolve  | Resolve L3->L2 address for ISIS adjacency       |

## Command Mode

- /exec/configure/router-isis

# advertise-labels

```
[no] advertise-labels [ vrf { <vrf-name> | <vrf-known-name> } ] [ [ for <pfx-list> [ to <peer-pfx-list> ] ] ] [ interface <intf> ] ]
```

## Syntax Description

| Syntax Description    |  |
|-----------------------|--|
| no                    | (Optional) Negate a command or set its defaults                    |
| advertise-labels      | Label advertisements   |
| vrf                   | (Optional) VRF Routing/Forwarding instance information             |
| <i>vrf-name</i>       | (Optional) VPN Routing/Forwarding instance name                    |
| <i>vrf-known-name</i> | (Optional) Known VRF name  |
| for                   | (Optional) Prefix list specifying controls on destination prefixes |
| <i>pfx-list</i>       | (Optional) Name of prefix list                                     |
| to                    | (Optional) Prefix list specifying controls on LDP peers            |
| <i>peer-pfx-list</i>  | (Optional) Name of prefix list                                     |
| interface             | (Optional) Advertise /32 interface address                         |
| <i>intf</i>           | (Optional)   |

## Command Mode

- /exec/configure/ldp

## advertise-map exist default advertise-map

```
{ [ no ] advertise-map <advrt-rmap-name> { exist-map | non-exist-map } <cond-rmap-name> } | default
advertise-map
```

### Syntax Description

#### Syntax Description

|                        |   |
|------------------------|---|
| no                     | (Optional) Negate a command or set its defaults                               |
| default                | Inherit values from a peer template   |
| advertise-map          | Specify route-map for conditional advertisement                               |
| exist-map              | Condition route-map to advertise only when prefix in condition exists         |
| non-exist-map          | Condition route-map to advertise only when prefix in condition does not exist |
| <i>advrt-rmap-name</i> | Route-map name  |
| <i>cond-rmap-name</i>  | Route-map name  |

### Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af

# advertise-system-mac

[no] advertise-system-mac

## Syntax Description

| Syntax Description   |   |
|----------------------|---|
| no                   | (Optional) Negate a command or set its defaults |
| advertise-system-mac | Advertise extra EVPN RT-2 with system MAC       |

## Command Mode

- /exec/configure/router-bgp/router-bgp-af-l2vpn-evpn

# advertise l2vpn evpn

[no] advertise l2vpn evpn

## Syntax Description

|                           |           |   |
|---------------------------|-----------|---|
| <b>Syntax Description</b> | no        | (Optional) Negate a command or set its defaults |
|                           | advertise | Configure advertise for this AF                 |
|                           | l2vpn     | L2VPN   |
|                           | evpn      | EVPN  |

## Command Mode

- /exec/configure/router-bgp/router-bgp-vrf-af-ipv4 /exec/configure/router-bgp/router-bgp-vrf-af-ipv6

# advertisement-interval

[no] advertisement-interval <adv-sec>

## Syntax Description

|                           |                        |  |
|---------------------------|------------------------|--|
| <b>Syntax Description</b> | no                     | (Optional) Negate a command or set its defaults      |
|                           | advertisement-interval | Minimum interval between sending BGP routing updates |
|                           | <i>adv-sec</i>         | Time in seconds                                      |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af  
/exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-vpnv4  
/exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-vpnv6

# advertisement-interval

[no] advertisement-interval <adv-sec>

## Syntax Description

| Syntax Description     |  |
|------------------------|--|
| no                     | (Optional) Negate a command or set its defaults      |
| advertisement-interval | Minimum interval between sending BGP routing updates |
| <i>adv-sec</i>         | Time in seconds                                      |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv4-mdt  
/exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-l2vpn-vpls



# advertisement-interval

```
{ advertisement-interval <interval_time> | no advertisement-interval [ <interval_time> ] }
```

## Syntax Description

|                           |                        |   |
|---------------------------|------------------------|---|
| <b>Syntax Description</b> | no                     | Negate a command or set its defaults              |
|                           | advertisement-interval | Set the time interval between advertisement       |
|                           | <i>interval_time</i>   | Time interval (in seconds) between advertisements |

## Command Mode

- /exec/configure/if-eth-any/vrrp

# afd queue-desired

[no] afd queue-desired <q-desired> { bytes | kbytes | mbytes } [ ecn ]

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| afd                | Configure AFD parameters                        |  |
| queue-desired      | Specify Queue Desired for AFD                   |  |
| bytes              | Bytes   |  |
| kbytes             | Kilo bytes                                      |  |
| mbytes             | Mega bytes                                      |  |
| ecn                | (Optional) ECN                                  |  |

## Command Mode

- /exec/configure/policy-map/type/queuing/class

# affinity-group

```
{ affinity-group <affinity_group_id> } | { { no | default } affinity-group [ <affinity_group_id> ] }
```

## Syntax Description

| Syntax Description       |  |                                      |
|--------------------------|--|--------------------------------------|
| no                       |  | Negate a command or set its defaults |
| default                  |  | Inherit values from a peer template  |
| affinity-group           |  | Configure an affinity group          |
| <i>affinity_group_id</i> |  | Affinity Group ID                    |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor-sess

# affinity-group activate

affinity-group activate <affinity\_group\_id> | no affinity-group activate [ <affinity\_group\_id> ]

## Syntax Description

| Syntax Description       |  |                                      |
|--------------------------|--|--------------------------------------|
| no                       |  | Negate a command or set its defaults |
| affinity-group           |  | Configure an affinity group          |
| activate                 |  | Activate the affinity group          |
| <i>affinity_group_id</i> |  | AFFINITY Group ID                    |

## Command Mode

- /exec/configure/router-bgp

# affinity

[no] affinity | affinity <hex\_value> [ mask <mask\_value> ]

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | Negate a command or set its defaults             |
| affinity           | Specify attribute flags for links comprising LSP |
| <i>hex_value</i>   | affinity value                                   |
| mask               | (Optional) mask on desired link attributes       |
| <i>mask_value</i>  | (Optional) affinity mask value                   |

## Command Mode

- /exec/configure/te/lsp-attr

# affinity

[no] affinity | affinity <value> [ mask <mask-value> ]

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults                |
| affinity           |  | desired link attributes for links comprising tunnel |
| <i>value</i>       |  | affinity value                                      |
| mask               |  | (Optional) mask on desired link attributes          |
| <i>mask-value</i>  |  | (Optional) affinity mask value                      |

## Command Mode

- /exec/configure/if-te /exec/configure/tunnel-te/cbts-member

# aggregate-address

[no] aggregate-address { <ip-addr> <ip-mask> | <ip-prefix> } [ as-set | summary-only | suppress-map <suppress-rmap> | advertise-map <advertise-rmap> | attribute-map <attribute-rmap> ] +

## Syntax Description

| Syntax Description    |  |
|-----------------------|--|
| no                    | (Optional) Negate a command or set its defaults              |
| aggregate-address     | Configure BGP aggregate prefixes                             |
| <i>ip-addr</i>        | Aggregate address  |
| <i>ip-mask</i>        | Aggregate mask   |
| <i>ip-prefix</i>      | Aggregate prefix   |
| summary-only          | (Optional) Don't advertise more specifics                    |
| as-set                | (Optional) Generate AS-SET information                       |
| suppress-map          | (Optional) Conditionally filter more specific routes         |
| advertise-map         | (Optional) Select attribute information from specific routes |
| attribute-map         | (Optional) Set attribute information of aggregate            |
| <i>advertise-rmap</i> | (Optional) Route-map name                                    |
| <i>suppress-rmap</i>  | (Optional) Route-map name                                    |
| <i>attribute-rmap</i> | (Optional) Route-map name                                    |

## Command Mode

- /exec/configure/router-bgp/router-bgp-af-ipv4 /exec/configure/router-bgp/router-bgp-vrf-af-ipv4

# aggregate-address

[no] aggregate-address <ipv6-prefix> [ as-set | summary-only | suppress-map <suppress-rmap> | advertise-map <advertise-rmap> | attribute-map <attribute-rmap> ] +

## Syntax Description

| Syntax Description    |            |   |
|-----------------------|------------|---|
| no                    | (Optional) | Negate a command or set its defaults              |
| aggregate-address     |            | Configure BGP aggregate IPv6 prefixes             |
| as-set                | (Optional) | Generate AS-SET information                       |
| summary-only          | (Optional) | Don't advertise more specifics                    |
| suppress-map          | (Optional) | Conditionally filter more specific routes         |
| advertise-map         | (Optional) | Select attribute information from specific routes |
| attribute-map         | (Optional) | Set attribute information of aggregate            |
| <i>advertise-rmap</i> | (Optional) | Route-map name                                    |
| <i>suppress-rmap</i>  | (Optional) | Route-map name                                    |
| <i>attribute-rmap</i> | (Optional) | Route-map name                                    |

## Command Mode

- /exec/configure/router-bgp/router-bgp-af-ipv6 /exec/configure/router-bgp/router-bgp-vrf-af-ipv6



## alert-group user-def-cmd

[no] alert-group { Configuration | Diagnostic | Environmental | Inventory | License | Linecard-Hardware | Supervisor-Hardware | Syslog-group-port | System | Test } user-def-cmd <s0>

### Syntax Description

| Syntax Description  |            |   |
|---------------------|------------|---|
| no                  | (Optional) | Negate a command or set its defaults                    |
| alert-group         |            | alert group   |
| user-def-cmd        |            | configure a cli command for an alert group              |
| s0                  |            | A valid CLI command                                     |
| Environmental       |            | Power,fan,temperature related events                    |
| Inventory           |            | Inventory status events                                 |
| License             |            | Events related to licensing                             |
| Linecard-Hardware   |            | Linecard related events                                 |
| Supervisor-Hardware |            | Supervisor related events                               |
| Syslog-group-port   |            | Events related to syslog messages filed by port manager |
| System              |            | Software related events                                 |
| Test                |            | User generated test events                              |
| Configuration       |            | Events related to Configuration                         |
| Diagnostic          |            | Events related to Diagnostic                            |

### Command Mode

- /exec/configure/callhome

# allocate-label all

[no] allocate-label { all | route-map <rmap-name> }

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| allocate-label     | Configure label allocation for this AF          |
| all                | Allocate labels for all routes                  |
| route-map          | Allocate labels for selected routes             |
| <i>rmap-name</i>   | Route-map name                                  |

## Command Mode

- /exec/configure/router-bgp/router-bgp-af-ipv6 /exec/configure/router-bgp/router-bgp-af-ipv4

# allocate1 interface2

```
allocate1 interface2 { <interface-id> [ force ] | unallocated-interfaces }
```

## Syntax Description

| Syntax Description     |  |   |
|------------------------|--|---|
| allocate1              |  | Assign interfaces to vdc  |
| interface2             |  | Assign interface range to vdc   |
| <i>interface-id</i>    |  | Assign interface range to vdc   |
| force                  |  | (Optional) force  |
| unallocated-interfaces |  | Best-effort trying to move all interfaces in the unallocated pool into this vdc |

## Command Mode

- /exec/configure/vdc

## allocate2 fcoe-vlan-range

```
{ allocate2 fcoe-vlan-range [ <vlan_range> ] [ from vdc <vdc_names> ] } | { no allocate2 fcoe-vlan-range
[ <vlan_range> | { from vdc <vdc_names> } ] }
```

### Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| allocate2          |  | Assign interfaces to vdc             |
| fcoe-vlan-range    | vlans reserved for FCoE                                      |                                      |
| <i>vlan_range</i>  | (Optional) vlans reserved for FCoE                           |                                      |
| from               | (Optional) which vdc will be sharing ports with the FCoE vdc |                                      |
| vdc                | (Optional) which vdc will be sharing ports with the FCoE vdc |                                      |
| <i>vdc_names</i>   | (Optional) which vdc will be sharing porst with the FCoE vdc |                                      |

### Command Mode

- /exec/configure/vdc

# allocate3 shared interface3

[no] allocate3 shared interface3 <interface-id>

## Syntax Description

| Syntax Description  |   |
|---------------------|---|
| no                  | (Optional) Negate a command or set its defaults |
| allocate3           | Assign interfaces to vdc                        |
| interface3          | Assign interface range to vdc                   |
| <i>interface-id</i> | Assign interface range to vdc                   |
| shared              | Shared this port using the reserved FCoE vlans  |

## Command Mode

- /exec/configure/vdc

# allow-vni-in-ethertag

[no] allow-vni-in-ethertag

## Syntax Description

|                           |                       |   |
|---------------------------|-----------------------|---|
| <b>Syntax Description</b> | no                    | (Optional) Negate a command or set its defaults |
|                           | allow-vni-in-ethertag | Allow VNI in Ethernet Tag field in EVPN route   |

## Command Mode

- /exec/configure/router-bgp/router-bgp-af-l2vpn-evpn

# allow delete boot-image

[no] allow delete boot-image [ retain ]

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| allow              | allow kickstart or system image to be deleted   |
| delete             | allow delete or overwrite of image file         |
| boot-image         | image file                                      |
| retain             | (Optional) retain this command after reboot     |

## Command Mode

- /exec

# allow feature-set

[no] allow feature-set <fs>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults                     |
| allow              | Used to change permissions inside a vdc                             |
| feature-set        | Change which feature-sets the user is able to enable inside the vdc |
| fs                 | installed feature-sets  |

## Command Mode

- /exec/configure/vdc



# allowas-in

[ no | default ] allowas-in [ <allowas-in-cnt> ]

## Syntax Description

| Syntax Description    |   |
|-----------------------|---|
| no                    | (Optional) Negate a command or set its defaults             |
| default               | (Optional) Inherit values from a peer template              |
| allowas-in            | Accept as-path with my AS present in it                     |
| <i>allowas-in-cnt</i> | (Optional) Number of occurrences of AS number, default is 3 |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-vpnv4
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-vpnv6
- /exec/configure/router-bgp/router-bgp-vrf-neighbor/router-bgp-vrf-neighbor-af-ipv4
- /exec/configure/router-bgp/router-bgp-vrf-neighbor/router-bgp-vrf-neighbor-af-ipv6
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-l2vpn-evpn
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv4-label
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv6-label
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-link-state
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv4-mvpn
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv6-mvpn

# allowas-in

[ no | default ] allowas-in [ <allowas-in-cnt> ]

## Syntax Description

| Syntax Description    |            |  |
|-----------------------|------------|--|
| no                    | (Optional) | Negate a command or set its defaults             |
| default               | (Optional) | Inherit values from a peer template              |
| allowas-in            |            | Accept as-path with my AS present in it          |
| <i>allowas-in-cnt</i> | (Optional) | Number of occurrences of AS number, default is 3 |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv4-mdt  
/exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-l2vpn-vpls

# allowed-locators

```
{ [ no ] allowed-locators { <rloc> | <rloc6> } + }
```

## Syntax Description

|                           |                         |   |
|---------------------------|-------------------------|---|
| <b>Syntax Description</b> | <i>no</i>               | (Optional) Negate a command or set its defaults |
|                           | <i>allowed-locators</i> | List of locators from LISP site                 |
|                           | <i>rloc</i>             | IPv4 locator allowed in registered locator-set  |

## Command Mode

- /exec/configure/lisp-site /exec/configure/vrf/lisp-site

# allowed-vlans

allowed-vlans { <allow-vlans> | add <add-vlans> | except <except-vlans> | remove <remove-vlans> | all }

## Syntax Description

### Syntax Description

|                     |  |
|---------------------|--|
| allowed-vlans       | Set list of allowed vlans that can be used for interface configuration |
| <i>allow-vlans</i>  | VLAN ID 1-4094 or range(s) like: 1-5, 10 or 2-5,7-19                   |
| add                 | add VLANs to the current list  |
| <i>add-vlans</i>    | VLAN ID 1-4094 or range(s) like: 1-5, 10 or 2-5,7-19                   |
| except              | all VLANs except the following   |
| <i>except-vlans</i> | VLAN ID 1-4094 or range(s) like: 1-5, 10 or 2-5,7-19                   |
| remove              | remove VLANs from the current list                                     |
| <i>remove-vlans</i> | VLAN ID 1-4094 or range(s) like: 1-5, 10 or 2-5,7-19                   |
| all                 | all VLANs  |

## Command Mode

- /exec/configure/vmt-conn

# amt flush-routes

[no] amt flush-routes

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| amt                | AMT global configuration commands               |
| flush-routes       | Remove routes when restarting AMT               |

## Command Mode

- /exec/configure /exec/configure/vrf

# amt pseudo-interface

```
{ { amt pseudo-interface <interface> } | { no amt pseudo-interface [ <interface> ] } }
```

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults             |
| amt                |  | AMT global configuration commands                |
| pseudo-interface   |  | Tunnel to relay for forwarding IGMP/MLD messages |
| <i>interface</i>   |  | Intername name to used for AMT pseudo interface  |

## Command Mode

- /exec/configure /exec/configure/vrf

# analytics cluster

```
[no] analytics cluster <clustername> [ vrf <vrfName> ] [ srcIf <src_intf> ]
```

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| analytics          | Feature Analytics                               |
| cluster            | Analytics cluster                               |
| <i>clustername</i> | Cluster name                                    |
| vrf                | (Optional) VRF Name                             |
| <i>vrfName</i>     | (Optional) VRF name                             |
| srcIf              | (Optional) Source Interface                     |
| <i>src_intf</i>    | (Optional) Source Interface                     |

## Command Mode

- /exec/configure

# anonymous-id

```
{ [ no ] anonymous-id <id> }
```

## Syntax Description

---

**Syntax Description**

anonymous-id anonymous identity associated with this profile

---

*id* identity name

---

## Command Mode

- /exec/configure/dot1x-cred



## append-after next

```
append-after <index> { next-address [ loose | strict ] <ipaddr> | exclude-address <ipaddr> }
```

### Syntax Description

| Syntax Description |  |
|--------------------|--|
| append-after       | Append additional entry after specified index            |
| <i>index</i>       | Previous index number                                    |
| next-address       | Specify the next address in the path                     |
| loose              | (Optional) Target address is loose                       |
| strict             | (Optional) Target address is strict                      |
| exclude-address    | Exclude an address from subsequent partial path segments |
| <i>ipaddr</i>      | Enter IP address (A.B.C.D)                               |

### Command Mode

- /exec/configure/te/expl-path

# apply profile

```
[no] apply profile { <all_conf_profile_name> } [ include-profile <include-profile> ] [ { param-instance <plistinst> | include-instance <plistinst> } + ]
```

## Syntax Description

| Syntax Description           |            |  |
|------------------------------|------------|--|
| no                           | (Optional) | Negate a command or set its defaults                                 |
| apply                        |            | Apply a config-profile   |
| profile                      |            | Apply a config-profile   |
| <i>all_conf_profile_name</i> |            | Enter the name of the profile  |
| param-instance               | (Optional) | Enter the name of the param-instance                                 |
| <i>plistinst</i>             | (Optional) | Enter the name of the instance                                       |
| include-profile              | (Optional) | Enter the name of the include profile                                |
| <i>include-profile</i>       | (Optional) | Enter the name of the include profile                                |
| include-instance             | (Optional) | Enter the param-instance corresponding to the first included profile |
| <i>plistinst</i>             | (Optional) | Enter the name of the include instance                               |

## Command Mode

- /exec/configure

# area authentication

[no] area <area-id-ip> authentication [ message-digest ]

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| area               | Configure area properties                       |  |
| <i>area-id-ip</i>  | Area Id as an integer or ip address             |  |
| authentication     | Enable authentication for the area              |  |
| message-digest     | (Optional) Use message-digest authentication    |  |

## Command Mode

- /exec/configure/router-ospf /exec/configure/router-ospf/vrf

## area authentication

```
area <area-id-ip> authentication { disable | ipsec spi <spi_id> { md5 <akey> | sha1 <akey> } } | no area
<area-id-ip> authentication { disable | ipsec spi <spi_id> }
```

### Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| area               |  | Configure area properties            |
| <i>area-id-ip</i>  |  | Area Id as an integer or ip address  |
| authentication     |  | Enable Authentication                |
| disable            |  | Disable Authentication               |
| ipsec              |  | IPSec                                |
| spi                |  | Security Parameter Index             |
| <i>spi_id</i>      |  | SPI Value                            |
| md5                |  | Use the MD5 algorithm                |
| <i>akey</i>        |  | Authentication Key                   |
| sha1               |  | Use the SHA1 algorithm               |
| <i>akey</i>        |  | Authentication Key                   |

### Command Mode

- /exec/configure/router-ospf3 /exec/configure/router-ospf3/vrf

## area default-cost

```
{ { area <area-id-ip> default-cost <cost> } | { no area <area-id-ip> default-cost [ <cost> ] } }
```

### Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults         |
| area               |  | Configure area properties                    |
| <i>area-id-ip</i>  |  | Area Id as an integer or ip address          |
| default-cost       |  | Specify default-cost for default summary LSA |
| <i>cost</i>        |  | Cost value                                   |

### Command Mode

- /exec/configure/router-ospf /exec/configure/router-ospf/vrf

## area default-cost

```
{ { area <area-id-ip> default-cost <cost> } | { no area <area-id-ip> default-cost [ <cost> ] } }
```

### Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults                   |
| area               |  | Configure area properties                              |
| <i>area-id-ip</i>  |  | Area Id as an integer or ip address                    |
| default-cost       |  | Specify default-cost for default inter-area-prefix LSA |
| <i>cost</i>        |  | Cost value   |

### Command Mode

- /exec/configure/router-ospf3/router-ospf3-af-ipv6 /exec/configure/router-ospf3/vrf/router-ospf3-af-ipv6

## area filter-list route-map in

```
{ area <area-id-ip> filter-list route-map { <policy-name> | <rtr_pol_name> } { in | out } } | { no area
<area-id-ip> filter-list route-map { <policy-name> | <rtr_pol_name> } [ in | out ] }
```

### Syntax Description

| Syntax Description  |  |                                      |
|---------------------|--|--------------------------------------|
| no                  |  | Negate a command or set its defaults |
| area                |  | Configure area properties            |
| <i>area-id-ip</i>   |  | Area Id as an integer or ip address  |
| filter-list         |  | Filter prefixes between OSPF areas   |
| route-map           |  | Name of filter policy                |
| <i>policy-name</i>  |  | Route-map name                       |
| <i>rtr_pol_name</i> |  | An existing routing-rules policy     |
| in                  |  | Filter networks sent to this area    |
| out                 |  | Filter networks sent from this area  |

### Command Mode

- /exec/configure/router-ospf /exec/configure/router-ospf/vrf

## area filter-list route-map in

```
{ area <area-id-ip> filter-list route-map { <policy-name> | <rtr_pol_name> } { in | out } } | { no area
<area-id-ip> filter-list route-map { <policy-name> | <rtr_pol_name> } [ in | out ] }
```

### Syntax Description

| Syntax Description  |  |                                      |
|---------------------|--|--------------------------------------|
| no                  |  | Negate a command or set its defaults |
| area                |  | Configure area properties            |
| <i>area-id-ip</i>   |  | Area Id as an integer or ip address  |
| filter-list         |  | Filter prefixes between OSPF areas   |
| route-map           |  | Name of filter policy                |
| <i>policy-name</i>  |  | Route-map name                       |
| <i>rtr_pol_name</i> |  | An existing routing-rules policy     |
| in                  |  | Filter networks sent to this area    |
| out                 |  | Filter networks sent from this area  |

### Command Mode

- /exec/configure/router-ospf3/router-ospf3-af-ipv6 /exec/configure/router-ospf3/vrf/router-ospf3-af-ipv6



## area nssa

[no] area <area-id-ip> nssa { [ no-summary ] [ no-redistribution ] [ default-information-originate [ route-map <policy-name> ] ] } +

### Syntax Description

| Syntax Description            |            |   |
|-------------------------------|------------|---|
| no                            | (Optional) | Negate a command or set its defaults            |
| area                          |            | Configure area properties                       |
| <i>area-id-ip</i>             |            | Area Id as an integer or ip address             |
| nssa                          |            | Configure area as NSSA                          |
| no-summary                    | (Optional) | Do not send summary LSAs into NSSA area         |
| no-redistribution             | (Optional) | Do not send redistributed LSAs into NSSA area   |
| default-information-originate | (Optional) | Originate Type-7 default LSA into NSSA area     |
| route-map                     | (Optional) | Policy to control distribution of default route |
| <i>policy-name</i>            | (Optional) | Route-map name                                  |

### Command Mode

- /exec/configure/router-ospf /exec/configure/router-ospf/vrf

## area nssa

```
[no] area <area-id-ip> nssa { [ no-summary ] [ no-redistribution ] [ default-information-originate [ route-map <policy-name> ] ] } +
```

### Syntax Description

#### Syntax Description

|                               |  |
|-------------------------------|--|
| no                            | (Optional) Negate a command or set its defaults            |
| area                          | Configure area properties                                  |
| <i>area-id-ip</i>             | Area Id as an integer or ip address                        |
| nssa                          | Configure area as NSSA                                     |
| no-summary                    | (Optional) Do not send summary LSAs into NSSA area         |
| no-redistribution             | (Optional) Do not send redistributed LSAs into NSSA area   |
| default-information-originate | (Optional) Originate Type-7 default LSA into NSSA area     |
| route-map                     | (Optional) Policy to control distribution of default route |
| <i>policy-name</i>            | (Optional) Route-map name                                  |

### Command Mode

- /exec/configure/router-ospf3 /exec/configure/router-ospf3/vrf

## area nssa translate type7 always never supress-fa

```
{ area <area-id-ip> nssa translate type7 { always [ supress-fa ] | never | supress-fa } } | { no area <area-id-ip>
nssa translate type7 [ always [ supress-fa ] | never | supress-fa ] }
```

### Syntax Description

| Syntax Description |            |   |
|--------------------|------------|---|
| no                 |            | Negate a command or set its defaults          |
| area               |            | Configure area properties                     |
| <i>area-id-ip</i>  |            | Area Id as an integer or ip address           |
| nssa               |            | Configure area as NSSA                        |
| translate          |            | Translate LSA                                 |
| type7              |            | From Type 7 to Type 5                         |
| always             |            | Always translate LSAs                         |
| never              |            | Never translate LSAs                          |
| supress-fa         | (Optional) | Supress forwarding address in translated LSAs |

### Command Mode

- /exec/configure/router-ospf /exec/configure/router-ospf/vrf

## area nssa translate type7 always never supress-fa

```
{ area <area-id-ip> nssa translate type7 { always [ supress-fa ] | never | supress-fa } } | { no area <area-id-ip>
nssa translate type7 [ always [ supress-fa ] | never | supress-fa ] }
```

### Syntax Description

| Syntax Description |            |   |
|--------------------|------------|---|
| no                 |            | Negate a command or set its defaults                |
| area               |            | Configure area properties                           |
| <i>area-id-ip</i>  |            | Area Id as an integer or ip address                 |
| nssa               |            | Configure area as NSSA                              |
| translate          |            | Translate LSA                                       |
| type7              |            | From NSSA-external (Type 7) to AS-external (Type 5) |
| always             |            | Always translate LSAs                               |
| never              |            | Never translate LSAs                                |
| supress-fa         | (Optional) | Supress forwarding address in translated LSAs       |

### Command Mode

- /exec/configure/router-ospf3 /exec/configure/router-ospf3/vrf

## area range

```
[no] area <area-id-ip> range { <ip-dest> <ip-mask> | <ip-prefix> } { [ not-advertise ] [ cost <conf-cost> ] }
```

+

### Syntax Description

#### Syntax Description

|                            |   |
|----------------------------|---|
| <code>no</code>            | (Optional) Negate a command or set its defaults     |
| <code>area</code>          | Configure area properties                           |
| <code>area-id-ip</code>    | Area Id as an integer or ip address                 |
| <code>range</code>         | Configure an address range for an area              |
| <code>ip-dest</code>       | IP prefix format: i.i.i.i                           |
| <code>ip-mask</code>       | IP network mask format: m.m.m.m                     |
| <code>ip-prefix</code>     | IP prefix format: x.x.x.x/ml                        |
| <code>not-advertise</code> | (Optional) Suppress advertising the specified range |
| <code>cost</code>          | (Optional) Cost to use for range                    |
| <code>conf-cost</code>     | (Optional) Cost value                               |

### Command Mode

- /exec/configure/router-ospf /exec/configure/router-ospf/vrf

## area range

[no] area <area-id-ip> range <ipv6-prefix> { [ not-advertise ] [ cost <conf-cost> ] } +

### Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults     |
| area               |            | Configure area properties                |
| <i>area-id-ip</i>  |            | Area Id as an integer or ip address      |
| range              |            | Configure an address range for an area   |
| not-advertise      | (Optional) | Suppress advertising the specified range |
| cost               | (Optional) | Cost to use for range                    |
| <i>conf-cost</i>   | (Optional) | Cost value                               |

### Command Mode

- /exec/configure/router-ospf3/router-ospf3-af-ipv6 /exec/configure/router-ospf3/vrf/router-ospf3-af-ipv6

# area sham-link

[no] area <area-id-ip> sham-link <source-address> <dest-address>

## Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| area                  | Configure area properties                       |  |
| <i>area-id-ip</i>     | Area Id as an integer or ip address             |  |
| sham-link             | Define a sham link and its parameters           |  |
| <i>source-address</i> | IP addr associated with sham-link source        |  |
| <i>dest-address</i>   | IP addr associated with sham-link destination   |  |

## Command Mode

- /exec/configure/router-ospf/vrf

# area stub

[no] area <area-id-ip> stub [ no-summary ]

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults                 |
| area               | Configure area properties                                       |
| <i>area-id-ip</i>  | Area Id as an integer or ip address                             |
| stub               | Configure area as a stub  |
| no-summary         | (Optional) Prevent ABR from sending summary LSAs into stub area |

## Command Mode

- /exec/configure/router-ospf /exec/configure/router-ospf/vrf



# area stub

[no] area <area-id-ip> stub [ no-summary ]

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults                 |
| area               | Configure area properties                                       |
| <i>area-id-ip</i>  | Area Id as an integer or ip address                             |
| stub               | Configure area as a stub  |
| no-summary         | (Optional) Prevent ABR from sending summary LSAs into stub area |

## Command Mode

- /exec/configure/router-ospf3 /exec/configure/router-ospf3/vrf

# area virtual-link

[no] area <area-id-ip> virtual-link <routerid>

## Syntax Description

| Syntax Description |            |   |
|--------------------|------------|---|
| no                 | (Optional) | Negate a command or set its defaults            |
| area               |            | Configure area properties                       |
| <i>area-id-ip</i>  |            | Area Id as an integer or ip address             |
| virtual-link       |            | Define a virtual link and its parameters        |
| <i>routerid</i>    |            | Router ID associated with virtual link neighbor |

## Command Mode

- /exec/configure/router-ospf

# area virtual-link

[no] area <area-id-ip> virtual-link <routerid>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| area               | Configure area properties                       |
| <i>area-id-ip</i>  | Area Id as an integer or ip address             |
| virtual-link       | Define a virtual link and its parameters        |
| <i>routerid</i>    | Router ID associated with virtual link neighbor |

## Command Mode

- /exec/configure/router-ospf/vrf

# area virtual-link

[no] area <area-id-ip> virtual-link <routerid>

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| area               | Configure area properties                       |  |
| <i>area-id-ip</i>  | Area Id as an integer or ip address             |  |
| virtual-link       | Define a virtual link and its parameters        |  |
| <i>routerid</i>    | Router ID associated with virtual link neighbor |  |

## Command Mode

- /exec/configure/router-ospf3

# area virtual-link

[no] area <area-id-ip> virtual-link <routerid>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| area               | Configure area properties                       |
| <i>area-id-ip</i>  | Area Id as an integer or ip address             |
| virtual-link       | Define a virtual link and its parameters        |
| <i>routerid</i>    | Router ID associated with virtual link neighbor |

## Command Mode

- /exec/configure/router-ospf3/vrf

# arp access-list

[no] arp access-list <name>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| arp                | ARP access-list configuration commands          |
| access-list        | Configure access list                           |
| <i>name</i>        | List name                                       |

## Command Mode

- /exec/configure

# as-format asdot

as-format asdot | no as-format

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | Negate a command or set its defaults                                  |
| as-format          | Configure the router's Autonomous system number (ASN) notation        |
| asdot              | Specifies the Autonomous system number (ASN) notation to asdot format |

## Command Mode

- /exec/configure

# as-override

[ no | default ] as-override

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults  |
| default            | (Optional) Inherit values from a peer template   |
| as-override        | Override matching AS-number while sending update |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af
- /exec/configure/router-bgp/router-bgp-vrf-neighbor/router-bgp-vrf-neighbor-af-ipv4
- /exec/configure/router-bgp/router-bgp-vrf-neighbor/router-bgp-vrf-neighbor-af-ipv6



# attach console module

attach console module <module>

## Syntax Description

| Syntax Description |                                |
|--------------------|--------------------------------|
| attach             | Connect to a specific linecard |
| console            | Connect to the console         |
| module             | Connect to the module console  |
| <i>module</i>      | Enter module number            |

## Command Mode

- /exec

# attach module

attach module <module>

## Syntax Description

---

**Syntax Description**

---

attach Connect to a specific linecard

---

module Module number of the linecard

---

*module* Enter module number

---

## Command Mode

- /exec

# attach module node

attach module <module> node <i0>

## Syntax Description

---

**Syntax Description**

---

attach Connect to a specific linecard

---

module Module number of the linecard

---

*module* Enter module number

---

node Avanti node number on the linecard

---

*i0*

---

## Command Mode

- /exec

# attach module port

```
attach module <module> port <i0>
```

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | <b>attach</b> Connect to a specific linecard |
|                           | <b>module</b> Module number of the linecard  |
|                           | <i>module</i> Enter module number            |
|                           | <b>port</b> Port number on the linecard      |
|                           | <i>i0</i>                                    |

## Command Mode

- /exec

# auth-mechanism plain

[no] auth-mechanism { plain }

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults    |
| auth-mechanism     | Set the authentication mechanism                   |
| plain              | Set the authentication mechanism as plain(default) |

## Command Mode

- /exec/configure/ldap

# authentication-check

[no] authentication-check

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

authentication-check Check authentication on received LSP/CSNP/PSNP's

---

## Command Mode

- /exec/configure/otv-isis/otv-isis-vrf-common

# authentication-check level-1

[no] authentication-check level-1

## Syntax Description

| Syntax Description   |   |
|----------------------|---|
| no                   | (Optional) Negate a command or set its defaults             |
| authentication-check | Check authentication on received LSP/CSNP/PSNP's            |
| level-1              | Specify authentication check for level-1 LSP, CSNP and PSNP |

## Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

# authentication-check level-2

[no] authentication-check level-2

## Syntax Description

| Syntax Description   |   |
|----------------------|---|
| no                   | (Optional) Negate a command or set its defaults             |
| authentication-check | Check authentication on received LSP/CSNP/PSNP's            |
| level-2              | Specify authentication check for level-2 LSP, CSNP and PSNP |

## Command Mode

- /exec/configure/router-isis/router-isis-vrf-common



# authentication-key

```
{ { authentication-key <key> } | { no authentication-key [ <key> ] } }
```

## Syntax Description

| Syntax Description              |   |
|---------------------------------|---|
| <code>no</code>                 | Negate a command or set its defaults                  |
| <code>authentication-key</code> | Configure the authentication key for the virtual-link |
| <code>key</code>                | Authentication key                                    |

## Command Mode

- /exec/configure/router-ospf/router-ospf-vlink /exec/configure/router-ospf/vrf/router-ospf-vlink

# authentication-key

```
{ { authentication-key <key> } | { no authentication-key [ <key> ] } }
```

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults               |
| authentication-key |  | Configure the authentication key for the sham-link |
| key                |  | Authentication key                                 |

## Command Mode

- /exec/configure/router-ospf/vrf/router-ospf-slink

# authentication-key

{ [ no ] authentication-key <key> }

## Syntax Description

|                           |                           |   |
|---------------------------|---------------------------|---|
| <b>Syntax Description</b> | <i>no</i>                 | (Optional) Negate a command or set its defaults |
|                           | <i>authentication-key</i> | Authentication key used by LISP site            |
|                           | <i>key</i>                | SHA-1 password                                  |

## Command Mode

- /exec/configure/lisp-site /exec/configure/vrf/lisp-site

# authentication-type cleartext

```
{ authentication-type { cleartext | md5 } | no authentication-type [ { cleartext | md5 } ] }
```

## Syntax Description

| Syntax Description  |  |                                      |
|---------------------|--|--------------------------------------|
| no                  |  | Negate a command or set its defaults |
| authentication-type |  | Set authentication type              |
| cleartext           |  | Cleartext                            |
| md5                 |  | HMAC-MD5                             |

## Command Mode

- /exec/configure/otv-isis/otv-isis-vrf-common

# authentication-type cleartext

```
{ authentication-type { cleartext | md5 } <level> | no authentication-type [ { cleartext | md5 } ] <level> }
```

## Syntax Description

| Syntax Description  |  |                                      |
|---------------------|--|--------------------------------------|
| no                  |  | Negate a command or set its defaults |
| authentication-type |  | Set authentication type              |
| cleartext           |  | Cleartext                            |
| md5                 |  | HMAC-MD5                             |
| <i>level</i>        |  | IS-IS level                          |

## Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

# authentication

```
authentication { [ text ] <secret> | md5 { key-chain <chain-name> | key-string [ 0 | 7 ] <key-name> [
compatibility ] [ timeout <sec> ] } } | no authentication
```

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults                                   |
| authentication     |  | Authentication   |
| text               |  | (Optional) Plain text authentication                                   |
| <i>secret</i>      |  | Plain text authentication string                                       |
| md5                |  | Use MD5 authentication   |
| key-chain          |  | Set key chain  |
| <i>chain-name</i>  |  | Name of key-chain  |
| key-string         |  | Set key string   |
| 0                  |  | (Optional) Specifies an UNENCRYPTED key string will follow             |
| 7                  |  | (Optional) Specifies a HIDDEN key string will follow                   |
| <i>key-name</i>    |  | Key string (64 chars max)  |
| compatibility      |  | (Optional) Operate in compatibility mode for MD5 type-7 authentication |
| timeout            |  | (Optional) Set timeout   |
| <i>sec</i>         |  | (Optional) (0-32767)Timeout until only accepting new key (seconds)     |

## Command Mode

- /exec/configure/if-eth-any/hsrp\_ipv4 /exec/configure/if-eth-any/hsrp\_ipv6

# authentication

[no] authentication [ message-digest | null ]

## Syntax Description

|                           |                |   |
|---------------------------|----------------|---|
| <b>Syntax Description</b> | no             | (Optional) Negate a command or set its defaults |
|                           | authentication | Authentication on the vlink                     |
|                           | message-digest | (Optional) Use message-digest authentication    |
|                           | null           | (Optional) Use null(disable) authentication     |

## Command Mode

- /exec/configure/router-ospf/router-ospf-vlink /exec/configure/router-ospf/vrf/router-ospf-vlink

# authentication

[no] authentication [ message-digest | null ]

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| authentication     | Authentication on the slink                     |
| message-digest     | (Optional) Use message-digest authentication    |
| null               | (Optional) Use null(disable) authentication     |

## Command Mode

- /exec/configure/router-ospf/vrf/router-ospf-slink



# authentication

```
authentication { { md5 { { key-chain <word-chain> } | { key-string [ encrypted ] <word-string> } } } | { text
<word-text> } } | no authentication
```

## Syntax Description

### Syntax Description

|                    |   |
|--------------------|---|
| no                 | Negate a command or set its defaults              |
| authentication     | Configure authentication                          |
| md5                | MD5 authentication                                |
| key-chain          | MD5 Key-chain authentication                      |
| <i>word-chain</i>  | MD5 authentication key-chain                      |
| key-string         | MD5 keyed authentication                          |
| encrypted          | (Optional) Specifies an encrypted key will follow |
| <i>word-string</i> | MD5 authentication key                            |
| text               | Plain text authentication                         |
| <i>word-text</i>   | Plain text  |

## Command Mode

- /exec/configure/if-eth-any/glbp

# authentication

authentication { ipsec spi <spi\_id> { md5 <akey> | sha1 <akey> } } | no authentication ipsec spi <spi\_id>

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| authentication     |  | Enable Authentication                |
| ipsec              |  | IPSec                                |
| spi                |  | Security Parameter Index             |
| <i>spi_id</i>      |  | SPI Value                            |
| md5                |  | Use the MD5 algorithm                |
| <i>akey</i>        |  | Authentication Key                   |
| sha1               |  | Use the SHA1 algorithm               |
| <i>akey</i>        |  | Authentication Key                   |

## Command Mode

- /exec/configure/router-ospf3 /exec/configure/router-ospf3/vrf

# authentication

authentication { disable | ipsec spi <spi\_id> { md5 <akey> | sha1 <akey> } } | no authentication { disable | ipsec spi <spi\_id> }

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| authentication     |  | Enable Authentication                |
| disable            |  | Disable Authentication               |
| ipsec              |  | IPSec                                |
| spi                |  | Security Parameter Index             |
| <i>spi_id</i>      |  | SPI Value                            |
| md5                |  | Use the MD5 algorithm                |
| <i>akey</i>        |  | Authentication Key                   |
| sha1               |  | Use the SHA1 algorithm               |
| <i>akey</i>        |  | Authentication Key                   |

## Command Mode

- /exec/configure/router-ospf3/router-ospf3-vlink /exec/configure/router-ospf3/vrf/router-ospf3-vlink

# authentication

```
[no] authentication { { key-chain <chain> } | { mode md5 } }
```

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| authentication     | Configures EIGRP authentication subcommands     |
| key-chain          | key-chain                                       |
| <i>chain</i>       | name of key-chain                               |
| mode               | mode  |
| md5                | Keyed message digest                            |

## Command Mode

- /exec/configure/router-eigrp/router-eigrp-vrf-common /exec/configure/router-eigrp/router-eigrp-af-common

# authentication bind

[no] authentication { bind-first [ append-with-basedn <s1> ] | compare [ password-attribute <s0> ] }

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults                 |
| authentication     |            | Set the authentication method                        |
| bind-first         |            | Set the authentication method to bind-first          |
| append-with-basedn | (Optional) | Change the default value (cn=\$userid)               |
| s1                 | (Optional) | append with dn value                                 |
| compare            |            | Change the default attribute                         |
| password-attribute | (Optional) | Change the default password attribute (userPassword) |
| s0                 | (Optional) | password attribute                                   |

## Command Mode

- /exec/configure/ldap

# authentication challenge

[no] authentication [ neighbor <nbr> ] challenge

## Syntax Description

|                           |                |  |
|---------------------------|----------------|--|
| <b>Syntax Description</b> | authentication | Configure RSVP neighbor cryptographic authentication         |
|                           | neighbor       | (Optional) Configure RSVP neighbor                           |
|                           | <i>nbr</i>     | (Optional) RSVP Neighbor address                             |
|                           | challenge      | Perform challenge/response handshake with new RSVP neighbors |

## Command Mode

- /exec/configure/ip-rsvp

# authentication key-chain

authentication [ neighbor <nbr> ] key-chain <key-chain-name> | no authentication [ neighbor <nbr> ] key-chain

## Syntax Description

|                           |                       |  |
|---------------------------|-----------------------|--|
| <b>Syntax Description</b> | authentication        | Configure RSVP neighbor cryptographic authentication |
|                           | neighbor              | (Optional) Configure RSVP neighbor                   |
|                           | <i>nbr</i>            | (Optional) RSVP Neighbor address                     |
|                           | key-chain             | Authentication password key-chain                    |
|                           | <i>key-chain-name</i> | Key-chain name                                       |

## Command Mode

- /exec/configure/ip-rsvp

# authentication key-chain

```
{ authentication key-chain <auth-keychain> | no authentication key-chain [ <auth-keychain> ] }
```

## Syntax Description

| Syntax Description   |                                    |                                      |
|----------------------|------------------------------------|--------------------------------------|
| no                   |                                    | Negate a command or set its defaults |
| authentication       | Set authentication keychain string |                                      |
| key-chain            | Set authentication keychain string |                                      |
| <i>auth-keychain</i> | authentication keychain            |                                      |

## Command Mode

- /exec/configure/otv-isis/otv-isis-vrf-common



# authentication key-chain

```
{ authentication key-chain <keychain> } | { no authentication key-chain [ <keychain> ] }
```

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| authentication     |  | Authentication on the vlink          |
| key-chain          |  | Authentication password key-chain    |
| <i>keychain</i>    |  | Key-chain name                       |

## Command Mode

- /exec/configure/router-ospf/router-ospf-vlink /exec/configure/router-ospf/vrf/router-ospf-vlink

# authentication key-chain

```
{ authentication key-chain <keychain> } | { no authentication key-chain [ <keychain> ] }
```

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| authentication     |  | Authentication on the slink          |
| key-chain          |  | Authentication password key-chain    |
| <i>keychain</i>    |  | Key-chain name                       |

## Command Mode

- /exec/configure/router-ospf/vrf/router-ospf-slink

# authentication key-chain

```
{ authentication key-chain <auth-keychain> <level> | no authentication key-chain [ <auth-keychain> ] <level>
}
```

## Syntax Description

| Syntax Description          |  |                                      |
|-----------------------------|--|--------------------------------------|
| <code>no</code>             |  | Negate a command or set its defaults |
| <code>authentication</code> |  | Set authentication keychain string   |
| <code>key-chain</code>      |  | Set authentication keychain string   |
| <code>auth-keychain</code>  |  | authentication keychain              |
| <code>level</code>          |  | IS-IS level                          |

## Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

# authentication lifetime

[no] authentication [ neighbor <nbr> ] lifetime <time>

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| authentication     | Configure RSVP neighbor cryptographic authentication |
| neighbor           | (Optional) Configure RSVP neighbor                   |
| <i>nbr</i>         | (Optional) RSVP Neighbor address                     |
| lifetime           | Maximum lifetime of neighbor authentication state    |
| <i>time</i>        | Lifetime value(in seconds)                           |

## Command Mode

- /exec/configure/ip-rsvp

# authentication text

```
{ authentication text <authentication_pwd> | no authentication [ text <authentication_pwd> ] }
```

## Syntax Description

| Syntax Description |                           |  |
|--------------------|---------------------------|--|
| no                 |                           | Negate a command or set its defaults         |
| authentication     |                           | Select authentication method                 |
| text               |                           | Set the authentication password (8 char max) |
|                    | <i>authentication_pwd</i> |  |

## Command Mode

- /exec/configure/if-eth-any/vrrp

# authentication type md5

[no] authentication [ neighbor <nbr> ] type { md5 | sha-1 }

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| authentication     | Configure RSVP neighbor cryptographic authentication |
| neighbor           | (Optional) Configure RSVP neighbor                   |
| <i>nbr</i>         | (Optional) RSVP Neighbor address                     |
| type               | Type of authentication algorithm                     |
| md5                | RSA Message Digest 5 hash algorithm (default)        |
| sha-1              | NIST Secure Hash Algorithm 1                         |

## Command Mode

- /exec/configure/ip-rsvp

# authentication window-size

[no] authentication [ neighbor <nbr> ] window-size <value>

## Syntax Description

### Syntax Description

|                |  |
|----------------|--|
| authentication | Configure RSVP neighbor cryptographic authentication |
| neighbor       | (Optional) Configure RSVP neighbor                   |
| <i>nbr</i>     | (Optional) RSVP Neighbor address                     |
| window-size    | Receive window size for authenticated messages       |
| <i>value</i>   | Maximum number of messages allowed in receive window |

## Command Mode

- /exec/configure/ip-rsvp

# auto-bw

[no] auto-bw | auto-bw [ { [ collect-bw | frequency <sec> ] + } | { [ frequency <sec> | min-bw <min-kbps> | max-bw <max-kbps> ] + } ]

## Syntax Description

### Syntax Description

|            |  |
|------------|--|
| no         | Negate a command or set its defaults             |
| auto-bw    | Specify automatic bandwidth configuration        |
| collect-bw | (Optional) Just collect bandwidth info           |
| frequency  | (Optional) frequency to change LSP bandwidth     |
| sec        | (Optional) seconds between applying auto-bw      |
| max-bw     | (Optional) Set the maximum bandwidth for auto-bw |
| max-kbps   | (Optional) Maximum bandwidth to apply (kbps)     |
| min-bw     | (Optional) Set the minimum bandwidth for auto-bw |
| min-kbps   | (Optional) Minimum bandwidth to apply (kbps)     |

## Command Mode

- /exec/configure/te/lsp-attr



# auto-bw

[no] auto-bw | auto-bw [ { [ collect-bw | frequency <sec> ] + } | { [ frequency <sec> | min-bw <min-kbps> | max-bw <max-kbps> ] + } ]

## Syntax Description

### Syntax Description

|            |   |
|------------|---|
| no         | Negate a command or set its defaults                            |
| auto-bw    | Specify mpls tunnel should automatically change bw              |
| collect-bw | (Optional) Just collect Bandwidth info on this tunnel           |
| frequency  | (Optional) Frequency to change tunnel BW                        |
| sec        | (Optional) seconds between applying auto-bw                     |
| max-bw     | (Optional) Set the Maximum Bandwidth for auto-bw on this tunnel |
| max-kbps   | (Optional) Maximum kb/s that tunnel can be auto set to          |
| min-bw     | (Optional) Set the Minimum Bandwidth for auto-bw on this tunnel |
| min-kbps   | (Optional) Min kb/s that tunnel can be auto set to              |

## Command Mode

- /exec/configure/if-te

# auto-bw timers frequency

[no] auto-bw timers { frequency } | auto-bw timers { frequency <sec> }

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults     |
| auto-bw            |  | auto-bw parameters                       |
| timers             |  | Enable auto-bw timers                    |
| frequency          |  | Interval between auto-bw data collection |
| sec                |  | Seconds between auto-bw data collection  |

## Command Mode

- /exec/configure/te

## auto-cost reference-bandwidth

auto-cost reference-bandwidth { <ref-bw-mbps> [ Mbps ] | <ref-bw-gbps> Gbps } | no auto-cost reference-bandwidth [ <ref-bw-mbps> [ Mbps ] | <ref-bw-gbps> Gbps ]

### Syntax Description

| Syntax Description  |  |  |
|---------------------|--|--|
| no                  |  | Negate a command or set its defaults         |
| auto-cost           |  | Calculate OSPF cost according to bandwidth   |
| reference-bandwidth |  | Reference bandwidth used to assign OSPF cost |
| Mbps                |  | (Optional) Specify rate in Mbps              |
| Gbps                |  | Specify rate in Gbps                         |
| <i>ref-bw-mbps</i>  |  | Rate in Mbps (bandwidth) (Default)           |
| <i>ref-bw-gbps</i>  |  | Rate in Gbps (bandwidth)                     |

### Command Mode

- /exec/configure/router-ospf /exec/configure/router-ospf/vrf

## auto-cost reference-bandwidth

auto-cost reference-bandwidth { <ref-bw-mbps> [ Mbps ] | <ref-bw-gbps> Gbps } | no auto-cost reference-bandwidth [ <ref-bw-mbps> [ Mbps ] | <ref-bw-gbps> Gbps ]

### Syntax Description

| Syntax Description  |  |  |
|---------------------|--|--|
| no                  |  | Negate a command or set its defaults           |
| auto-cost           |  | Calculate OSPFv3 cost according to bandwidth   |
| reference-bandwidth |  | Reference bandwidth used to assign OSPFv3 cost |
| Mbps                |  | (Optional) Specify rate in Mbps                |
| Gbps                |  | Specify rate in Gbps                           |
| <i>ref-bw-mbps</i>  |  | Rate in Mbps (bandwidth) (Default)             |
| <i>ref-bw-gbps</i>  |  | Rate in Gbps (bandwidth)                       |

### Command Mode

- /exec/configure/router-ospf3 /exec/configure/router-ospf3/vrf

## auto-recovery

auto-recovery [ reload-delay <time-out> ] | no auto-recovery [ reload-delay <time-out> ]

### Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | Negate a command or set its defaults                                     |
| auto-recovery      | vPC settings to enable auto recovery if peer is presumed non-operational |
| reload-delay       | (Optional) Duration to wait before assuming peer dead and restoring vpcs |
| <i>time-out</i>    | (Optional) Time-out for restoring vPC links (in seconds)                 |

### Command Mode

- /exec/configure/vpc-domain

# auto-remap-replication-servers

[no] auto-remap-replication-servers

## Syntax Description

---

**Syntax Description**

no (Optional) Negate a command or set its defaults

---

auto-remap-replication-servers Automatically re-map replication servers on every replication server add

---

## Command Mode

- /exec/configure/if-nve

# autonomous-system

{ { autonomous-system <local-as> } | { no autonomous-system [ <local-as> ] } }

## Syntax Description

|                           |                   |                                      |
|---------------------------|-------------------|--------------------------------------|
| <b>Syntax Description</b> | no                | Negate a command or set its defaults |
|                           | autonomous-system | Specify AS number for Address Family |
|                           | <i>local-as</i>   | Local AS number                      |

## Command Mode

- /exec/configure/router-eigrp/router-eigrp-vrf-common /exec/configure/router-eigrp/router-eigrp-af-common

# autoroute announce

[no] autoroute announce

## Syntax Description

|                           |           |   |
|---------------------------|-----------|---|
| <b>Syntax Description</b> | no        | (Optional) Negate a command or set its defaults |
|                           | autoroute | parameters for IGP routing over tunnel          |
|                           | announce  | announce tunnel to IGP                          |

## Command Mode

- /exec/configure/if-te



# autoroute metric

[no] autoroute metric | autoroute metric { <value> | relative <rel-value> }

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | Negate a command or set its defaults                |
| autoroute          | parameters for IGP routing over tunnel              |
| metric             | Specify mpls tunnel metric                          |
| <i>value</i>       | Set tunnel metric for autoroutes                    |
| relative           | Adjust tunnel metric for autoroutes relative to IGP |
| <i>rel-value</i>   | Relative metric value                               |

## Command Mode

- /exec/configure/if-te

# autostate

[no] autostate

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| autostate          | Enable or disable autostate for interface-vlan  |

## Command Mode

- /exec/configure/if-vlan

# autovlan enable

[no] autovlan enable

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| autovlan           | Automatic creation/deletion of VLANs            |
| enable             | Enable auto creation/deletion of VLANs          |

## Command Mode

- /exec/configure/vmt-conn

# awk

| awk <expr>

## Syntax Description

---

### Syntax Description

| Pipe command output to filter

---

awk Mini AWK

---

*expr* Edition command (script)

---

## Command Mode

- /output



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---

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# backoff

backoff <initial-backoff> <maximum-backoff> | no backoff

## Syntax Description

---

### Syntax Description

---

|                        |  |
|------------------------|--|
| no                     | Negate a command or set its defaults   |
| backoff                | Set LDP session backoff parameters     |
| <i>initial-backoff</i> | Initial session backoff time (seconds) |
| <i>maximum-backoff</i> | Maximum session backoff time (seconds) |

---

## Command Mode

- /exec/configure/ldp



# backup-bw

backup-bw { <kbps> } | no backup-bw

## Syntax Description

|                           |             |  |
|---------------------------|-------------|--|
| <b>Syntax Description</b> | no          | Negate a command or set its defaults             |
|                           | backup-bw   | Represents bw for Fast Reroute backup            |
|                           | <i>kbps</i> | Amount of allocatable backup bw, any lsp may use |

## Command Mode

- /exec/configure/if-te

# bandwidth

{ bandwidth <value> } | { no bandwidth }

## Syntax Description

|                           |                  |                                      |
|---------------------------|------------------|--------------------------------------|
| <b>Syntax Description</b> | <i>no</i>        | Negate a command or set its defaults |
|                           | <i>bandwidth</i> | Bandwidth per flow                   |
|                           | <i>value</i>     | Per Flow Bandwidth in Mbps           |

## Command Mode

- /exec/configure/nbm-flow/policy

# bandwidth

```
[no] bandwidth { { <bw-value> [ bps | kbps | mbps | gbps ] | percent <percentage> } | { remaining percent <rem-perc> } }
```

## Syntax Description

### Syntax Description

|                   |   |
|-------------------|---|
| no                | (Optional) Negate a command or set its defaults |
| bandwidth         | Specify bandwidth for the class                 |
| bps               | (Optional) Bits per second                      |
| kbps              | (Optional) Kilo bits per second                 |
| mbps              | (Optional) Mega bits per second                 |
| gbps              | (Optional) Giga bits per second                 |
| percent           | Percentage of available bandwidth               |
| <i>percentage</i> | Value in percentage                             |
| remaining         | % of remaining bandwidth                        |
| <i>rem-perc</i>   | Value in percentage                             |

## Command Mode

- /exec/configure/policy-map/type/plc/class

# bandwidth

```
bandwidth { <bandwidth_val> | inherit [ <inherit_val> ] } | no bandwidth { [ <bandwidth_val> ] | inherit [ <inherit_val> ] }
```

## Syntax Description

| Syntax Description   |  |                                       |
|----------------------|--|---------------------------------------|
| no                   |  | Negate a command or set its defaults  |
| bandwidth            |  | Set bandwidth informational parameter |
| <i>bandwidth_val</i> |  | Bandwidth in kilobits                 |
| inherit              |  | Specify that bandwidth is inherited   |
| <i>inherit_val</i>   |  | (Optional) Bandwidth in kilobits      |

## Command Mode

- /exec/configure/if-ether-sub /exec/configure/if-ether-sub-p2p /exec/configure/if-port-channel-sub

# bandwidth

```
bandwidth { <bandwidth_val> | inherit [ <inherit_val> ] } | no bandwidth { [ <bandwidth_val> ] | inherit [ <inherit_val> ] }
```

## Syntax Description

| Syntax Description   |  |                                       |
|----------------------|--|---------------------------------------|
| no                   |  | Negate a command or set its defaults  |
| bandwidth            |  | Set bandwidth informational parameter |
| <i>bandwidth_val</i> |  | Bandwidth in kilobits                 |
| inherit              |  | Specify that bandwidth is inherited   |
| <i>inherit_val</i>   |  | (Optional) Bandwidth in kilobits      |

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-eth-non-member /exec/configure/if-gig-ether-sub /exec/configure/if-remote-ethernet-sub

# bandwidth

bandwidth { <bandwidth\_val> | inherit [ <inherit\_val> ] } | no bandwidth { [ <bandwidth\_val> ] | inherit [ <inherit\_val> ] }

## Syntax Description

| Syntax Description |                                       |
|--------------------|---------------------------------------|
| no                 | Negate a command or set its defaults  |
| bandwidth          | Set bandwidth informational parameter |
| inherit            | Specify that bandwidth is inherited   |

## Command Mode

- /exec/configure/if-eth-port-channel /exec/configure/if-port-channel-range  
/exec/configure/if-port-channel-sub /exec/configure/if-eth-port-channel-switch  
/exec/configure/if-eth-port-channel-p2p

# bandwidth

bandwidth <bandwidth\_val> | no bandwidth

## Syntax Description

| Syntax Description   |  |                                       |
|----------------------|--|---------------------------------------|
| no                   |  | Negate a command or set its defaults  |
| bandwidth            |  | Set bandwidth informational parameter |
| <i>bandwidth_val</i> |  | Bandwidth in kilobits                 |

## Command Mode

- /exec/configure/if-any-tunnel

# bandwidth

```
[no] bandwidth { { xxx <bw-value> [ bps | kbps | mbps | gbps ] | percent <percentage> } | { remaining percent <rem-perc> } }
```

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| bandwidth          | Specify bandwidth for the class                 |
| xxx                | xxx   |
| bps                | (Optional) Bits per second                      |
| kbps               | (Optional) Kilo bits per second                 |
| mbps               | (Optional) Mega bits per second                 |
| gbps               | (Optional) Giga bits per second                 |
| percent            | Percentage of available bandwidth               |
| <i>percentage</i>  | Value in percentage                             |
| remaining          | % of remaining bandwidth                        |
| <i>rem-perc</i>    | Value in percentage                             |

## Command Mode

- /exec/configure/policy-map/type/queuing/class



# bandwidth

[no] bandwidth | bandwidth { <bw> }

## Syntax Description

|                           |                  |                                      |
|---------------------------|------------------|--------------------------------------|
| <b>Syntax Description</b> | <i>no</i>        | Negate a command or set its defaults |
|                           | <i>bandwidth</i> | Specify LSP bandwidth                |
|                           | <i>bw</i>        | bandwidth requirement in kbps        |

## Command Mode

- /exec/configure/te/lsp-attr

# bandwidth

[no] bandwidth | bandwidth { <kbps> }

## Syntax Description

|                           |             |                                      |
|---------------------------|-------------|--------------------------------------|
| <b>Syntax Description</b> | no          | Negate a command or set its defaults |
|                           | bandwidth   | tunnel bandwidth requirement         |
|                           | <i>kbps</i> | bandwidth requirement in kbps        |

## Command Mode

- /exec/configure/if-te /exec/configure/tunnel-te/cbts-member

# bandwidth

bandwidth <bandwidth\_val> | no bandwidth

## Syntax Description

| Syntax Description   |  |                                       |
|----------------------|--|---------------------------------------|
| no                   |  | Negate a command or set its defaults  |
| bandwidth            |  | Set bandwidth informational parameter |
| <i>bandwidth_val</i> |  | Bandwidth in kilobits                 |

## Command Mode

- /exec/configure/if-vlan-common

# banner motd

```
{ banner motd <line> } | { no banner motd }
```

## Syntax Description

---

### Syntax Description

---

**no** Negate a command or set its defaults

---

**banner** Configure banner message

---

**motd** Configure banner motd message

---

*line* Delimiter char (Very first char is delimiter char) followed by message ending with delimiter

---

## Command Mode

- /exec/configure

# bcm-shell module

bcm-shell module <module> <quoted-cmd>

## Syntax Description

|                           |                   |                                 |
|---------------------------|-------------------|---------------------------------|
| <b>Syntax Description</b> | bcm-shell         | bcm shell/cmd                   |
|                           | module            | Module number of the linecard   |
|                           | <i>module</i>     | Enter module number             |
|                           | <i>quoted-cmd</i> | the command to run on bcm-shell |

## Command Mode

- /exec

# bcm-shell module

bcm-shell module <module>

## Syntax Description

---

### Syntax Description

---

bcm-shell bcm shell/cmd

---

module Module number of the  
linecard

---

*module* Enter module number

---

## Command Mode

- /exec

# beacon

[no] beacon

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

beacon Disable/enable the beacon for an interface

---

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-eth-base

# begin exclude include end

| { begin | exclude | include | end } [ -i | -x ] + <expr> [ next <num> | prev <num> ] +

## Syntax Description

### Syntax Description

|             |  |
|-------------|--|
|             | Pipe command output to filter                                      |
| begin       | Begin with the line that matches                                   |
| exclude     | Exclude lines that match   |
| include     | Include lines that match   |
| end         | End with the line that matches                                     |
| -i          | (Optional) Ignore case difference when comparing strings           |
| -x          | (Optional) Print only lines where the match is a whole line        |
| <i>expr</i> | Search for the expression  |
| next        | (Optional) Print <num> lines of context after every matching line  |
| prev        | (Optional) Print <num> lines of context before every matching line |
| <i>num</i>  | (Optional) Print <num> lines of context                            |

## Command Mode

- /output



# bestpath

[no] bestpath { always-compare-med | med { missing-as-worst | non-deterministic | confed } | compare-routerid | compare-neighborid | cost-community ignore | as-path multipath-relax }

## Syntax Description

### Syntax Description

|                    |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults                           |
| bestpath           | Change default bestpath selection algorithm                               |
| always-compare-med | Compare MED on paths from different AS                                    |
| med                | MED   |
| missing-as-worst   | Treat missing MED as highest MED  |
| non-deterministic  | Not always pick the best-MED path among paths from same AS                |
| compare-routerid   | Compare router-id for identical EBGp paths                                |
| compare-neighborid | When more paths available than max path config, use neighborid tiebreaker |
| cost-community     | cost community  |
| ignore             | Ignore cost communities in bestpath selection                             |
| confed             | Compare MED only from paths originated from within a confederation        |
| as-path            | AS-Path   |
| multipath-relax    | Relax AS-Path restriction when choosing multipaths                        |

## Command Mode

- /exec/configure/router-bgp/vrf-cmds

# bestpath all

[no] bestpath { all-paths-ecmp }

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults     |
| bestpath           | Change default bestpath selection algorithm         |
| all-paths-ecmp     | Treat all paths as ECMP during bestpath calculation |

## Command Mode

- /exec/configure/router-bgp/router-bgp-af

# bfd-app session auto-expiry timeout

```
bfd-app session auto-expiry { timeout <millis> | now }
```

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| bfd-app            | BFD application commands                          |
| auto-expiry        | auto expiry start/end                             |
| session            | session operation                                 |
| timeout            | timeout after                                     |
| now                | expiry reached, dont wait to timeout, do them now |
| <i>millis</i>      | milli-secs later                                  |

## Command Mode

- /exec/configure

## bfd-app session remove

```
bfd-app session remove { all | intf <intf_id> | iod <iod_id> }
```

### Syntax Description

| Syntax Description   |                                  |
|----------------------|----------------------------------|
| <code>bfd-app</code> | BFD application commands         |
| <code>session</code> | session operation                |
| <code>remove</code>  | Remove sessions                  |
| <code>all</code>     | Remove all sessions              |
| <code>intf</code>    | Remove all sessions on interface |
| <code>intf_id</code> | Interface Id                     |
| <code>iod</code>     | interface iod                    |
| <code>iod_id</code>  | Interface iod in hex             |

### Command Mode

- /exec/configure

## bfd-app session src-ip dest intf

```
[no] bfd-app session src-ip { <src_ip> dest-ip <dest_ip> | <src_ipv6> dest-ip <dest_ipv6> } { intf <intf_id>
| iod <iod_id> }
```

### Syntax Description

#### Syntax Description

|                |   |
|----------------|---|
| no             | (Optional) Negate a command or set its defaults |
| bfd-app        | bfd application commands                        |
| session        | session operation                               |
| src-ip         | Source ip                                       |
| <i>src_ip</i>  | Source ip value                                 |
| dest-ip        | Destination ip                                  |
| <i>dest_ip</i> | Destination ip value                            |
| iod            | interface iod                                   |
| <i>iod_id</i>  | Interface iod in hex                            |
| intf           | interface                                       |
| <i>intf_id</i> | Interface Id                                    |

### Command Mode

- /exec/configure

# bfd-neighbor

[no] bfd-neighbor <remote-peer-ip> <inner-dest-ip> <inner-dest-mac>

## Syntax Description

| Syntax Description    |   |
|-----------------------|---|
| no                    | (Optional) Negate a command or set its defaults |
| bfd-neighbor          | BFD   |
| <i>remote-peer-ip</i> | Remote peer IP address                          |
| <i>inner-dest-ip</i>  | Inner Destination IP address                    |
| <i>inner-dest-mac</i> | Inner Destination MAC address                   |

## Command Mode

- /exec/configure/if-nve

# bfd

[no] bfd

## Syntax Description

---

### Syntax Description

---

**no** (Optional) Negate a command or set its defaults

---

**bfd** Enable BFD on all OSPF interfaces

---

## Command Mode

- /exec/configure/router-ospf /exec/configure/router-ospf/vrf

# bfd

[no] bfd

## Syntax Description

---

### Syntax Description

---

**no** (Optional) Negate a command or set its defaults

---

**bfd** Enable IPv4 BFD on all ISIS interfaces

---

## Command Mode

- /exec/configure/router-isis/router-isis-af-ipv6



# bfd

[ no | default ] bfd

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

default (Optional) Inherit values from a peer template

---

bfd Bidirectional Fast Detection for the neighbor

---

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor-sess

# bfd

[no] bfd [ ipv4 | ipv6 ]

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | no (Optional) Negate a command or set its defaults |
|                           | bfd BFD commands                                   |
|                           | ip4 (Optional) ipv4 sessions                       |
|                           | ip6 (Optional) ipv6 sessions                       |

## Command Mode

- /exec/configure/if-ma /exec/configure/if-vlan /exec/configure/if-ma-p2p

# bfd

[no] bfd

## Syntax Description

---

### Syntax Description

---

**no** (Optional) Negate a command or set its defaults

---

**bfd** Enable BFD on all OSPF interfaces

---

## Command Mode

- /exec/configure/router-ospf3 /exec/configure/router-ospf3/vrf

# bfd

[no] bfd

## Syntax Description

---

### Syntax Description

---

**no** (Optional) Negate a command or set its defaults

---

**bfd** Enable BFD on all EIGRP interfaces

---

## Command Mode

- /exec/configure/router-eigrp /exec/configure/router-eigrp/router-eigrp-vrf  
/exec/configure/router-eigrp/router-eigrp-af-common

## bfd authentication key-id key

```
bfd [ { ipv4 | ipv6 } ] authentication <auth_name> key-id <key_id_val> { key <key_val> | hex-key <h_key_val> } | no bfd [ { ipv4 | ipv6 } ] authentication
```

### Syntax Description

#### Syntax Description

|                   |   |
|-------------------|---|
| no                | Negate a command or set its defaults    |
| bfd               | BFD commands                            |
| authentication    | Configure BFD authentication parameters |
| ipv4              | (Optional) ipv4 sessions                |
| ipv6              | (Optional) ipv6 sessions                |
| <i>auth_name</i>  | auth algorithm                          |
| key-id            | Key ID to use in BFD frames             |
| <i>key_id_val</i> | Key ID value                            |
| key               | ASCII SHA1 secret                       |
| hex-key           | HEX binary SHA1 secret                  |
| <i>key_val</i>    | SHA1 secret value                       |
| <i>h_key_val</i>  | SHA1 secret value. e.g ABCD123          |

### Command Mode

- /exec/configure/if-ma /exec/configure/if-vlan /exec/configure/if-ma-p2p

# bfd echo-interface

[no] bfd echo-interface <ifindex>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| bfd                | BFD commands                                    |
| echo-interface     | Configure interface used for bfd echo frames    |
| <i>ifindex</i>     | loopback interface                              |

## Command Mode

- /exec/configure

# bfd echo-rx-interval

bfd [ ipv4 | ipv6 ] echo-rx-interval <intv> | no bfd [ ipv4 | ipv6 ] echo-rx-interval

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults   |
| bfd                |  | BFD commands                           |
| ipv6               |  | (Optional) ipv6 sessions               |
| ipv4               |  | (Optional) ipv4 sessions               |
| echo-rx-interval   |  | Configure BFD session echo rx interval |
| <i>intv</i>        |  | Echo Rx Interval in milliseconds       |

## Command Mode

- /exec/configure /exec/configure/if-ma /exec/configure/if-ma-p2p

# bfd echo

[no] bfd [ { ipv4 | ipv6 } ] echo

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <b>no</b> (Optional) Negate a command or set its defaults   |
|                           | <b>bfd</b> BFD commands                                     |
|                           | <b>all</b> Configure Echo function for all address families |
|                           | <b>ip4</b> (Optional) ipv4 sessions                         |
|                           | <b>ip6</b> (Optional) ipv6 sessions                         |

## Command Mode

- /exec/configure/if-ma /exec/configure/if-vlan /exec/configure/if-ma-p2p



# bfd interval

[no] bfd [ ipv4 | ipv6 ] interval [ <min\_tx\_mills> min\_rx <min\_rx\_mills> multiplier <int\_mult> ]

## Syntax Description

| Syntax Description  |   |  |
|---------------------|---|--|
| no                  | Negate a command or set its defaults                    |  |
| bfd                 | BFD commands  |  |
| interval            | Configure BFD session interval parameters               |  |
| ipv6                | (Optional) ipv6 sessions                                |  |
| ipv4                | (Optional) ipv4 sessions                                |  |
| <i>min_tx_mills</i> | (Optional) TX interval in milliseconds                  |  |
| <i>min_rx</i>       | (Optional) Minimum RX interval                          |  |
| <i>min_rx_mills</i> | (Optional) RX interval in milliseconds                  |  |
| multiplier          | (Optional) Configure detect multiplier for bfd sessions |  |
| <i>int_mult</i>     | (Optional) Detect Multiplier                            |  |

## Command Mode

- /exec/configure/if-ma /exec/configure/if-ma-p2p

# bfd interval

```
[no] bfd [ ipv4 | ipv6 ] interval [ <min_tx_mills> min_rx <min_rx_mills> multiplier <int_mult> ]
```

## Syntax Description

| Syntax Description  |            |  |
|---------------------|------------|--|
| no                  |            | Negate a command or set its defaults         |
| bfd                 |            | BFD commands                                 |
| interval            |            | Configure BFD session interval parameters    |
| ipv6                |            | (Optional) ipv6 sessions                     |
| ipv4                |            | (Optional) ipv4 sessions                     |
| <i>min_tx_mills</i> | (Optional) | TX interval in milliseconds                  |
| min_rx              | (Optional) | Minimum RX interval                          |
| <i>min_rx_mills</i> | (Optional) | RX interval in milliseconds                  |
| multiplier          | (Optional) | Configure detect multiplier for bfd sessions |
| <i>int_mult</i>     | (Optional) | Detect Multiplier                            |

## Command Mode

- /exec/configure

## bfd interval min\_rx multiplier

bfd [ ipv6 | ipv4 ] interval <min\_tx\_mills> min\_rx <min\_rx\_mills> multiplier <int\_mult>

### Syntax Description

| Syntax Description  |  |  |
|---------------------|--|--|
| bfd                 |  | BFD commands                                 |
| interval            |  | Configure BFD session interval parameters    |
| ipv6                |  | (Optional) ipv6 sessions                     |
| ipv4                |  | (Optional) ipv4 sessions                     |
| <i>min_tx_mills</i> |  | TX interval in milliseconds                  |
| min_rx              |  | Minimum RX interval                          |
| <i>min_rx_mills</i> |  | RX interval in milliseconds                  |
| multiplier          |  | Configure detect multiplier for bfd sessions |
| <i>int_mult</i>     |  | Detect Multiplier                            |

### Command Mode

- /exec/configure/if-ma /exec/configure/if-ma-p2p

## bfd interval min\_rx multiplier

bfd [ ipv6 | ipv4 ] interval <min\_tx\_mills> min\_rx <min\_rx\_mills> multiplier <int\_mult>

### Syntax Description

| Syntax Description  |  |  |
|---------------------|--|--|
| bfd                 |  | BFD commands                                 |
| interval            |  | Configure BFD session interval parameters    |
| ipv6                |  | (Optional) ipv6 sessions                     |
| ipv4                |  | (Optional) ipv4 sessions                     |
| <i>min_tx_mills</i> |  | TX interval in milliseconds                  |
| min_rx              |  | Minimum RX interval                          |
| <i>min_rx_mills</i> |  | RX interval in milliseconds                  |
| multiplier          |  | Configure detect multiplier for bfd sessions |
| <i>int_mult</i>     |  | Detect Multiplier                            |

### Command Mode

- /exec/configure

# bfd move-session target

bfd move-session target <target\_mod> [ <discr> ]

## Syntax Description

|                           |                   |                                  |
|---------------------------|-------------------|----------------------------------|
| <b>Syntax Description</b> | bfd               | BFD commands                     |
|                           | move-session      | move a session                   |
|                           | target            | Target module                    |
|                           | <i>target_mod</i> | Module number                    |
|                           | <i>discr</i>      | (Optional) Session discriminator |

## Command Mode

- /exec/configure/if-ma /exec/configure/if-ma-p2p

## bfd neighbor src-ip dest

```
[no] bfd neighbor src-ip { <src_ip> dest-ip <dest_ip> | <src_ipv6> dest-ip <dest_ipv6> }
```

### Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults       |
| bfd                | BFD commands  |
| neighbor           | BFD neighbor configuration commands (simulate client) |
| src-ip             | Source ip   |
| <i>src_ip</i>      | Source ip value                                       |
| dest-ip            | Destination ip  |
| <i>dest_ip</i>     | Destination ip value                                  |

### Command Mode

- /exec/configure/if-ma /exec/configure/if-ma-p2p

# bfd optimize subinterface

[no] bfd [ ipv4 ] optimize subinterface

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| bfd                | BFD commands                                    |
| optimize           | optimize  |
| subinterface       | optimize subinterfaces                          |
| ipv4               | (Optional) ipv4 sessions                        |

## Command Mode

- /exec/configure/if-ma /exec/configure/if-ma-p2p

# bfd per-link

[no] bfd [ { ipv4 | ipv6 } ] per-link

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| bfd                | BFD commands                                    |
| per-link           | Run BFD sessions on each port-channel link      |
| ipv4               | (Optional) ipv4 sessions                        |
| ipv6               | (Optional) ipv6 sessions                        |

## Command Mode

- /exec/configure/if-eth-port-channel /exec/configure/if-port-channel-sub  
/exec/configure/if-eth-port-channel-p2p



# bfd session-store remove client

```
bfd session-store remove <hex_disc> client <int_cl>
```

## Syntax Description

|                           |                 |                                   |
|---------------------------|-----------------|-----------------------------------|
| <b>Syntax Description</b> | bfd             | BFD commands                      |
|                           | session-store   | session store operation           |
|                           | remove          | Remove session from session store |
|                           | <i>hex_disc</i> | Session discriminator             |
|                           | client          | Client Id                         |
|                           | <i>int_cl</i>   | client                            |

## Command Mode

- /exec/configure

## bfd session-store source-ip dest-ip intf client

bfd session-store source-ip <src\_ip> dest-ip <dest\_ip> intf <intf\_id> client <int\_cl>

### Syntax Description

| Syntax Description |  |                         |
|--------------------|--|-------------------------|
| bfd                |  | BFD commands            |
| session-store      |  | Session store operation |
| source-ip          |  | source ip               |
| <i>src_ip</i>      |  | source ip value         |
| dest-ip            |  | dest ip                 |
| <i>dest_ip</i>     |  | source ip value         |
| intf               |  | interface               |
| <i>intf_id</i>     |  | Interface Id            |
| client             |  | Client Id               |
| <i>int_cl</i>      |  | client                  |

### Command Mode

- /exec/configure

# bfd session state state

bfd session state <hex\_disc> state <state\_up\_down>

## Syntax Description

| Syntax Description   |  |                       |
|----------------------|--|-----------------------|
| bfd                  |  | BFD commands          |
| session              |  | session related test  |
| state                |  | Change session state  |
| <i>hex_disc</i>      |  | Session discriminator |
| state                |  | Change to state       |
| <i>state_up_down</i> |  | UP/DOWN               |

## Command Mode

- /exec/configure

## bfd slow-timer

bfd [ { ipv4 | ipv6 } ] slow-timer <int\_slow\_timer> | no bfd [ { ipv4 | ipv6 } ] slow-timer

### Syntax Description

| Syntax Description    |  |  |
|-----------------------|--|--|
| no                    |  | Negate a command or set its defaults   |
| bfd                   |  | BFD commands                           |
| slow-timer            |  | Configure slow mode timer for sessions |
| <i>int_slow_timer</i> |  | Slow rate timer in milliseconds        |
| ipv4                  |  | (Optional) ipv4 sessions               |
| ipv6                  |  | (Optional) ipv6 sessions               |

### Command Mode

- /exec/configure

## **bfd startup-timer bfd startup-timer**

bfd startup-timer <int\_startup\_timer> | [ no ] bfd startup-timer

### **Syntax Description**

| <b>Syntax Description</b> |   |  |
|---------------------------|---|--|
| no                        | (Optional) Negate a command or set its defaults |  |
| bfd                       | BFD commands                                    |  |
| startup-timer             | Configure Delayed Start Up timer for sessions   |  |
| <i>int_startup_timer</i>  | Start Up timer in seconds                       |  |

### **Command Mode**

- /exec/configure

## bfd system internal

```
[no] bfd system internal { max session histories <sess_histories_val> | max lc retry interval <max_lc_retry_val>
| max acl retry interval <max_acl_retry_val> | lc retry interval <lc_retry_val> | acl retry interval <acl_retry_val>
| session init retry interval <init_retry_val> | move interval <move_interval> | max lc wait <max_lc_wait_val>
| move detect-mult <move_dm> | neighbor-discovery interval <discovery_val> | max sessions <max_sess_val>
| max mts tlvs <tlv_val> | enable-mts <f2lc_number_v> <f3lc_number_v> | max mts flush interval <flush_val>
| session expiry <session_expiry_val> } | { interval issu <tx_val> min_rx <rx_val> multiplier <multiplier_val>
}
```

### Syntax Description

#### Syntax Description

|                           |  |
|---------------------------|--|
| no                        | (Optional) Reset global config to defaults                             |
| bfd                       | BFD commands   |
| system                    | System-related commands  |
| internal                  | Commands for internal use  |
| max                       | Configure maximum  |
| session                   | session  |
| histories                 | histories to retain  |
| <i>sess_histories_val</i> | Number of session histories to retain                                  |
| retry                     | retry  |
| interval                  | interval   |
| lc                        | LC   |
| retry                     | LC retry (secs)  |
| <i>max_lc_retry_val</i>   | Value for max interval(sec)  |
| <i>lc_retry_val</i>       | gap in seconds   |
| session                   | Session  |
| init                      | reinit interval  |
| flush                     | flush interval   |
| interval                  | interval   |
| <i>init_retry_val</i>     | Gap in seconds   |
| acl                       | acl  |
| <i>max_acl_retry_val</i>  | Maximum interval for which acl installation needs to be retried (secs) |

|                        |  |
|------------------------|--|
| <i>flush_val</i>       | Maximum interval to wait before pending mts is sent to aclmgr/bfdc (sec) |
| acl                    | acl  |
| <i>acl_retry_val</i>   | Acl retry interval(secs)   |
| interval               | TX to use during ISSU  |
| issu                   | issu parameters  |
| min_rx                 | RX to use during ISSU  |
| multiplier             | Multiplier to use during ISSU  |
| <i>tx_val</i>          | TX val (msec)  |
| <i>rx_val</i>          | RX val (msecs)   |
| <i>multiplier_val</i>  | Multiplier   |
| move                   | Move   |
| interval               | interval   |
| <i>move_interval</i>   | move interval value  |
| detect-mult            | detect multiplier  |
| <i>move_dm</i>         | move detect multiplier value   |
| wait                   | wait   |
| <i>max_lc_wait_val</i> | max wait time(sec)   |
| neighbor-discovery     | neighbor discovery   |
| <i>discovery_val</i>   | Neighbor discovery interval(msecs)                                       |
| sessions               | sessions   |
| <i>max_sess_val</i>    | max number of sessions(16-10000)   |
| mts                    | mts msg  |
| tlvs                   | TLVS batched   |
| <i>tlv_val</i>         | number of tlvs   |
| enable-mts             | Enables MTS send(F2)/recv(F3) between Specified line cards               |
| <i>f2lc_number_v</i>   | F2 Line card number (1-10)   |
| <i>f3lc_number_v</i>   | F3 Line card number (1-10)   |
| session                | session  |
| expiry                 | expiry   |

---

*session\_expiry\_val* session expiry sec

---

**Command Mode**

- /exec



# binary-location

[no] binary-location <source-uri>

## Syntax Description

|                           |                   |   |
|---------------------------|-------------------|---|
| <b>Syntax Description</b> | no                | (Optional) Negate a command or set its defaults |
|                           | binary-location   | the location binaries are downloaded from       |
|                           | <i>source-uri</i> | Location for restoration to pick up binaries    |

## Command Mode

- /exec/configure/personality

# blink

```
[no] blink { module <module> | <s0> <santa-cruz-range> | chassis | powersupply <psnum> | fan <fan_num>
}
```

## Syntax Description

| Syntax Description      |   |  |
|-------------------------|---|--|
| no                      | (Optional) Negate a command or set its defaults |  |
| blink                   | blink locator led                               |  |
| module                  | blink module led                                |  |
| <i>module</i>           | please enter the module number                  |  |
| <i>s0</i>               | blink a specific xbar                           |  |
| <i>santa-cruz-range</i> | please enter the xbar number                    |  |
| chassis                 | blink chassis led                               |  |
| powersupply             | blink powersupply led                           |  |
| <i>psnum</i>            | powersupply number                              |  |
| fan                     | blink Fan led                                   |  |
| <i>fan_num</i>          | fan number                                      |  |

## Command Mode

- /exec

# bloggerd delete all

bloggerd delete { all-temporary-binary-log-dumps | all-temporary-binary-show-tech-files }

## Syntax Description

| Syntax Description                   |  |   |
|--------------------------------------|--|---|
| bloggerd                             |  | Blogger commands  |
| delete                               |  | Delete all logs of one type   |
| all-temporary-binary-log-dumps       |  | Delete all binary log dumps from the local partition (/var/sysmgr/tmp/) |
| all-temporary-binary-show-tech-files |  | Delete all binary show tech files                                       |

## Command Mode

- /exec

# bloggerd live-process-core process pid

bloggerd live-process-core process <process-name> pid <process-pid>

## Syntax Description

| Syntax Description  |  |  |
|---------------------|--|--|
| bloggerd            |  | Blogger commands   |
| live-process-core   |  | Request a process core dump without killing it                                     |
| process             |  | Linux Process name   |
| <i>process-name</i> |  | Enter the Linux name of the process for which core is being requested (Eg: sysmgr) |
| pid                 |  | Process PID  |
| <i>process-pid</i>  |  | Enter the linux PID of the process for which core is being requested (Eg: 4571)    |

## Command Mode

- /exec

# bloggerd live-process-core sap

bloggerd live-process-core sap <sap>

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| bloggerd           |  | Blogger commands                                    |
| live-process-core  |  | Dump the core of the live-process                   |
| sap                |  | Dump core for a particular SAP                      |
| sap                |  | Enter a valid SAP. Enter 0 for ALL SAPs in this VDC |

## Command Mode

- /exec

# bloggerd log-dump all

```
[no] bloggerd log-dump { all | [ module <module> ] sap <sap_num> [ vdc <new_id> | vdc-all ] }
```

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults                                  |
| bloggerd           | Blogger commands   |
| log-dump           | Dump Log Buffer  |
| all                | Log Dump for ALL services across ALL modules in the switch on reaching threshold |
| module             | (Optional) Enable Buffer Dump for particular Module                              |
| <i>module</i>      | (Optional) Enter a valid Module Number   |
| sap                | Enable Buffer Dump for a particular sap  |
| <i>sap_num</i>     | Enter a valid SAP. Enter 0 for ALL SAPs in this VDC                              |
| vdc                | (Optional) Enable Log Dump for a particular VDC. DEFAULT_VDC by default          |
| <i>new_id</i>      | (Optional) Enter a valid VDC ID  |
| vdc-all            | (Optional) Enable Log Dump for the sap on ALL VDCs                               |

## Command Mode

- /exec/configure

# bloggerd log-dump once log-buffer sap event-history

```
bloggerd log-dump once log-buffer sap <sap> event-history { errors | msgs | { app-specific <uuid> instance
<buffer-instance> } }
```

## Syntax Description

| Syntax Description     |  |   |
|------------------------|--|---|
| bloggerd               |  | Blogger commands                                    |
| log-dump               |  | Dump Log Buffer                                     |
| once                   |  | Dump Log Buffer once immediately                    |
| log-buffer             |  | Dump Log buffer                                     |
| sap                    |  | Enable Buffer Dump for a particular sap             |
| <i>sap</i>             |  | Enter a valid SAP. Enter 0 for ALL SAPs in this VDC |
| event-history          |  | Event-History Buffers                               |
| errors                 |  | event-history errors                                |
| msgs                   |  | event-history messages                              |
| app-specific           |  | application specific event history                  |
| <i>uuid</i>            |  | Enter valid app's UUID                              |
| instance               |  | Buffer Instance of the App-Specific SDWrap buffer   |
| <i>buffer-instance</i> |  | Enter a valid SDWrap buffer instance for the app    |

## Command Mode

- /exec

# bloggerd log-dump once pss uuid

bloggerd log-dump once pss uuid <uuid>

## Syntax Description

| Syntax Description |                                  |
|--------------------|----------------------------------|
| bloggerd           | Blogger commands                 |
| log-dump           | Dump Log Buffer                  |
| once               | Dump Log Buffer once immediately |
| pss                | Dump PSS                         |
| uuid               | Dump PSS for a particular UUID   |
| <i>uuid</i>        | Enter a app's UUID               |

## Command Mode

- /exec



# bloggerd log-throttle

```
[no] bloggerd log-throttle [ min-rollover <min-rollover> max-rollover-per-minute <max-rollover-per-minute> ]
```

## Syntax Description

### Syntax Description

|                                |  |
|--------------------------------|--|
| no                             | (Optional) Negate a command or set its defaults  |
| bloggerd                       | Blogger commands   |
| log-throttle                   | Enable Log Dump Throttling for all NxOS services   |
| min-rollover                   | (Optional) Number of minimum buffer rollovers before starting to throttle. Default: 5    |
| <i>min-rollover</i>            | (Optional) Enter the minimum number of roll-overs before throttling log-dump. Default: 5 |
| max-rollover-per-minute        | (Optional) Maximum allowed buffer rollovers per minute. Default: 1                       |
| <i>max-rollover-per-minute</i> | (Optional) Enter the maximum allowed roll-overs per minute before throttling. Default: 1 |

## Command Mode

- /exec/configure

# bloggerd log-transfer

```
bloggerd log-transfer { <ip-addr> <path> | logflash }
```

## Syntax Description

|                           |                     |  |
|---------------------------|---------------------|--|
| <b>Syntax Description</b> | <b>bloggerd</b>     | Blogger commands                                 |
|                           | <b>log-transfer</b> | Configure log transfer                           |
|                           | <i>ip-addr</i>      | IP addr of logging server                        |
|                           | <i>path</i>         | Path in tftp server to store logs. Eg: logOutput |
|                           | <b>logflash</b>     | Move all log-files to logflash                   |

## Command Mode

- /exec/configure

# bloggerd log-transfer

[no] bloggerd log-transfer

## Syntax Description

|                           |              |                                      |
|---------------------------|--------------|--------------------------------------|
| <b>Syntax Description</b> | no           | Negate a command or set its defaults |
|                           | bloggerd     | Blogger commands                     |
|                           | log-transfer | Configure log transfer               |

## Command Mode

- /exec/configure

## bloggerd mleak-check directory1 directory2

bloggerd mleak-check directory1 <uri0> directory2 <uri1>

### Syntax Description

| Syntax Description |   |
|--------------------|---|
| bloggerd           | Blogger commands                                  |
| mleak-check        | Leak check  |
| directory1         | Enter path of directory                           |
| <i>uri0</i>        | Linux path to file/directory (Eg: /bootflash/abc) |
| directory2         | Enter path of directory                           |
| <i>uri1</i>        | Linux path to file/directory (Eg: /bootflash/abc) |

### Command Mode

- /exec

# bloggerd leak-dump all

bloggerd leak-dump all

## Syntax Description

| Syntax Description |                         |
|--------------------|-------------------------|
| bloggerd           | Blogger commands        |
| leak-dump          | Leak dump               |
| all                | All apps on all modules |

## Command Mode

- /exec

# bloggerd parse log-buffer file

```
bloggerd parse log-buffer { file | directory } <uri0>
```

## Syntax Description

|                           |             |  |
|---------------------------|-------------|--|
| <b>Syntax Description</b> | bloggerd    | Blogger commands                                   |
|                           | parse       | Parse a file                                       |
|                           | log-buffer  | Parse buffer log file                              |
|                           | directory   | Enter path of directory                            |
|                           | file        | Enter file name. Please unzip file before parsing! |
|                           | <i>uri0</i> | Linux path to file/directory (Eg: /bootflash/abc)  |

## Command Mode

- /exec

# bloggerd parse log-buffer file sap

bloggerd parse log-buffer file <uri0> sap <sap-num>

## Syntax Description

|                           |                |   |
|---------------------------|----------------|---|
| <b>Syntax Description</b> | bloggerd       | Blogger commands                                    |
|                           | parse          | Parse a file  |
|                           | log-buffer     | Parse buffer log file                               |
|                           | file           | Enter file name. Please unzip file before parsing!  |
|                           | <i>uri0</i>    | Linux path to file (Eg: /bootflash/abc)             |
|                           | sap            | SAP of the application which should parse the file  |
|                           | <i>sap-num</i> | Enter a valid SAP. Enter 0 for ALL SAPs in this VDC |

## Command Mode

- /exec

# bloggerd parse pss file

bloggerd parse pss file <uri0>

## Syntax Description

---

### Syntax Description

---

bloggerd Blogger commands

---

parse Parse a file

---

pss Parse a dumped PSS File

---

file Enter file name (without pss extensions). Please unzip file before parsing!

---

*uri0* Linux path to file/directory (Eg: /bootflash/abc)

---

## Command Mode

- /exec



# bmp-activate-server

bmp-activate-server <server-number> | { no | default } bmp-activate-server <server-number>

## Syntax Description

| Syntax Description   |  |                                      |
|----------------------|--|--------------------------------------|
| no                   |  | Negate a command or set its defaults |
| default              |  | Inherit values from a peer template  |
| bmp-activate-server  |  | Activate BMP monitoring for the peer |
| <i>server-number</i> |  | Server Id                            |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor-sess

# bmp-server

[no] bmp-server <server-number>

## Syntax Description

| Syntax Description   |   |
|----------------------|---|
| no                   | (Optional) Negate a command or set its defaults |
| bmp-server           | Configure bmp-server                            |
| <i>server-number</i> | server number value                             |

## Command Mode

- /exec/configure/router-bgp

# boot-install nxos

```
{ boot-install nxos <uri0> | no boot-install nxos [ <uri0> ] }
```

## Syntax Description

|                           |              |                                      |
|---------------------------|--------------|--------------------------------------|
| <b>Syntax Description</b> | no           | Negate a command or set its defaults |
|                           | boot-install | Configure boot variables             |
|                           | nxos         | Configure NXOS image                 |
|                           | <i>uri0</i>  | Enter NXOS image uri                 |

## Command Mode

- /exec/configure

# boot-order

boot-order <new\_id>

## Syntax Description

---

### Syntax Description

*boot-order* The order at which a vdc will boot up. VDCs at the same level will be started parallelly

*new\_id* The order at which a vdc will boot up. VDCs at the same level will be started parallelly

---

## Command Mode

- /exec/configure/vdc

# boot

```
{ boot <s0> <uri0> [ module [ <module> ] ] | no boot <s0> [ <uri0> [ module [ <module> ] ] ] }
```

## Syntax Description

### Syntax Description

|                     |  |
|---------------------|--|
| <code>no</code>     | Negate a command or set its defaults           |
| <code>boot</code>   | Configure boot variables                       |
| <code>s0</code>     | use [show boot variables] for list of keywords |
| <code>uri0</code>   | Enter module image uri                         |
| <code>module</code> | (Optional) Enter module number for the image   |
| <code>module</code> | (Optional) Enter module number                 |

## Command Mode

- /exec/configure

# boot aci

```
{ boot aci <uri0> | no boot aci [ <uri0> ] }
```

## Syntax Description

|                           |             |                                      |
|---------------------------|-------------|--------------------------------------|
| <b>Syntax Description</b> | no          | Negate a command or set its defaults |
|                           | boot        | Configure boot variables             |
|                           | aci         | Configure ACI image                  |
|                           | <i>uri0</i> | Enter ACI image uri                  |

## Command Mode

- /exec/configure

# boot auto-copy

[no] boot auto-copy

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| boot               | Configure boot variables                        |
| auto-copy          | Turns on/off autcopy of bootvar images          |

## Command Mode

- /exec/configure

# boot kickstart

```
{ boot kickstart <uri0> | no boot kickstart [ <uri0> ] }
```

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| boot               |  | Configure boot variables             |
| kickstart          |  | Configure kickstart image            |
| <i>uri0</i>        |  | Enter Kickstart image uri            |

## Command Mode

- /exec/configure



# boot mode lxc

[no] boot mode lxc

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | no (Optional) Negate a command or set its defaults |
|                           | boot Configure boot mode                           |
|                           | <del>mode</del> boot mode                          |
|                           | lxc Turns on/off lxc mode                          |

## Command Mode

- /exec/configure

# boot nxos

```
{ boot nxos <uri0> | no boot nxos [ <uri0> ] }
```

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | <b>no</b> Negate a command or set its defaults |
|                           | <b>boot</b> Configure boot variables           |
|                           | <b>nxos</b> Configure NXOS image               |
|                           | <i>uri0</i> Enter nxos image uri               |

## Command Mode

- /exec/configure

# boot nxos sup-1

```
{ boot nxos <uri0> sup-1 | no boot nxos <uri0> sup-1 }
```

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <b>no</b> Negate a command or set its defaults    |
|                           | <b>boot</b> Configure boot variables              |
|                           | <b>nxos</b> Configure NXOS image                  |
|                           | <b>uri0</b> Enter kickstart image uri             |
|                           | <b>sup-1</b> Enter sup-1 to configure the 1st sup |

## Command Mode

- /exec/configure

# boot nxos sup-1 sup-2

{ boot nxos <uri0> sup-1 sup-2 | no boot nxos <uri0> sup-1 sup-2 }

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <b>no</b> Negate a command or set its defaults    |
|                           | <b>boot</b> Configure boot variables              |
|                           | <b>nxos</b> Configure NXOS image                  |
|                           | <b>uri0</b> Enter kickstart image uri             |
|                           | <b>sup-1</b> Enter sup-1 to configure the 1st sup |
|                           | <b>sup-2</b> Enter sup-2 to configure the 2nd sup |

## Command Mode

- /exec/configure

# boot nxos sup-2

```
{ boot nxos <uri0> sup-2 | no boot nxos <uri0> sup-2 }
```

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <b>no</b> Negate a command or set its defaults    |
|                           | <b>boot</b> Configure boot variables              |
|                           | <b>nxos</b> Configure NXOS image                  |
|                           | <b>uri0</b> Enter kickstart image uri             |
|                           | <b>sup-2</b> Enter sup-2 to configure the 2nd sup |

## Command Mode

- /exec/configure

# boot order bootflash

```
{ boot order bootflash [ pxe ] | no boot order bootflash [ pxe ] }
```

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| boot               |  | Configure boot variables             |
| order              |  | Configure loader fallback order      |
| bootflash          |  | Boot from Bootflash                  |
| pxe                |  | (Optional) Pxe Boot                  |

## Command Mode

- /exec/configure

# boot order pxe

```
{ boot order pxe [ bootflash ] | no boot order pxe [ bootflash ] }
```

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 |            | Negate a command or set its defaults |
| boot               |            | Configure boot variables             |
| order              |            | Configure loader fallback order      |
| pxe                |            | Pxe Boot                             |
| bootflash          | (Optional) | Boot from Bootflash                  |

## Command Mode

- /exec/configure

# boot system

{ boot system <uri0> | no boot system [ <uri0> ] }

## Syntax Description

|                           |               |                                      |
|---------------------------|---------------|--------------------------------------|
| <b>Syntax Description</b> | <b>no</b>     | Negate a command or set its defaults |
|                           | <b>boot</b>   | Configure boot variables             |
|                           | <b>system</b> | Configure system image               |
|                           | <i>uri0</i>   | Enter system image uri               |

## Command Mode

- /exec/configure



# bootmode boot

[no] bootmode boot

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| bootmode           | set bootmode for all modules in the switch      |
| boot               | boot in boot mode                               |

## Command Mode

- /exec/configure

# bootmode extruntime

[no] bootmode extruntime

## Syntax Description

---

|                           |    |   |
|---------------------------|----|---|
| <b>Syntax Description</b> | no | (Optional) Negate a command or set its defaults |
|---------------------------|----|---|

---

|  |          |  |
|--|----------|--|
|  | bootmode | set bootmode for all modules in the switch |
|--|----------|--|

---

|  |            |  |
|--|------------|--|
|  | extruntime | boot in runtime mode with extended diags |
|--|------------|--|

---

## Command Mode

- /exec/configure

# bootmode hitless

[no] bootmode hitless

## Syntax Description

---

|                           |    |   |
|---------------------------|----|---|
| <b>Syntax Description</b> | no | (Optional) Negate a command or set its defaults |
|---------------------------|----|---|

---

|          |  |
|----------|--|
| bootmode | set bootmode for all modules in the switch |
|----------|--|

---

|         |                      |
|---------|----------------------|
| hitless | boot in hitless mode |
|---------|----------------------|

---

## Command Mode

- /exec/configure

## bootmode module

[no] bootmode module <module> { boot | extruntime | hitless | netboot | nodiagruntime | runtime }

### Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults           |
| bootmode           |            | set bootmode for all modules in the switch     |
| module             |            | set bootmode for a given module in the switch  |
| <i>module</i>      |            | please enter module number                     |
| boot               |            | boot in boot mode                              |
| extruntime         |            | boot in runtime mode with extended diags       |
| hitless            |            | boot in hitless mode                           |
| netboot            |            | boot using boot netboot in runtime mode        |
| nodia runtime      |            | boot in runtime mode without running any diags |
| runtime            |            | boot in runtime mode with normal diags         |

### Command Mode

- /exec/configure

# bootmode nodiagruntime

[no] bootmode nodiagruntime

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| bootmode           | set bootmode for all modules in the switch      |
| nodiagruntime      | boot in runtime mode without running any diags  |

## Command Mode

- /exec/configure

# bootmode runtime

[no] bootmode runtime

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| bootmode           | set bootmode for all modules in the switch      |
| runtime            | boot in runtime mode with normal diags          |

## Command Mode

- /exec/configure

# buffer-boost

[no] buffer-boost

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| buffer-boost       | Enable extra buffers for this interface         |

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-eth-non-member /exec/configure/if-port-channel

# buffer-delete

```
buffer-delete { <id-range> | <id> | all }
```

## Syntax Description

---

### Syntax Description

buffer-delete delete buffered command(s)

---

*id-range* Range(whole-number) of command id(s) to be deleted from switch-profile buffer

---

*id* Exact command id (x.x.x format) to be deleted from switch-profile buffer

---

all delete all buffered commands

---

## Command Mode

- /exec/configure



# buffer-move

buffer-move <fromid> <toid>

## Syntax Description

---

### Syntax Description

---

buffer-move move buffered command(s)

---

*fromid* Command id of command(s) to be moved in switch-profile buffer

---

*toid* New command id to be assigned in switch-profile buffer

---

## Command Mode

- /exec/configure

## burst-detect rise-threshold bytes fall-threshold bytes2

[no] burst-detect rise-threshold <value-in-bytes> bytes fall-threshold <value-in-bytes> bytes2

### Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults                   |
| burst-detect       |            | Specify OOBST burst-detect thresholds for the class    |
| rise-threshold     |            | Threshold bytes(queue depth) to start monitoring burst |
|                    |            | <i>value-in-bytes</i>                                  |
| bytes              |            | bytes  |
| fall-threshold     |            | Threshold bytes(queue depth) to stop monitoring burst  |
|                    |            | <i>value-in-bytes</i>                                  |
| bytes2             |            | bytes2   |

### Command Mode

- /exec/configure/policy-map/type/queuing/class



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# callhome

callhome

## Syntax Description

---

### Syntax Description

---

callhome Enter the callhome configuration mode

---

## Command Mode

- /exec/configure



# callhome send configuration

callhome send configuration

## Syntax Description

| Syntax Description |                                 |
|--------------------|---------------------------------|
| callhome           | callhome commands               |
| send               | send a command callhome message |
| configuration      | configuration type              |

## Command Mode

- /exec

# callhome send diagnostic

callhome send diagnostic

## Syntax Description

---

### Syntax Description

---

callhome callhome commands

---

send send a command callhome message

---

diagnostic diagnostic command

---

## Command Mode

- /exec

# callhome send eem subject body

callhome send eem subject <s1> body <s2>

## Syntax Description

| Syntax Description |                                 |
|--------------------|---------------------------------|
| callhome           | callhome commands               |
| send               | send a command callhome message |
| eem                | eem action email                |
| subject            | action email subject            |
| body               | action email body               |
| <i>s1</i>          | subject-text string             |
| <i>s2</i>          | body-text string                |

## Command Mode

- /exec

# callhome test

callhome test

## Syntax Description

---

### Syntax Description

---

callhome callhome commands

---

test send a test callhome  
message

---

## Command Mode

- /exec

# callhome test inventory

callhome test inventory

## Syntax Description

| Syntax Description |                                 |
|--------------------|---------------------------------|
| callhome           | callhome commands               |
| test               | send a test callhome message    |
| inventory          | send a dummy callhome inventory |

## Command Mode

- /exec

# callhome test supfail

callhome test supfail

## Syntax Description

---

### Syntax Description

---

callhome callhome commands

---

test send a test callhome message

---

supfail send a dummy callhome message about sup failure

---

## Command Mode

- /exec

## capability additional-paths receive

[ no | default ] capability additional-paths receive [ disable ]

### Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults                 |
| default            | (Optional) Inherit values from a peer template                  |
| capability         | Advertise capability to the peer                                |
| additional-paths   | Additional paths capability                                     |
| receive            | Additional paths Receive capability                             |
| disable            | (Optional) Do not advertise additional paths Receive capability |

### Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-vpnv4
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-vpnv6
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv4-mvpn
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv6-mvpn

## capability additional-paths send

[ no | default ] capability additional-paths send [ disable ]

### Syntax Description

| Syntax Description |            |   |
|--------------------|------------|---|
| no                 | (Optional) | Negate a command or set its defaults              |
| default            | (Optional) | Inherit values from a peer template               |
| capability         |            | Advertise capability to the peer                  |
| additional-paths   |            | Additional paths capability                       |
| send               |            | Additional paths Send capability                  |
| disable            | (Optional) | Do not advertise additional paths Send capability |

### Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-vpnv4
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-vpnv6
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv4-mvpn
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv6-mvpn



# capability suppress 4-byte-as

[ no | default ] capability suppress 4-byte-as

## Syntax Description

|                           |            |   |
|---------------------------|------------|---|
| <b>Syntax Description</b> | no         | (Optional) Negate a command or set its defaults |
|                           | default    | (Optional) Inherit values from a peer template  |
|                           | capability | Capability                                      |
|                           | suppress   | Suppress sending out capability                 |
|                           | 4-byte-as  | Suppress 4-byte AS Capability                   |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor-sess

# capability vrf-lite

[no] capability vrf-lite [ evpn ]

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| capability         | Capability                                      |
| vrf-lite           | Enable VRF-lite support                         |
| evpn               | (Optional) Ethernet VPN                         |

## Command Mode

- /exec/configure/router-ospf/vrf

# capture session

[no] capture session <session-id>

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults  |
| capture            | Enable packet capture on this filter for session |
| session            | Session ID <1-48> for this session               |
| <i>session-id</i>  | Session ID <1-48> for this session               |

## Command Mode

- /exec/configure/ipacl /exec/configure/ipv6acl /exec/configure/macacl /exec/configure/arpacl

# carrier-delay

carrier-delay { <sec\_val> | msec <msec\_val> } | no carrier-delay

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults    |
| carrier-delay      |  | Specify delay for interface transitions |
| <i>sec_val</i>     |  | Carrier Transitions delay seconds       |
| msec               |  | Carrier Transitions delay milliseconds  |
| <i>msec_val</i>    |  | Carrier Transitions delay milliseconds  |

## Command Mode

- /exec/configure/if-vlan-common

# catena

{ catena <instance-name> } | { no catena <instance-name> }

## Syntax Description

| Syntax Description   |  |                                      |
|----------------------|--|--------------------------------------|
| no                   |  | Negate a command or set its defaults |
| catena               |  | L2 instance                          |
| <i>instance-name</i> |  | L2 instance-name                     |

## Command Mode

- /exec/configure

# catena device-group

{ catena device-group <device-grp-name> } | { no catena device-group <device-grp-name> }

## Syntax Description

| Syntax Description     |  |                                      |
|------------------------|--|--------------------------------------|
| no                     |  | Negate a command or set its defaults |
| catena                 |  | instance                             |
| device-group           |  | device group                         |
| <i>device-grp-name</i> |  | device-grp-name                      |

## Command Mode

- /exec/configure

# catena port-group

{ catena port-group <port-group-name> } | { no catena port-group <port-group-name> }

## Syntax Description

| Syntax Description     |  |                                      |
|------------------------|--|--------------------------------------|
| no                     |  | Negate a command or set its defaults |
| catena                 |  | instance                             |
| port-group             |  | port group                           |
| <i>port-group-name</i> |  | port-group-name                      |

## Command Mode

- /exec/configure

# catena vlan-group

{ catena vlan-group <vlan-grp-name> } | { no catena vlan-group <vlan-grp-name> }

## Syntax Description

| Syntax Description   |  |                                      |
|----------------------|--|--------------------------------------|
| no                   |  | Negate a command or set its defaults |
| catena               |  | instance                             |
| vlan-group           |  | vlan group                           |
| <i>vlan-grp-name</i> |  | vlan-grp-name                        |

## Command Mode

- /exec/configure



## cbts-member tunnel-te

[no] cbts-member tunnel-te <tunnel-num>

### Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| cbts-member        | Member Tunnel                                   |
| tunnel-te          | Tunnel Interface                                |
| <i>tunnel-num</i>  | Tunnel Interface number                         |

### Command Mode

- /exec/configure/if-te

# cd

cd <uri0>

## Syntax Description

---

**Syntax Description**

---

cd Change current directory

---

*uri0* Enter the name of the directory

---

## Command Mode

- /exec

# cdp advertise v1

cdp advertise { v1 | v2 } | no cdp advertise [ v1 | v2 ]

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults        |
| cdp                |  | Configure CDP parameters                    |
| advertise          |  | Highest CDP version supported on the switch |
| v1                 |  | CDP Version 1                               |
| v2                 |  | CDP Version 2                               |

## Command Mode

- /exec/configure

# cdp enable

[no] cdp enable

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| cdp                | Configure CDP interface parameters              |
| enable             | Enable/disable CDP on the interface             |

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-gig-ether-all /exec/configure/if-gig-ether /exec/configure/if-eth-base /exec/configure/if-mgmt-ether

# cdp enable

[no] cdp enable

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| cdp                | Configure CDP interface parameters              |
| enable             | Enable/disable CDP on all interfaces            |

## Command Mode

- /exec/configure

## cdp format device-id

[no] cdp format device-id { mac-address | serial-number | system-name }

### Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults   |  |
| cdp                | Configure CDP parameters                          |  |
| format             | Device ID format for CDP                          |  |
| device-id          | Device ID format for CDP                          |  |
| mac-address        | Mac-address of the Chassis                        |  |
| serial-number      | Chassis Serial Number/OUI                         |  |
| system-name        | System name/Fully Qualified Domain Name (Default) |  |

### Command Mode

- /exec/configure

# cdp holdtime

[no] cdp holdtime <i0>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| cdp                | Configure CDP parameters                        |
| holdtime           | CDP hold time advertised (in seconds)           |
| <i>i0</i>          | CDP hold time advertised (in seconds)           |

## Command Mode

- /exec/configure

# cdp timer

[no] cdp timer <i1>

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | <b>no</b> (Optional) Negate a command or set its defaults      |
|                           | <b>cdp</b> Configure CDP parameters                            |
|                           | <del><b>timer</b></del> CDP refresh time interval (in seconds) |
|                           | <b>i1</b> CDP refresh time interval (in seconds)               |

## Command Mode

- /exec/configure



# certificate

certificate <file-name> <host-name> | no certificate

## Syntax Description

|                           |                  |                                      |
|---------------------------|------------------|--------------------------------------|
| <b>Syntax Description</b> | no               | Negate a command or set its defaults |
|                           | certificate      | Specify certificate                  |
|                           | <i>file-name</i> | .pem certificate filename            |
|                           | <i>host-name</i> | hostname associated with certificate |

## Command Mode

- /exec/configure/telemetry

## cfs clear message-context name session-id

cfs clear message-context name <cfs-dyn-app-name> session-id <i0>

### Syntax Description

#### Syntax Description

|                         |   |
|-------------------------|---|
| cfs                     | CFS parameters                              |
| clear                   | clear message context                       |
| message-context         | clear message context                       |
| name                    | clear message context for given application |
| <i>cfs-dyn-app-name</i> | Registered name of the local application    |
| session-id              | Seesion id of message context               |
| <i>i0</i>               | Seesion id                                  |

### Command Mode

- /exec

# cfs debug all

cfs debug all

## Syntax Description

| Syntax Description |                             |
|--------------------|-----------------------------|
| cfs                | CFS parameters              |
| debug              | Internal command for debugs |
| all                | Internal command for debugs |

## Command Mode

- /exec

# cfs distribute

[no] cfs distribute

## Syntax Description

|                           |            |   |
|---------------------------|------------|---|
| <b>Syntax Description</b> | no         | (Optional) Negate a command or set its defaults |
|                           | distribute | Enable fabric wide distribution                 |

## Command Mode

- /exec/configure

# cfs eth cos

{ cfs eth cos <i0> | no cfs eth cos [ <i0> ] }

## Syntax Description

---

### Syntax Description

---

**n** Negate a command or set its defaults

---

**e** ETH configurations

---

**c** Configure CFS Ethernet COS value

---

*i0* COS Value Range

---

## Command Mode

- /exec/configure

# cfs eth distribute

[no] cfs eth distribute

## Syntax Description

|                           |            |   |
|---------------------------|------------|---|
| <b>Syntax Description</b> | no         | (Optional) Negate a command or set its defaults |
|                           | eth        | ETH configurations                              |
|                           | distribute | Enable CFS distribution over Ethernet           |

## Command Mode

- /exec/configure

## cfs internal

cfs internal { decrement-uncoord <i0> | decrement-unrestricted <i1> | increment-uncoord <i2> | increment-unrestricted <i3> | lock <i4> | unlock <i5> | latency-log-on | latency-log-off }

### Syntax Description

| Syntax Description     |  |  |
|------------------------|--|--|
| cfs                    |  | CFS parameters   |
| internal               |  | CFs internal database modification                             |
| decrement-uncoord      |  | Decrement the number of uncoord distributions for the sap      |
| <i>i0</i>              |  | SAP of the application to be locked                            |
| decrement-unrestricted |  | Decrement the number of unrestricted distributions for the sap |
| <i>i1</i>              |  | SAP of the application to be locked                            |
| increment-uncoord      |  | Increment the number of uncoord distributions for the sap      |
| <i>i2</i>              |  | SAP of the application to be locked                            |
| increment-unrestricted |  | Increment the number of unrestricted distributions for the sap |
| <i>i3</i>              |  | SAP of the application to be locked                            |
| lock                   |  | Lock and application instance.                                 |
| <i>i4</i>              |  | SAP of the application to be locked                            |
| unlock                 |  | UnLock a application instance.                                 |
| <i>i5</i>              |  | SAP of the application to be unlocked                          |
| latency-log-on         |  | Enable latency logs  |
| latency-log-off        |  | Disable latency logs   |

### Command Mode

- /exec

## cfs internal cfsoe

```
cfs internal cfsoe { sap <i0> { lmi <i1> | ami <i2> | emi <i3> | reorder <i4> | send_ack <i5> | drop_packet
<i6> | iod_register <i7> } | reset { all | reassembly_q } }
```

### Syntax Description

| Syntax Description |                                    |  |
|--------------------|------------------------------------|--|
| cfs                | CFS parameters                     |  |
| internal           | CFs internal database modification |  |
| cfsoe              | CFSOE IoD internal values          |  |
| sap                | SAP Number                         |  |
| <i>i0</i>          | SAP Number                         |  |
| lmi                | Least msg-id value                 |  |
| <i>i1</i>          | Msg-id value                       |  |
| ami                | Application msg-id value           |  |
| <i>i2</i>          | Msg-id value                       |  |
| emi                | Least msg-id value                 |  |
| <i>i3</i>          | Msg-id value                       |  |
| reorder            | Reorder Set/Unset                  |  |
| <i>i4</i>          | Set(1)/Unset(0)                    |  |
| send_ack           | Send/Dont Send Ack                 |  |
| <i>i5</i>          | Set(1)/Unset(0)                    |  |
| drop_packet        | Drop/Dont Drop Packet              |  |
| <i>i6</i>          | Set(1)/Unset(0)                    |  |
| iod_register       | Register app for IOD               |  |
| <i>i7</i>          | Set(1)/Unset(0)                    |  |
| reset              | Reset globally                     |  |
| all                | All values                         |  |
| reassembly_q       | Set Reassembly Queue count to zero |  |

### Command Mode

- /exec



# cfs ipv4 distribute

[no] cfs ipv4 { distribute | mcast-address <ip0> }

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| ipv4               | IPv4 configurations                             |  |
| distribute         | Enable CFS distribution over IPv4               |  |
| mcast-address      | Configure IPv4 multicast address                |  |
| <i>ip0</i>         | Admin scope [239.255/16, 239.192/16-239.251/16] |  |

## Command Mode

- /exec/configure

# cfs ipv6 distribute

```
[no] cfs ipv6 { distribute | mcast-address <ipv6> }
```

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| ipv6               | IPv6 configurations                             |  |
| distribute         | Enable CFS distribution over IPv6               |  |
| mcast-address      | Configure IPv6 multicast address                |  |

## Command Mode

- /exec/configure

## cfs merge all-fabrics name

cfs merge all-fabrics name <cfs-dyn-app-name> [ vsan <i0> ]

### Syntax Description

| Syntax Description      |  |   |
|-------------------------|--|---|
| cfs                     |  | CFS parameters                                  |
| merge                   |  | Resolve the merge failures                      |
| all-fabrics             |  | Fabric wide within the scope of the application |
| name                    |  | Application name                                |
| <i>cfs-dyn-app-name</i> |  | Registered name of the local application        |
| vsan                    |  | (Optional) For logical applications only        |
| <i>i0</i>               |  | (Optional) Vsan Id                              |

### Command Mode

- /exec

# cfs region

[no] cfs region <i0>

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

region Regions to limit the distribution scope of application(s)

---

i0 Region Id

---

## Command Mode

- /exec/configure

# chain

{ chain <chain-id> } | { no chain <chain-id> }

## Syntax Description

|                           |                 |                                      |
|---------------------------|-----------------|--------------------------------------|
| <b>Syntax Description</b> | no              | Negate a command or set its defaults |
|                           | chain           | chain for instance                   |
|                           | <i>chain-id</i> | chain ID                             |

## Command Mode

- /exec/configure/catena

# change-password

change-password [ old-password <s1> new-password <s2> ]

## Syntax Description

---

### Syntax Description

---

change-password Change your password

---

old-password (Optional) Current password for the user

---

*s1* (Optional) Current password for the user (clear text)

---

new-password (Optional) New password for the user

---

*s2* (Optional) New password for the user (clear text)

---

## Command Mode

- /exec

# checkpoint

```
checkpoint { [ <name> ] [ description <descr_str> ] | file <file_uri> }
```

## Syntax Description

### Syntax Description

|                  |  |
|------------------|--|
| checkpoint       | Create configuration rollback checkpoint                   |
| <i>name</i>      | (Optional) Checkpoint name                                 |
| file             | Create configuration rollback checkpoint to file           |
| <i>file_uri</i>  | Checkpoint file path                                       |
| description      | (Optional) checkpoint description for the given checkpoint |
| <i>descr_str</i> | (Optional) checkpoint description(can include spaces)      |

## Command Mode

- /exec

# checkpoint

[no] checkpoint <chkpoint\_name>

## Syntax Description

| Syntax Description   |  |  |
|----------------------|--|--|
| no                   |  | Negate a command or set its defaults     |
| checkpoint           |  | Delete configuration rollback checkpoint |
| <i>chkpoint_name</i> |  | Checkpoint name                          |

## Command Mode

- /exec



# cipher-suite

[no] cipher-suite <suite>

## Syntax Description

|                           |              |                        |
|---------------------------|--------------|------------------------|
| <b>Syntax Description</b> | cipher-suite | Configure Cipher Suite |
|                           | <i>suite</i> | Cipher Suite options   |

## Command Mode

- /exec/configure/macsec-policy

# class-map

[no] class-map [ type qos ] [ <any\_or\_all> ] <omap-name>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| class-map          | Configure a class map                           |
| type               | (Optional) Specify the type of this class-map   |
| qos                | (Optional) Qos class                            |
| <i>any_or_all</i>  | (Optional) Enter match-any or match-all         |
| <i>omap-name</i>   | class-map name                                  |

## Command Mode

- /exec/configure

# class-map type control-plane

[no] class-map type control-plane [ <opt\_any\_or\_all> ] <map-name>

## Syntax Description

| Syntax Description    |            |                                      |
|-----------------------|------------|--------------------------------------|
| no                    | (Optional) | Negate a command or set its defaults |
| class-map             |            | Configure a class map                |
| type                  |            | Specify the type of this class-map   |
| control-plane         |            | Control-Plane                        |
| <i>opt_any_or_all</i> | (Optional) | Enter match-any or match-all         |
| <i>map-name</i>       |            | Class-map name                       |

## Command Mode

- /exec/configure

## class-map type network-qos

[no] class-map type network-qos [ match-any ] <omap-name-nq>

### Syntax Description

| Syntax Description  |            |                                      |
|---------------------|------------|--------------------------------------|
| no                  | (Optional) | Negate a command or set its defaults |
| class-map           |            | Configure a class map                |
| type                |            | Specify the type of this class-map   |
| network-qos         |            | Network QoS class                    |
| match-any           | (Optional) | Match on any criteria                |
| <i>omap-name-nq</i> |            | class-map name                       |

### Command Mode

- /exec/configure

## class-map type psp

```
[no] class-map type psp [ <any_or_all> ] { <cmap-name-plc> | { handle <ppf_id> } } [ sequence <seq_no> ] [ client <clienttype> <clientID> ]
```

### Syntax Description

| Syntax Description   |            |                                      |
|----------------------|------------|--------------------------------------|
| no                   | (Optional) | Negate a command or set its defaults |
| class-map            |            | Configure a class map                |
| type                 |            | Specify the type of this class-map   |
| psp                  |            | PSP class                            |
| <i>any_or_all</i>    | (Optional) | Enter match-any or match-all         |
| <i>cmap-name-plc</i> |            | class-map name                       |
| handle               |            | Handle                               |
| <i>ppf_id</i>        |            | PPF ID                               |
| sequence             | (Optional) | sequence                             |
| <i>seq_no</i>        | (Optional) | Sequence number                      |
| client               | (Optional) | set client type                      |
| <i>clienttype</i>    | (Optional) | cli/onep                             |
| <i>clientID</i>      | (Optional) | client appID                         |

### Command Mode

- /exec/configure

## class-map type queuing

```
[no] class-map type queuing [ <any_or_all> ] { xxx <cmap-enum-name> | <cmap-dce-name> | zzz
<cmap-name-hque> }
```

### Syntax Description

| Syntax Description    |            |                                      |
|-----------------------|------------|--------------------------------------|
| no                    | (Optional) | Negate a command or set its defaults |
| class-map             |            | Configure a class map                |
| type                  |            | Specify the type of this class-map   |
| queuing               |            | Queuing class                        |
| <i>any_or_all</i>     | (Optional) | Enter match-any                      |
| <i>cmap-enum-name</i> |            |                                      |
| xxx                   | xxx        |                                      |
| zzz                   | zzz        |                                      |
| <i>cmap-dce-name</i>  |            | Queuing class-map name               |
| <i>cmap-name-hque</i> |            | Hierarchical class-map name          |

### Command Mode

- /exec/configure

# class-map type queuing

[no] class-map type queuing { <omap-dce-name> }

## Syntax Description

| Syntax Description   |            |                                      |
|----------------------|------------|--------------------------------------|
| no                   | (Optional) | Negate a command or set its defaults |
| class-map            |            | Configure a class map                |
| type                 |            | Specify the type of this class-map   |
| queuing              |            | Queuing class                        |
| <i>omap-dce-name</i> |            | Queuing class-map name               |

## Command Mode

- /exec/configure

# class

```
class { <cmmap-name> [ insert-before <cmmap-name2> ] | class-default } | no class { <cmmap-name> | class-default }
}
```

## Syntax Description

### Syntax Description

|                    |  |
|--------------------|--|
| no                 | Negate a command or set its defaults                           |
| class              | Attach class map to policy map                                 |
| <i>cmmap-name</i>  | Class-map name   |
| insert-before      | (Optional) Insert this class before another class              |
| <i>cmmap-name2</i> | (Optional) class map name before which insertion should happen |
| class-default      | Use class default  |

## Command Mode

- /exec/configure/pmap



# class

```
[no] class [ type qos ] <omap-name> [ insert-before [ type qos1 ] <omap-name2> ]
```

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults   |
| class              |            | Policy Criteria                        |
| type               | (Optional) | Specify the type of class              |
| qos                | (Optional) | Match on Qos class                     |
| <i>omap-name</i>   |            | class map name                         |
| insert-before      | (Optional) | Insert this class before another class |
| qos1               | (Optional) | Insert before Qos class                |
| <i>omap-name2</i>  | (Optional) | class map name                         |

## Command Mode

- /exec/configure/policy-map

## class \_\_inline\_\_

[no] class \_\_inline\_\_ [ type psp ] <omap-name-plc> [ insert-before <omap-name2> ]

### Syntax Description

| Syntax Description   |            |  |
|----------------------|------------|--|
| no                   | (Optional) | Negate a command or set its defaults   |
| class                |            | Policy Criteria                        |
| __inline__           |            | Inline Class                           |
| type                 | (Optional) | Specify the type of class              |
| psp                  | (Optional) | Match on PSP class                     |
| <i>omap-name-plc</i> |            | class map name                         |
| insert-before        | (Optional) | Insert this class before another class |
| <i>omap-name2</i>    | (Optional) | class map name                         |

### Command Mode

- /exec/configure/policy-map/type/plc

# class class-default

[no] class class-default

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults              |
| class              | Policy Criteria  |
| class-default      | System default class matching otherwise unclassified packets |

## Command Mode

- /exec/configure/policy-map

## class type network-qos

[no] class type network-qos <omap-name-nq>

### Syntax Description

| Syntax Description  |   |  |
|---------------------|---|--|
| no                  | (Optional) Negate a command or set its defaults |  |
| class               | Match on network-qos class-map                  |  |
| type                | Specify the type of this class-map              |  |
| network-qos         | Network QoS policy                              |  |
| <i>omap-name-nq</i> | Match class-map name                            |  |

### Command Mode

- /exec/configure/policy-map/type/uf

# class type network-qos class-default

[no] class type network-qos class-default

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults                   |
| class              | Match on network-qos class-map                                    |
| type               | Specify the type of this class-map                                |
| network-qos        | Network QoS policy  |
| class-default      | System default class matching otherwise not classified cos values |

## Command Mode

- /exec/configure/policy-map/type/uf

## class type psp

```
[no] class type psp { <omap-name-plc> | { handle1 <ppf_id1> } } [ insert-before { <omap-name2> | { handle2 <ppf_id2> } } ]
```

### Syntax Description

| Syntax Description   |            |  |
|----------------------|------------|--|
| no                   | (Optional) | Negate a command or set its defaults   |
| class                |            | Policy Criteria                        |
| type                 |            | Specify the type of class              |
| psp                  |            | Match on PSP class                     |
| <i>omap-name-plc</i> |            | class map name                         |
| handle1              |            | Handle1                                |
| <i>ppf_id1</i>       |            | PPF ID1                                |
| insert-before        | (Optional) | Insert this class before another class |
| <i>omap-name2</i>    | (Optional) | class map name                         |
| handle2              | (Optional) | Handle2                                |
| <i>ppf_id2</i>       | (Optional) | PPF ID2                                |

### Command Mode

- /exec/configure/policy-map/type/plc

## class type queuing

```
[no] class type queuing { xxx <cmap-enum-name> | <cmap-dce-name> | zzz <cmap-name-hque> } [
insert-before type queuing1 yyy <xcmmap-enum-name> ]
```

### Syntax Description

| Syntax Description      |  |   |
|-------------------------|--|---|
| xxx                     |  | xxx   |
| yyy                     |  | (Optional) yyy                                    |
| zzz                     |  | zzz   |
| no                      |  | (Optional) Negate a command or set its defaults   |
| class                   |  | Policy Criteria                                   |
| type                    |  | Specify the type of class                         |
| queuing                 |  | Match on Queuing class                            |
| <i>cmap-enum-name</i>   |  |   |
| <i>cmap-dce-name</i>    |  | Queuing class-map name                            |
| <i>cmap-name-hque</i>   |  | Hierarchical class-map name                       |
| insert-before           |  | (Optional) Insert this class before another class |
| queuing1                |  | (Optional) Insert before Queuing class            |
| <i>xcmmap-enum-name</i> |  | (Optional)  |

### Command Mode

- /exec/configure/policy-map/type/queuing

# clean ip bfd

clean ip bfd

## Syntax Description

---

### Syntax Description

---

clean Clean internal datastructures

---

ip IP related information

---

bfd clean ip bfd datastructures

---

## Command Mode

- /exec



# clean ipv6 bfd

clean ipv6 bfd

## Syntax Description

---

### Syntax Description

---

**clean** Clean internal datastructures

---

**ipv6** IPV6 related information

---

**bfd** clean ip bfd datastructures

---

## Command Mode

- /exec

# clear

```
clear { { ip route [ vrf { <vrf-name> | <vrf-known-name> | <vrf-all> } ] | { routing [ vrf { <vrf-name> |
<vrf-known-name> } ] [ ip | ipv4 ] [ unicast ] [ topology <topology-name> ] } } { <all> | { { <ip-addr> |
<ip-prefix> } [ <nh-addr> | <nh-addr-v6> ] [ <nh-interface> ] } } [ no-ufdm ]
```

## Syntax Description

### Syntax Description

|                       |  |
|-----------------------|--|
| clear                 | Reset functions                              |
| route                 | Clear routing information                    |
| routing               | Clear routing information                    |
| vrf                   | (Optional) Clear per-VRF information         |
| <i>vrf-name</i>       | (Optional) VRF name                          |
| <i>vrf-known-name</i> | (Optional) Known VRF name                    |
| vrf-all               | (Optional) Display information for all VRFs  |
| ip                    | Clear IP commands                            |
| ipv4                  | (Optional) Clear IP commands                 |
| unicast               | (Optional) Clear unicast information         |
| topology              | (Optional) Clear per-topology information    |
| <i>topology-name</i>  | (Optional) Topology name                     |
| all                   | Clear all routes                             |
| <i>ip-addr</i>        | Clear single host route                      |
| <i>ip-prefix</i>      | Clear single exact match route               |
| <i>nh-addr</i>        | (Optional) Clear single path                 |
| <i>nh-interface</i>   | (Optional) Interface Name                    |
| no-ufdm               | (Optional) Do not tell UFDm about the change |

## Command Mode

- /exec

# clear

```
clear { { ipv6 route [ vrf { <vrf-name> | <vrf-known-name> | <vrf-all> } ] } | { routing [ vrf { <vrf-name> |
<vrf-known-name> } ] ipv6 [ unicast ] [ topology <topology-name> ] } } { <all> | { { <ipv6-addr> |
<ipv6-prefix> } [ <nh-addr> <nh-interface> ] } } [ no-ufdm ]
```

## Syntax Description

### Syntax Description

|                       |  |
|-----------------------|--|
| clear                 | Reset functions                              |
| route                 | Clear routing information                    |
| routing               | Clear routing information                    |
| vrf                   | (Optional) Clear per-VRF information         |
| <i>vrf-name</i>       | (Optional) VRF name                          |
| <i>vrf-known-name</i> | (Optional) Known VRF name                    |
| vrf-all               | (Optional) Display information for all VRFs  |
| ipv6                  | Clear IPv6 commands                          |
| unicast               | (Optional) Clear unicast information         |
| topology              | (Optional) Clear per-topology information    |
| <i>topology-name</i>  | (Optional) Topology name                     |
| all                   | Clear all routes                             |
| <i>nh-interface</i>   | (Optional) Interface Name                    |
| no-ufdm               | (Optional) Do not tell UFDM about the change |

## Command Mode

- /exec

# clear

```
clear { { ip eigrp [ <eigrp-ptag> ] topology { { <address> <mask> } | { <prefix> } } [ vrf { <vrf-name> |
<vrf-known-name> | all } ] } | { ipv6 eigrp [ <eigrp-ptag> ] topology { <ipv6-prefix> } [ vrf { <vrf-name> |
<vrf-known-name> | all } ] } }
```

## Syntax Description

### Syntax Description

|                       |  |
|-----------------------|--|
| clear                 | Reset functions                                    |
| ip                    | Clear IP commands                                  |
| ipv6                  | Clear IPv6 commands                                |
| eigrp                 | EIGRP clear commands                               |
| vrf                   | (Optional) Display per-VRF information             |
| <i>vrf-name</i>       | (Optional) VRF name                                |
| <i>vrf-known-name</i> | (Optional) Known VRF name                          |
| all                   | (Optional) Display information for all VRFs        |
| <i>eigrp-ptag</i>     | (Optional) Process tag                             |
| topology              | Clear IP-EIGRP topology table entry                |
| <i>address</i>        | Network to display information about               |
| <i>mask</i>           | Network mask                                       |
| <i>prefix</i>         | IP prefix <network>/<length>, e.g., 192.168.0.0/16 |
| <i>eigrp-ptag</i>     | (Optional)   |

## Command Mode

- /exec

# clear

```
clear { { ip eigrp [ <eigrp-ptag> ] neighbors { * | <address> | <interface> } [ soft ] [ no-goodbye ] [ vrf {
<vrf-name> | <vrf-known-name> | all } ] } | { ipv6 eigrp [ <eigrp-ptag> ] neighbors { * | <ipv6-addr> |
<interface> } [ soft ] [ no-goodbye ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] } }
```

## Syntax Description

### Syntax Description

|                       |   |
|-----------------------|---|
| clear                 | Reset functions                             |
| ip                    | Clear IP commands                           |
| ipv6                  | Clear IPv6 commands                         |
| eigrp                 | EIGRP clear commands                        |
| vrf                   | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       | (Optional) VRF name                         |
| <i>vrf-known-name</i> | (Optional) Known VRF name                   |
| all                   | (Optional) Display information for all VRFs |
| <i>eigrp-ptag</i>     | (Optional) Process tag                      |
| neighbors             | Clear EIGRP neighbors                       |
| *                     | Clear all EIGRP neighbors                   |
| <i>address</i>        | IP-EIGRP neighbor address                   |
| <i>interface</i>      | Interface                                   |
| soft                  | (Optional) Soft reset                       |
| no-goodbye            | (Optional) No goodbye                       |
| <i>eigrp-ptag</i>     | (Optional)                                  |

## Command Mode

- /exec

## clear aaa local user blocked username

```
clear aaa local user blocked { username <s0> | all }
```

### Syntax Description

| Syntax Description |                             |  |
|--------------------|-----------------------------|--|
| clear              | Reset functions             |  |
| aaa                | Configure aaa functions     |  |
| local              | Local username              |  |
| user               | Local system user           |  |
| blocked            | Clear blocked user          |  |
| username           | Blocked username            |  |
| <i>s0</i>          | Enter the username          |  |
| all                | Clear all the blocked users |  |

### Command Mode

- /exec

# clear access-list counters

```
clear [ <ip_ipv6_mac> ] access-list counters [ <name> ]
```

## Syntax Description

| Syntax Description |            |   |
|--------------------|------------|---|
| clear              |            | Reset functions                           |
| <i>ip_ipv6_mac</i> | (Optional) | IP/IPv6/MAC                               |
| access-list        |            | Clear access list statistical information |
| counters           |            | Clear access list counters                |
| <i>name</i>        | (Optional) | List name                                 |

## Command Mode

- /exec

# clear access-list hardware counters

clear access-list hardware counters [ module <module> ]

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| clear              | Reset functions                           |
| access-list        | Clear access list statistical information |
| hardware           | hardware information                      |
| counters           | Clear access list counters                |
| module             | (Optional) Slot/module                    |
| <i>module</i>      | (Optional) Slot/module number             |

## Command Mode

- /exec



## clear access-list ipsg stats

```
clear access-list ipsg stats [ module <module> ] [ instance <instance_number> ]
```

### Syntax Description

| Syntax Description     |  |  |
|------------------------|--|--|
| clear                  |  | Reset functions                            |
| access-list            |  | access-list                                |
| ipsg                   |  | ipsg                                       |
| stats                  |  | Clear Statistics of IPSG drop entries      |
| module                 |  | (Optional) Slot/module                     |
| <i>module</i>          |  | (Optional) Slot/module number              |
| instance               |  | (Optional) ASIC Instance Number            |
| <i>instance_number</i> |  | (Optional) ASIC Instance Number in Decimal |

### Command Mode

- /exec

# clear accounting log

clear accounting log

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| clear              | Reset functions                          |
| accounting         | Clear accounting log(s) in all vdc's     |
| log                | Clear the accounting log(s) in all vdc's |

## Command Mode

- /exec

# clear aclqos cl-qos

clear aclqos cl-qos

## Syntax Description

---

**Syntax Description**

---

clear Reset functions

---

aclqos Configure aclqos  
debug

---

cl-qos cl-qos logs of  
ACLQOS

---

## Command Mode

- /exec

# clear aclqos fab

clear aclqos fab

## Syntax Description

---

### Syntax Description

---

clear Reset functions

---

aclqos Configure aclqos debug

---

fab Fabric logs of  
ACLQOS

---

## Command Mode

- /exec

# clear aclqos fc

clear aclqos fc

## Syntax Description

---

### Syntax Description

---

clear Reset functions

---

aclqos Configure aclqos  
debug

---

fc fc logs of ACLQOS

---

## Command Mode

- /exec

# clear aclqos libdrv

clear aclqos libdrv

## Syntax Description

---

### Syntax Description

---

clear Reset functions

---

aclqos Configure aclqos  
debug

---

libdrv libdrv logs of  
ACLQOS

---

## Command Mode

- /exec

# clear aclqos map

clear aclqos map

## Syntax Description

---

### Syntax Description

---

clear Reset functions

---

aclqos Configure aclqos  
debug

---

map map logs of ACLQOS

---

## Command Mode

- /exec

# clear aclqos merge

clear aclqos merge

## Syntax Description

---

### Syntax Description

---

clear Reset functions

---

aclqos Configure aclqos debug

---

merge merge logs of  
ACLQOS

---

## Command Mode

- /exec



# clear aclqos pl

clear aclqos pl

## Syntax Description

---

### Syntax Description

---

clear Reset functions

---

aclqos Configure aclqos  
debug

---

pl pl logs of ACLQOS

---

## Command Mode

- /exec

# clear aclqos ppf-parse

clear aclqos ppf-parse

## Syntax Description

---

### Syntax Description

---

clear    Reset functions

---

aclqos    Configure aclqos debug

---

ppf-parse    ppf-parse logs of  
                  ACLQOS

---

## Command Mode

- /exec

# clear aclqos ppf

clear aclqos ppf

## Syntax Description

---

### Syntax Description

---

clear Reset functions

---

aclqos Configure aclqos  
debug

---

ppf ppf logs of ACLQOS

---

## Command Mode

- /exec

# clear aclqos qng-hw

clear aclqos qng-hw

## Syntax Description

---

### Syntax Description

---

clear   Reset functions

---

aclqos   Configure aclqos  
          debug

---

qng-hw   Qng logs of ACLQOS

---

## Command Mode

- /exec

# clear aclqos qng

clear aclqos qng

## Syntax Description

---

### Syntax Description

---

clear Reset functions

---

aclqos Configure aclqos  
debug

---

qng Qng logs of ACLQOS

---

## Command Mode

- /exec

# clear aclqos rl

clear aclqos rl

## Syntax Description

---

### Syntax Description

---

clear Reset functions

---

aclqos Configure aclqos  
debug

---

rl RL logs of ACLQOS

---

## Command Mode

- /exec

# clear aclqos rm

clear aclqos rm

## Syntax Description

---

### Syntax Description

---

clear Reset functions

---

aclqos Configure aclqos  
debug

---

rm RM logs of ACLQOS

---

## Command Mode

- /exec

# clear aclqos sch

clear aclqos sch

## Syntax Description

---

### Syntax Description

---

clear Reset functions

---

aclqos Configure aclqos  
debug

---

sch Sch logs of ACLQOS

---

## Command Mode

- /exec



# clear aclqos stats

clear aclqos stats

## Syntax Description

---

### Syntax Description

---

clear Reset functions

---

aclqos Configure aclqos  
debug

---

stats stats logs of ACLQOS

---

## Command Mode

- /exec

# clear aclqos tbl

clear aclqos tbl

## Syntax Description

---

### Syntax Description

---

clear Reset functions

---

aclqos Configure aclqos  
debug

---

tbl tbl logs of ACLQOS

---

## Command Mode

- /exec

# clear aclqos trace-detail

clear aclqos trace-detail

## Syntax Description

| Syntax Description |                        |  |
|--------------------|------------------------|--|
| clear              | Reset functions        |  |
| aclqos             | Configure aclqos debug |  |
| trace-detail       | detail logs of ACLQOS  |  |

## Command Mode

- /exec

# clear aclqos trace

clear aclqos trace

## Syntax Description

---

### Syntax Description

---

clear Reset functions

---

aclqos Configure aclqos  
debug

---

trace trace logs of ACLQOS

---

## Command Mode

- /exec

# clear aclqos uf

clear aclqos uf

## Syntax Description

---

### Syntax Description

---

clear Reset functions

---

aclqos Configure aclqos  
debug

---

uf UF logs of ACLQOS

---

## Command Mode

- /exec

# clear bfd statistics

clear bfd statistics

## Syntax Description

---

### Syntax Description

---

|       |       |
|-------|-------|
| clear | Clear |
|-------|-------|

---

|     |     |
|-----|-----|
| bfd | bfd |
|-----|-----|

---

|            |            |
|------------|------------|
| statistics | statistics |
|------------|------------|

---

## Command Mode

- /exec

# clear bgp

```
clear bgp { ipv4 { unicast | multicast } policy statistics { { redistribute [ { { eigrp | isis | ospf | rip } <tag> } |
static | direct | amt | lisp | hmm | am ] } | { neighbor <neighbor-id> [ default-originate | { route-map | filter-list
| prefix-list } { in | out } ] } | { dampening } | { network { <ip-addr> mask <ip-mask> | <ip-prefix> } } | {
aggregate-address { <ip-addr> <ip-mask> | <ip-prefix> } { suppress-map | advertise-map } } } | { vpv4 |
vpnv6 } unicast policy statistics { neighbor <neighbor-id> [ { route-map | filter-list | prefix-list } { in | out }
] } | ipv6 { unicast | multicast } policy statistics { { redistribute [ { { eigrp | isis | ospfv3 | rip } <tag> } | static
| direct | amt | lisp | hmm | am ] } | { neighbor { <neighbor-id> | <ipv6-neighbor-id> } [ default-originate | {
route-map | filter-list | prefix-list } { in | out } ] } | { dampening } | { network <ipv6-prefix> } | {
aggregate-address <ipv6-prefix> { suppress-map | advertise-map } } } }
```

## Syntax Description

### Syntax Description

|              |   |
|--------------|---|
| clear        | Reset functions                                     |
| ipv4         | Clear IPv4 address-family                           |
| ipv6         | Clear IPv6 address-family                           |
| vpnv4        | Clear VPNv4 address-family                          |
| vpnv6        | Clear VPNv6 address-family                          |
| bgp          | Clear BGP sessions                                  |
| unicast      | Clear unicast address-family                        |
| multicast    | Clear multicast address-family                      |
| policy       | Clear policy related information                    |
| statistics   | Clear Route Filter statistics                       |
| redistribute | Statistics for redistribution                       |
| isis         | (Optional) ISO IS-IS                                |
| ospf         | (Optional) Open Shortest Path First (OSPF)          |
| ospfv3       | (Optional) Open Shortest Path First v3              |
| rip          | (Optional) Routing Information Protocol             |
| eigrp        | (Optional) Enhanced Interior Gateway Protocol       |
| static       | (Optional) Static routes                            |
| direct       | (Optional) Directly connected                       |
| amt          | (Optional) AMT anycast prefix                       |
| lisp         | (Optional) LISP EID-prefixes in the non-default VRF |

|                   |   |
|-------------------|---|
| hmm               | (Optional) HMM prefix                       |
| am                | (Optional) AM routes (learned via ARP)      |
| tag               | (Optional) Source protocol tag              |
| neighbor          | Clear neighbor specific counters            |
| neighbor-id       | Neighbor IPv4 address                       |
| route-map         | (Optional) Neighbor route-map               |
| prefix-list       | (Optional) Neighbor prefix-list             |
| filter-list       | (Optional) Neighbor filter-list             |
| out               | (Optional) Outbound policy                  |
| in                | (Optional) Inbound policy                   |
| default-originate | (Optional) Default-originate policy         |
| dampening         | Clear dampening info                        |
| network           | Configured IP prefix to advertise           |
| aggregate-address | Configured BGP aggregate prefixes           |
| suppress-map      | Statistics of suppress policy               |
| advertise-map     | Statistics of advertise policy              |
| ip-addr           | IP network advertised                       |
| mask              | Configured mask of the IP prefix advertised |
| ip-mask           | Dotted 4-octet mask                         |
| ip-prefix         | IP prefix in CIDR format                    |

### Command Mode

- /exec



# clear bgp bmp stats server

clear bgp bmp stats server { <server-id> | all }

## Syntax Description

| Syntax Description |                    |  |
|--------------------|--------------------|--|
| clear              | Reset functions    |  |
| bgp                | Clear BGP sessions |  |
| bmp                | Clear BMP          |  |
| stats              | Server Stats       |  |
| server             | BMP Server         |  |
| <i>server-id</i>   | Server ID          |  |
| all                | All BMP Servers    |  |

## Command Mode

- /exec

# clear bgp event-history

clear bgp event-history { <bgp-event-hist> | detail | all | msgs }

## Syntax Description

| Syntax Description |                       |                             |
|--------------------|-----------------------|-----------------------------|
|                    | clear                 | Reset functions             |
|                    | bgp                   | Clear BGP sessions          |
|                    | event-history         | Clear event-history buffers |
|                    | <i>bgp-event-hist</i> | Event History               |
|                    | detail                | Show detailed event logs    |
|                    | all                   | All event history buffers   |
|                    | msgs                  | Clear message logs of BGP   |

## Command Mode

- /exec

# clear bgp private

```
clear bgp private { all | global | threads | session | debug | io | memory | af | damp | lists | attr [ <ip-prefix> |
<ipv6-prefix> ] | rpm-info [ <rpm-name> { <ip-prefix> | <ipv6-prefix> } ] | neighbor { <neighbor-id> |
<ipv6-neighbor-id> } | slab | mqstat | ipc | rnh | rpm-attribute-cache | rpm-comm-attr-cache | peer-template
<peer-template-name> | aggregates [ summary ] | bestpath }
```

## Syntax Description

### Syntax Description

|                    |   |
|--------------------|---|
| clear              | Reset functions                         |
| bgp                | Clear BGP sessions                      |
| private            | Clear internal BGP counters             |
| all                | Clear all info                          |
| global             | Clear global info                       |
| threads            | Clear thread info                       |
| session            | Clear session info                      |
| debug              | Clear debug info                        |
| io                 | Clear IO info                           |
| memory             | Clear memory info                       |
| af                 | Clear AF info                           |
| damp               | Clear dampening info                    |
| lists              | Clear BGP internal lists                |
| attr               | Clear BGP attributes                    |
| rpm-info           | Clear BGP policy outbound info          |
| <i>ip-prefix</i>   | (Optional) Clear attribute for a prefix |
| neighbor           | Clear neighbor specific counters        |
| <i>neighbor-id</i> | Neighbor IP address                     |
| <i>rpm-name</i>    | (Optional) Route-map name               |
| slab               | Clear information about SLABs used      |
| mqstat             | Clear message queue stats               |
| ipc                | Clear ipc information                   |
| rnh                | Clear recursive next hops               |

---

|                           |  |
|---------------------------|--|
| aggregates                | Clear information about aggregates             |
| rpm-attribute-cache       | Clear rpm attribute cache statistics           |
| rpm-comm-attr-cache       | Clear rpm community attribute cache statistics |
| peer-template             | Clear information about a peer-template        |
| bestpath                  | Clear internal information about bestpath      |
| summary                   | (Optional) Summary only                        |
| <i>peer-template-name</i> | Peer-template name                             |

---

**Command Mode**

- /exec

# clear bootvar log

clear bootvar log

## Syntax Description

---

### Syntax Description

---

clear   Reset functions

---

bootvar   Clear the bootvar  
          log

---

log       Clear the bootvar  
          log

---

## Command Mode

- /exec

# clear cdp counters

```
clear cdp { counters [ interface <if0> ] | table [ interface1 <if1> ] }
```

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| clear              | Reset functions                               |  |
| cdp                | Cisco Discovery Protocol                      |  |
| counters           | Clear CDP counters on all interfaces          |  |
| interface          | (Optional) Clear CDP counters on an interface |  |
| <i>if0</i>         | (Optional)                                    |  |
| table              | Clear CDP cache on all interfaces             |  |
| interface1         | (Optional) Clear CDP cache on an interface    |  |
| <i>if1</i>         | (Optional)                                    |  |

## Command Mode

- /exec

# clear checkpoint database

clear checkpoint database [ user | system ]

## Syntax Description

---

### Syntax Description

---

clear      Reset functions

---

checkpoint      Clear configuration rollback checkpoint

---

database      Clear configuration rollback checkpoint database

---

user      (Optional) Clear configuration rollback checkpoint database for user checkpoints

---

system      (Optional) Clear configuration rollback checkpoint database for system checkpoints

---

## Command Mode

- /exec

# clear cli history

clear cli history

## Syntax Description

---

### Syntax Description

---

clear    Reset functions

---

cli      debug cli

---

history  history of cli  
          commands

---

## Command Mode

- /exec



# clear clis event-history objstr

```
clear clis event-history { objstr | objstr-errors }
```

## Syntax Description

| Syntax Description |  |                                  |
|--------------------|--|----------------------------------|
| clear              |  | Reset functions                  |
| clis               |  | cli server                       |
| event-history      |  | Event history logs for clis      |
| objstr             |  | Log of Object Store events       |
| objstr-errors      |  | Log of Object Store error events |

## Command Mode

- /exec

# clear controller accounting log

clear controller <ctrl-id> accounting log

## Syntax Description

|                           |                |                                 |
|---------------------------|----------------|---------------------------------|
| <b>Syntax Description</b> | clear          | Show running system information |
|                           | controller     | Controller command              |
|                           | <i>ctrl-id</i> | Controller id value             |
|                           | accounting     | Accounting                      |
|                           | log            | Clear log information           |

## Command Mode

- /exec

# clear copp statistics

clear copp statistics

## Syntax Description

| Syntax Description |                                   |
|--------------------|-----------------------------------|
| clear              | Reset functions                   |
| copp               | Clear policy information for copp |
| statistics         | Clear statistics                  |

## Command Mode

- /exec

# clear cores

clear cores

## Syntax Description

---

### Syntax Description

---

clear Reset functions

---

cores clear all core dumps for the switch

---

## Command Mode

- /exec

# clear cores archive

clear cores archive [ file <s0> ]

## Syntax Description

---

### Syntax Description

---

clear Reset functions

---

cores clear all cores for this vdc

---

archive clear all core dump files for this vdc from logflash on this module

---

file (Optional) delete a core file on logflash

---

s0 (Optional) Name of file in directory 'core'

---

## Command Mode

- /exec

# clear counters

clear counters

## Syntax Description

---

**Syntax Description**

---

|       |                    |
|-------|--------------------|
| clear | Reset<br>functions |
|-------|--------------------|

---

|          |                |
|----------|----------------|
| counters | Clear counters |
|----------|----------------|

---

## Command Mode

- /exec

# clear counters buffers

```
clear counters buffers [ module <module> [ instance <instance> ] ] [ __readonly__ <clear_valid> ]
```

## Syntax Description

| Syntax Description  |  |  |
|---------------------|--|--|
| clear               |  | Reset functions                            |
| counters            |  | Clear counters                             |
| buffers             |  | Clear system buffer max cell usage counter |
| module              |  | (Optional) Slot/module                     |
| <i>module</i>       |  | (Optional) Slot/module number              |
| instance            |  | (Optional) ASIC Instance Number            |
| <i>instance</i>     |  | (Optional) ASIC Instance Number in Decimal |
| <i>__readonly__</i> |  | (Optional) Read Only                       |
| <i>clear_valid</i>  |  | (Optional) Clear                           |

## Command Mode

- /exec

# clear counters interface

clear counters interface <ifindex>

## Syntax Description

---

### Syntax Description

---

clear    Reset functions

---

counters    Clear counters

---

interface    Clear interface  
counters

---

*ifindex*    Clear interface  
counters

---

## Command Mode

- /exec



# clear counters interface all

clear counters interface all

## Syntax Description

| Syntax Description |                              |
|--------------------|------------------------------|
| clear              | Reset functions              |
| counters           | Clear counters               |
| interface          | Clear interface counters     |
| all                | Clear all interface counters |

## Command Mode

- /exec

# clear counters interface snmp

```
clear counters interface <ifindex> snmp
```

## Syntax Description

---

**Syntax Description**

---

clear    Reset functions

---

counters    Clear counters

---

interface    Clear interface counters

---

*ifindex*    Clear interface counters

---

snmp    Clear snmp interface  
counters

---

## Command Mode

- /exec

# clear counters mpls strip

clear counters mpls strip

## Syntax Description

| Syntax Description |                           |
|--------------------|---------------------------|
| clear              | Reset functions           |
| mpls               | Configure MPLS settings   |
| strip              | Stripping of MPLS headers |
| counters           | stats/counters for labels |

## Command Mode

- /exec

## clear counters tah-buffers

```
clear counters tah-buffers [ module <module> ] [ { instance <instance> | { unit <unit> slice <slice> } } ]
```

### Syntax Description

#### Syntax Description

|                 |  |
|-----------------|--|
| clear           | Reset functions                            |
| counters        | Clear counters                             |
| tah-buffers     | Clear system buffer max cell usage counter |
| instance        | (Optional) ASIC Instance Number            |
| <i>instance</i> | (Optional) ASIC Instance Number in Decimal |
| unit            | (Optional) Asic Number                     |
| <i>unit</i>     | (Optional) Asic Number on the module       |
| slice           | (Optional) slice num on asic               |
| <i>slice</i>    | (Optional) slice number on asic            |
| module          | (Optional) Slot/module                     |
| <i>module</i>   | (Optional) Slot/module number              |

### Command Mode

- /exec

# clear debug-logfile

clear debug-logfile <s0>

## Syntax Description

| Syntax Description |  |                          |
|--------------------|--|--------------------------|
| clear              |  | Reset functions          |
| debug-logfile      |  | Remove the debug logfile |
| s0                 |  | Provide name of the file |

## Command Mode

- /exec

# clear debug logfile

clear debug logfile <s0>

## Syntax Description

---

### Syntax Description

---

clear Reset functions

---

debug Debugging functions

---

logfile Remove the debug  
logfile

---

s0 Provide name of the file

---

## Command Mode

- /exec

# clear dot1x all

```
{ clear dot1x all } | { clear dot1x interface <if> }
```

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | <i>clear</i> Reset functions                         |
|                           | <i>dot1x</i> dot1x configuration commands            |
|                           | <i>all</i> authenticator instances on all interfaces |
|                           | <i>if</i> target interface                           |

## Command Mode

- /exec

# clear dot1x supplicant all

{ clear dot1x supplicant all } | { clear dot1x supplicant interface <if> }

## Syntax Description

| Syntax Description |                              |  |
|--------------------|------------------------------|--|
| clear              | Reset functions              |  |
| dot1x              | dot1x configuration commands |  |
| all                | instances on all interfaces  |  |
| supplicant         | 802.1x supplicant            |  |
| <i>if</i>          | target interface             |  |

## Command Mode

- /exec



# clear ecp statistics

clear ecp statistics

## Syntax Description

| Syntax Description |                             |
|--------------------|-----------------------------|
| clear              | Reset functions             |
| ecp                | ECP (Edge Control Protocol) |
| statistics         | Clear ECP Statistics        |

## Command Mode

- /exec

## clear eigrp event-history

clear eigrp [ <eigrp-ptag> ] event-history [ cli | notifications | all ]

### Syntax Description

| Syntax Description |            |                                 |
|--------------------|------------|---------------------------------|
| clear              |            | Reset functions                 |
| eigrp              |            | EIGRP clear commands            |
| <i>eigrp-ptag</i>  | (Optional) | Process tag                     |
| event-history      |            | Clear the event history buffers |
| notifications      | (Optional) | EIGRP Notifications             |
| cli                | (Optional) | EIGRP CLI related events        |
| all                | (Optional) | All event history buffers       |

### Command Mode

- /exec

# clear evb hosts

```
clear evb { hosts | vsi } [ force-standby ] *
```

## Syntax Description

| Syntax Description |            |   |
|--------------------|------------|---|
| clear              |            | Reset functions                             |
| evb                |            | EVB (Edge Virtual Bridge)                   |
| hosts              |            | Clear EVB host information                  |
| vsi                |            | Clear EVB vsi information                   |
| force-standby      | (Optional) | Force to clear standby entries              |
| *                  |            | Clear all entries (Should be a * character) |

## Command Mode

- /exec

## clear evb hosts

```
clear evb { hosts | vsi } [ force-standby ] [ { [ mac <mac-addr> | interface <intf-name> | vlan <vlan-id> | vni
<vni-id> | ip <ip-addr> | ipv6 <ipv6-addr> ]+ } ]
```

### Syntax Description

| Syntax Description |            |   |
|--------------------|------------|---|
| clear              |            | Reset functions                         |
| evb                |            | EVB (Edge Virtual Bridge)               |
| hosts              |            | Clear EVB host information              |
| vsi                |            | Clear EVB vsi information               |
| force-standby      | (Optional) | Force to clear standby entries          |
| mac                | (Optional) | Clear entries by filtering MAC address  |
| <i>mac-addr</i>    | (Optional) | MAC Address                             |
| interface          | (Optional) | Clear entries by filtering interface    |
| <i>intf-name</i>   | (Optional) | Interface name                          |
| vlan               | (Optional) | Clear entries by filtering VLAN         |
| <i>vlan-id</i>     | (Optional) | VLAN ID                                 |
| vni                | (Optional) | Clear entries by filtering VNI          |
| <i>vni-id</i>      | (Optional) | VNI                                     |
| ip                 | (Optional) | Clear entries by filtering IP address   |
| ipv6               | (Optional) | Clear entries by filtering IPv6 address |
| <i>ip-addr</i>     | (Optional) | IPV4 host address                       |

### Command Mode

- /exec

# clear evb internal adjacency

clear evb internal adjacency

## Syntax Description

| Syntax Description |                                |  |
|--------------------|--------------------------------|--|
| clear              | Reset functions                |  |
| evb                | EVB (Edge Virtual Bridge)      |  |
| internal           | Clear EVB internal information |  |
| adjacency          | Clear EVB adjacency state      |  |

## Command Mode

- /exec

# clear evb internal event-history

```
clear evb internal event-history { all | <evt-hist-subsystem> }
```

## Syntax Description

| Syntax Description        |  |                                 |
|---------------------------|--|---------------------------------|
| clear                     |  | Reset functions                 |
| evb                       |  | Clear EVB information           |
| internal                  |  | Clear EVB internal information  |
| event-history             |  | Clear EVB event history buffers |
| all                       |  | All EVB logs                    |
| <i>evt-hist-subsystem</i> |  | EVB event history buffers       |

## Command Mode

- /exec

# clear evb statistics

clear evb statistics

## Syntax Description

| Syntax Description |                           |  |
|--------------------|---------------------------|--|
| clear              | Reset functions           |  |
| evb                | EVB (Edge Virtual Bridge) |  |
| statistics         | Clear EVB Statistics      |  |

## Command Mode

- /exec

## clear fabric database dci vrf node-id

```
clear fabric database dci vrf { <vrf-name> | <vrf-known-name> } node-id <mgmt-ip-address> [ peer-id
<peer-ip-address> ]
```

### Syntax Description

#### Syntax Description

|                        |  |
|------------------------|--|
| clear                  | Reset functions                          |
| fabric                 | Fabric                                   |
| database               | Fabric Database                          |
| dci                    | DCI profile                              |
| vrf                    | Display per-VRF information              |
| <i>vrf-name</i>        | VRF name                                 |
| <i>vrf-known-name</i>  | Known VRF name                           |
| node-id                | management ip address of this node       |
| <i>mgmt-ip-address</i> | IP address in CIDR format                |
| peer-id                | (Optional) management ip address of peer |
| <i>peer-ip-address</i> | (Optional) IP address in CIDR format     |

### Command Mode

- /exec



## clear fabric database host all vni

```
{ clear fabric database host { all | { vni <vni-id> } | { dot1q <vlan-id> } } [ re-sync ] } | { clear fabric database host vni <vni-id> re-apply } | { clear fabric database client uuid <uuid> }
```

### Syntax Description

| Syntax Description |   |
|--------------------|---|
| clear              | Reset functions                             |
| fabric             |   |
| database           |   |
| host               | Active Host to profile mapping              |
| vni                | Virtual Network Identifier                  |
| <i>vni-id</i>      |   |
| dot1q              | Dot1Q Encapsulation                         |
| <i>vlan-id</i>     |   |
| re-apply           | Download new config parameters and re-apply |
| re-sync            | (Optional) Force to sync the host entry     |
| all                | Remove all entries                          |
| client             | Auto-config client                          |
| uuid               | Auto-config client UUID                     |
| <i>uuid</i>        | UUID  |

### Command Mode

- /exec

# clear fabric database host statistics

clear fabric database host statistics

## Syntax Description

### Syntax Description

---

|       |                 |
|-------|-----------------|
| clear | Reset functions |
|-------|-----------------|

---

|        |        |
|--------|--------|
| fabric | Fabric |
|--------|--------|

---

|          |                 |
|----------|-----------------|
| database | Fabric Database |
|----------|-----------------|

---

|      |                          |
|------|--------------------------|
| host | Auto-configured<br>Hosts |
|------|--------------------------|

---

|            |            |
|------------|------------|
| statistics | Statistics |
|------------|------------|

---

## Command Mode

- /exec

# clear fabric database include-vrf

clear fabric database include-vrf <vrf-name>

## Syntax Description

| Syntax Description |                  |
|--------------------|------------------|
| clear              | Reset functions  |
| fabric             |                  |
| database           |                  |
| include-vrf        | Include VRF name |
| <i>vrf-name</i>    | VRF name         |

## Command Mode

- /exec

## clear fabric database statistics

```
clear fabric database statistics [ type { network | profile | cabling | partition | bl-dci } [ server-proto ldap { ipv6
<ipv6addr> | ip <ipaddr> | host <hostname> } [ port <portnum> ] [ vrf { <vrf-name> | <vrf-known-name> }
] ] ]
```

### Syntax Description

#### Syntax Description

|                       |  |
|-----------------------|--|
| clear                 | Reset functions                            |
| fabric                | Fabric                                     |
| database              | Clear Fabric Database                      |
| statistics            | Clear database statistics                  |
| type                  | (Optional) Enter database type             |
| network               | (Optional) Network Database                |
| profile               | (Optional) Port or Switch Profile Database |
| cabling               | (Optional) Cable Management Database       |
| partition             | (Optional) Partition Database              |
| bl-dci                | (Optional) Border Leaf - DCI               |
| server-proto          | (Optional) Enter database protocol         |
| ldap                  | (Optional) Use LDAP                        |
| ipv6                  | (Optional) IPv6 address of server          |
| ip                    | (Optional) IP address of server            |
| <i>ipaddr</i>         | (Optional) Enter IP address of server      |
| host                  | (Optional) Hostname of server              |
| <i>hostname</i>       | (Optional) Enter hostname of server        |
| port                  | (Optional) Port                            |
| <i>portnum</i>        | (Optional) Enter port number               |
| vrf                   | (Optional) vrf context                     |
| <i>vrf-name</i>       | (Optional) VRF name                        |
| <i>vrf-known-name</i> | (Optional) Known VRF name                  |

### Command Mode

- /exec

## clear fabric database statistics type server-proto xmpp ip

```
clear fabric database statistics type { network | profile | cabling | partition | bl-dci } server-proto xmpp { ip
<ipaddr> | host <hostname> } [ port <portnum> ] [ vrf { <vrf-name> | <vrf-known-name> } ]
```

### Syntax Description

| Syntax Description    |  |                                 |
|-----------------------|--|---------------------------------|
| clear                 |  | Reset functions                 |
| fabric                |  | Fabric                          |
| database              |  | Clear Fabric Database           |
| statistics            |  | Clear database statistics       |
| type                  |  | Enter database type             |
| network               |  | Network Database                |
| profile               |  | Port or Switch Profile Database |
| cabling               |  | Cable Management Database       |
| partition             |  | Partition Database              |
| bl-dci                |  | Border Leaf - DCI               |
| server-proto          |  | Enter database protocol         |
| xmpp                  |  | Use XMPP                        |
| ip                    |  | IP address of server            |
| <i>ipaddr</i>         |  | Enter IP address of server      |
| host                  |  | Hostname of server              |
| <i>hostname</i>       |  | Enter hostname of server        |
| port                  |  | (Optional) Port                 |
| <i>portnum</i>        |  | (Optional) Enter port number    |
| vrf                   |  | (Optional) vrf context          |
| <i>vrf-name</i>       |  | (Optional) VRF name             |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name       |

### Command Mode

- /exec

# clear fabric database statistics type server-proto radius group

clear fabric database statistics type { network | profile | cabling | partition | bl-dci } server-proto radius group <groupname>

## Syntax Description

| Syntax Description |                                 |  |
|--------------------|---------------------------------|--|
| clear              | Reset functions                 |  |
| fabric             | Fabric                          |  |
| database           | Clear Fabric Database           |  |
| statistics         | Clear database statistics       |  |
| type               | Enter database type             |  |
| network            | Network Database                |  |
| profile            | Port or Switch Profile Database |  |
| cabling            | Cable Management Database       |  |
| partition          | Partition Database              |  |
| bl-dci             | Border Leaf - DCI               |  |
| server-proto       | Enter database protocol         |  |
| radius             | Use RADIUS                      |  |
| group              | AAA group                       |  |
| <i>groupname</i>   | Enter AAA group name of servers |  |

## Command Mode

- /exec

# clear fc2

clear fc2 [ counters ]

## Syntax Description

---

### Syntax Description

---

clear    Reset functions

---

fc2      Clear FC2 Port Counters

---

counters (Optional) Clear All FC2/FCoE Port Counters

---

## Command Mode

- /exec

# clear flow exporter

clear flow exporter [ name ] <exportername>

## Syntax Description

| Syntax Description  |  |                                     |
|---------------------|--|-------------------------------------|
| clear               |  | Reset functions                     |
| flow                |  | NetFlow information                 |
| exporter            |  | Clear NetFlow exporter statistics   |
| name                |  | (Optional) The name of the exporter |
| <i>exportername</i> |  | Specify an exporter                 |

## Command Mode

- /exec



# clear flow monitor

clear flow monitor [ name ] <monitorname> [ cache [ force-export ] | statistics ]

## Syntax Description

| Syntax Description |            |   |
|--------------------|------------|---|
| clear              |            | Reset functions                         |
| flow               |            | NetFlow information                     |
| monitor            |            | Clear monitor cache and statistics      |
| name               | (Optional) | The name of the monitor                 |
| <i>monitorname</i> |            | Specify a monitor                       |
| cache              | (Optional) | Clear only monitor cache contents       |
| force-export       | (Optional) | Force the cache entries to be exported  |
| statistics         | (Optional) | Clear only the monitor cache statistics |

## Command Mode

- /exec

## clear forwarding adjacency mpls stats

```
clear forwarding [ ip | ipv4 ] adjacency mpls stats [ vrf { <vrf-name> | <vrf-known-name> | <vrf-all> } ] [
<aif> ] [ <anh> ] [ module <module> ]
```

### Syntax Description

| Syntax Description    |  |   |
|-----------------------|--|---|
| clear                 |  | Reset functions                             |
| forwarding            |  | forwarding                                  |
| adjacency             |  | display adjacency information               |
| mpls                  |  | mpls adjacency information                  |
| stats                 |  | Clear adjacency statistics                  |
| vrf                   |  | (Optional) display info per VRF             |
| <i>vrf-name</i>       |  | (Optional) VRF name                         |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name                   |
| vrf-all               |  | (Optional) Display information for all VRFs |
| ip                    |  | (Optional) ipv4                             |
| ipv4                  |  | (Optional) ipv4                             |
| <i>aif</i>            |  | (Optional) adjacency output interface       |
| <i>anh</i>            |  | (Optional) adjacency next hop               |
| module                |  | (Optional) slot                             |
| <i>module</i>         |  | (Optional) slot number                      |

### Command Mode

- /exec

## clear forwarding cumulative counter

```
clear forwarding cumulative counter [ all | v4_ucast_add | v4_ucast_del | v6_ucast_add | v6_ucast_del ] [
module <module> ]
```

### Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| clear              | clear                                      |  |
| forwarding         | forwarding information                     |  |
| cumulative         | accumulated prefix add/delete count        |  |
| counter            | counter                                    |  |
| all                | (Optional) all                             |  |
| v4_ucast_add       | (Optional) IPv4 unicast route add count    |  |
| v4_ucast_del       | (Optional) IPv4 unicast route delete count |  |
| v6_ucast_add       | (Optional) IPv6 unicast route add count    |  |
| v6_ucast_del       | (Optional) IPv6 unicast route delete count |  |
| module             | (Optional) slot                            |  |
| <i>module</i>      | (Optional) slot number                     |  |

### Command Mode

- /exec

# clear forwarding internal message counts

clear forwarding internal message counts [ module <module> ]

## Syntax Description

| Syntax Description |                                 |
|--------------------|---------------------------------|
| clear              | clear                           |
| forwarding         | display fib information         |
| internal           | internal information            |
| message            | display internal message counts |
| counts             | display internal message counts |
| module             | (Optional) slot                 |
| <i>module</i>      | (Optional) slot number          |

## Command Mode

- /exec

## clear forwarding internal unicast counts

```
clear forwarding internal unicast counts [ vdc { <vdc_id> | all } ] [ module <module> ] [ __readonly__
<err-str><count> ]
```

### Syntax Description

#### Syntax Description

|                     |  |
|---------------------|--|
| clear               |  |
| forwarding          | display fib information                  |
| internal            | internal information                     |
| unicast             | unicast counters                         |
| counts              | display counts                           |
| module              | (Optional) slot                          |
| <i>module</i>       | (Optional) slot number                   |
| vdc                 | (Optional) vdc id                        |
| <i>vdc_id</i>       | (Optional) vdc id                        |
| all                 | (Optional) all VDCs active on the module |
| <i>__readonly__</i> | (Optional)                               |

### Command Mode

- /exec

## clear forwarding ipv4 multicast counters

```
clear forwarding ipv4 multicast counters [ vrf { <vrf-name> | <vrf-known-name> | all } ] { [ group <gaddr>
[ source <saddr> ] ] | [ source <saddr> [ group <gaddr> ] ] } [ module <module> ]
```

### Syntax Description

| Syntax Description    |  |
|-----------------------|--|
| clear                 |  |
| forwarding            | fib information                                |
| vrf                   | (Optional) Specify VRF                         |
| <i>vrf-name</i>       | (Optional) VRF name                            |
| <i>vrf-known-name</i> | (Optional) Known VRF name                      |
| all                   | (Optional) Display information for all VRFs    |
| ipv4                  | Ipv4   |
| multicast             | Multicast IPv4 information                     |
| counters              |  |
| group                 | (Optional) Multicast IPv4 Group specific info  |
| <i>gaddr</i>          | (Optional) Multicast IPv4 Group Address        |
| source                | (Optional) Multicast IPv4 Source specific info |
| <i>saddr</i>          | (Optional) Multicast IPv4 Source Address       |
| module                | (Optional) slot                                |
| <i>module</i>         | (Optional) slot number                         |

### Command Mode

- /exec

## clear forwarding ipv6 adjacency mpls stats

```
clear forwarding ipv6 adjacency mpls stats [ vrf { <vrf-name> | <vrf-known-name> | <vrf-all> } ] [ <aif> ] [ <anh> ] [ module <module> ]
```

### Syntax Description

| Syntax Description    |  |   |
|-----------------------|--|---|
| clear                 |  | Reset functions                             |
| forwarding            |  | forwarding                                  |
| ipv6                  |  | ipv6  |
| adjacency             |  | adjacency information                       |
| mpls                  |  | mpls adjacency information                  |
| stats                 |  | Clear adjacency statistics                  |
| vrf                   |  | (Optional) display info per VRF             |
| <i>vrf-name</i>       |  | (Optional) VRF name                         |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name                   |
| vrf-all               |  | (Optional) Display information for all VRFs |
| <i>aif</i>            |  | (Optional) adjacency output interface       |
| module                |  | (Optional) slot                             |
| <i>module</i>         |  | (Optional) slot number                      |

### Command Mode

- /exec

## clear forwarding ipv6 multicast counters

```
clear forwarding ipv6 multicast counters [ vrf { <vrf-name> | <vrf-known-name> | all } ] { [ group <gaddr>
[ source <saddr> ] ] | [ source <saddr> [ group <gaddr> ] ] } [ module <module> ]
```

### Syntax Description

| Syntax Description    |  |
|-----------------------|--|
| clear                 |  |
| forwarding            | fib information                                |
| vrf                   | (Optional) Specify VRF                         |
| <i>vrf-name</i>       | (Optional) VRF name                            |
| <i>vrf-known-name</i> | (Optional) Known VRF name                      |
| all                   | (Optional) Display information for all VRFs    |
| ipv6                  | Ipv6   |
| multicast             | Multicast IPv6 information                     |
| counters              |  |
| group                 | (Optional) Multicast IPv6 Group specific info  |
| source                | (Optional) Multicast IPv6 Source specific info |
| module                | (Optional) slot                                |
| <i>module</i>         | (Optional) slot number                         |

### Command Mode

- /exec



## clear forwarding l2mcast info l2-oiflist-history

clear forwarding l2mcast info l2-oiflist-history [ module <num> ]

### Syntax Description

| Syntax Description |  |                        |
|--------------------|--|------------------------|
| clear              |  | Clear bintrace entries |
| forwarding         |  | forwarding             |
| l2mcast            |  | l2mcast                |
| info               |  | L2mcast Internal Info  |
| l2-oiflist-history |  | L2 oiflist history     |
| module             |  | (Optional) Slot        |
| <i>num</i>         |  | (Optional) Slot number |

### Command Mode

- /exec

# clear forwarding l2mcast info l2-route-history

clear forwarding l2mcast info l2-route-history [ module <num> ]

## Syntax Description

| Syntax Description |  |                        |
|--------------------|--|------------------------|
| clear              |  | Clear bintrace entries |
| forwarding         |  | forwarding             |
| l2mcast            |  | l2mcast                |
| info               |  | L2mcast Internal Info  |
| l2-route-history   |  | L2 Route history       |
| module             |  | (Optional) Slot        |
| <i>num</i>         |  | (Optional) Slot number |

## Command Mode

- /exec

## clear forwarding l2mcast info l2-xbar-history

clear forwarding l2mcast info l2-xbar-history [ module <num> ]

### Syntax Description

| Syntax Description |  |                        |
|--------------------|--|------------------------|
| clear              |  | Clear bintrace entries |
| forwarding         |  | forwarding             |
| l2mcast            |  | l2mcast                |
| info               |  | L2mcast Internal Info  |
| l2-xbar-history    |  | L2 Route history       |
| module             |  | (Optional) Slot        |
| <i>num</i>         |  | (Optional) Slot number |

### Command Mode

- /exec

## clear forwarding l2mcast info statistics

clear forwarding l2mcast info statistics [ module <num> ]

### Syntax Description

| Syntax Description |                                     |
|--------------------|-------------------------------------|
| clear              | Clear all entries                   |
| forwarding         | Forwarding Information              |
| l2mcast            | Layer-2 multicast                   |
| info               | L2mcast Internal Info               |
| statistics         | L2mcast Internal Info<br>Statistics |
| module             | (Optional) Slot                     |
| <i>num</i>         | (Optional) Slot number              |

### Command Mode

- /exec

# clear forwarding l2vpn trace member-history

clear forwarding l2vpn trace member-history

## Syntax Description

| Syntax Description |                |                        |
|--------------------|----------------|------------------------|
| clear              |                | Clear bintrace entries |
| forwarding         | forwarding     |                        |
| l2vpn              | L2VPN          |                        |
| trace              | internal trace |                        |
| member-history     | member history |                        |

## Command Mode

- /exec

# clear forwarding mpls drop-stats

clear forwarding mpls drop-stats

## Syntax Description

| Syntax Description |                       |            |
|--------------------|-----------------------|------------|
| clear              | Clear                 | Statistics |
| forwarding         | forwarding            |            |
| mpls               | mpls                  | forwarding |
| drop-stats         | Clear dropped packets | stats      |

## Command Mode

- /exec

## clear forwarding mpls stats

```
clear forwarding mpls stats [ vrf { <vrf-name> | <vrf-known-name> | <vrf-all> } ] [ table <table_id> ] [ [ label
<label> | <prefix> | <v6prefix> ] | [ label-space <label-space-id> ] ] [ module <module> ]
```

### Syntax Description

| Syntax Description    |  |  |
|-----------------------|--|--|
| clear                 |  | Reset functions                                |
| forwarding            |  | forwarding                                     |
| mpls                  |  | mpls   |
| stats                 |  | Clear Input Statistics                         |
| vrf                   |  | (Optional) display info per VRF                |
| <i>vrf-name</i>       |  | (Optional) VRF name                            |
| <i>vrf-known-name</i> |  | (Optional) Known vrf name                      |
| vrf-all               |  | (Optional) Display information for all VRFs    |
| table                 |  | (Optional) display info per vpn-id             |
| <i>table_id</i>       |  | (Optional) table number                        |
| label-space           |  | (Optional) label space                         |
| <i>label-space-id</i> |  | (Optional) label space id                      |
| label                 |  | (Optional) mpls labels                         |
| <i>label</i>          |  | (Optional) mpls label value                    |
| <i>prefix</i>         |  | (Optional) Labels for single exact match route |
| module                |  | (Optional) slot                                |
| <i>module</i>         |  | (Optional) slot number                         |

### Command Mode

- /exec

## clear forwarding mpls trace adj-history

clear forwarding mpls trace adj-history [ module <module> ]

### Syntax Description

| Syntax Description |            |                  |
|--------------------|------------|------------------|
| clear              | Clear      | bintrace entries |
| forwarding         | forwarding |                  |
| mpls               | mpls       |                  |
| trace              | internal   | trace            |
| adj-history        | adjacency  | history          |
| module             | (Optional) | slot             |
| <i>module</i>      | (Optional) | slot<br>number   |

### Command Mode

- /exec



# clear forwarding mpls trace ecmp-history

clear forwarding mpls trace ecmp-history [ module <module> ]

## Syntax Description

| Syntax Description |                           |                        |
|--------------------|---------------------------|------------------------|
| clear              |                           | Clear bintrace entries |
| forwarding         | forwarding                |                        |
| mpls               | mpls                      |                        |
| trace              | internal trace            |                        |
| ecmp-history       | ECMP history              |                        |
| module             | (Optional) slot           |                        |
| <i>module</i>      | (Optional) slot<br>number |                        |

## Command Mode

- /exec

# clear forwarding mpls trace label-history

clear forwarding mpls trace label-history [ module <module> ]

## Syntax Description

| Syntax Description |            |                  |
|--------------------|------------|------------------|
| clear              | Clear      | bintrace entries |
| forwarding         | forwarding |                  |
| mpls               | mpls       |                  |
| trace              | internal   | trace            |
| label-history      | label      | history          |
| module             | (Optional) | slot             |
| <i>module</i>      | (Optional) | slot<br>number   |

## Command Mode

- /exec

# clear forwarding mpls trace te-history

clear forwarding mpls trace te-history [ module <module> ]

## Syntax Description

| Syntax Description |                           |
|--------------------|---------------------------|
| clear              | Clear bintrace entries    |
| forwarding         | forwarding                |
| mpls               | mpls                      |
| trace              | internal trace            |
| te-history         | TE history                |
| module             | (Optional) slot           |
| <i>module</i>      | (Optional) slot<br>number |

## Command Mode

- /exec

# clear forwarding trace ecmp-history

clear forwarding trace ecmp-history [ module <module> ]

## Syntax Description

| Syntax Description |                           |                        |
|--------------------|---------------------------|------------------------|
| clear              |                           | Clear bintrace entries |
| forwarding         | forwarding                |                        |
| trace              | internal trace            |                        |
| ecmp-history       | ECMP history              |                        |
| module             | (Optional) slot           |                        |
| <i>module</i>      | (Optional) slot<br>number |                        |

## Command Mode

- /exec

# clear forwarding trace mfib oif-history

clear forwarding trace mfib oif-history

## Syntax Description

| Syntax Description |                        |  |
|--------------------|------------------------|--|
| clear              | Clear bintrace entries |  |
| forwarding         | forwarding             |  |
| trace              | internal trace         |  |
| mfib               | mfib entries           |  |
| oif-history        | oif history            |  |

## Command Mode

- /exec

# clear forwarding trace mfib oiflist-history

clear forwarding trace mfib oiflist-history

## Syntax Description

| Syntax Description |                 |                        |
|--------------------|-----------------|------------------------|
| clear              |                 | Clear bintrace entries |
| forwarding         | forwarding      |                        |
| trace              | internal trace  |                        |
| mfib               | mfib entries    |                        |
| oiflist-history    | oiflist history |                        |

## Command Mode

- /exec

# clear forwarding trace mfib otv oif-history

clear forwarding trace mfib otv oif-history

## Syntax Description

| Syntax Description |                        |  |
|--------------------|------------------------|--|
| clear              | Clear bintrace entries |  |
| forwarding         | forwarding             |  |
| trace              | internal trace         |  |
| mfib               | mfib entries           |  |
| otv                | otv entries            |  |
| oif-history        | oif history            |  |

## Command Mode

- /exec

# clear forwarding trace mfib otv oiflist-history

clear forwarding trace mfib otv oiflist-history

## Syntax Description

| Syntax Description |  |                        |
|--------------------|--|------------------------|
| clear              |  | Clear bintrace entries |
| forwarding         |  | forwarding             |
| trace              |  | internal trace         |
| mfib               |  | mfib entries           |
| otv                |  | otv entries            |
| oiflist-history    |  | oiflist history        |

## Command Mode

- /exec



# clear forwarding trace mfib otv v4-route-history

clear forwarding trace mfib otv v4-route-history

## Syntax Description

| Syntax Description |  |                        |
|--------------------|--|------------------------|
| clear              |  | Clear bintrace entries |
| forwarding         |  | forwarding             |
| trace              |  | internal trace         |
| mfib               |  | mfib entries           |
| otv                |  | otv entries            |
| v4-route-history   |  | v4 route history       |

## Command Mode

- /exec

# clear forwarding trace mfib otv v6-route-history

clear forwarding trace mfib otv v6-route-history

## Syntax Description

| Syntax Description |  |                        |
|--------------------|--|------------------------|
| clear              |  | Clear bintrace entries |
| forwarding         |  | forwarding             |
| trace              |  | internal trace         |
| mfib               |  | mfib entries           |
| otv                |  | otv mfib entries       |
| v6-route-history   |  | v6 route history       |

## Command Mode

- /exec

# clear forwarding trace mfib platform oiflist-history

clear forwarding trace mfib platform oiflist-history

## Syntax Description

| Syntax Description |  |                        |
|--------------------|--|------------------------|
| clear              |  | Clear                  |
| forwarding         |  | Forwarding information |
| trace              |  | internal trace         |
| mfib               |  | mfib entries           |
| platform           |  | platform information   |
| oiflist-history    |  | Oiflist history        |

## Command Mode

- /exec

# clear forwarding trace mfib v4-route-history

clear forwarding trace mfib v4-route-history

## Syntax Description

| Syntax Description |  |                        |
|--------------------|--|------------------------|
| clear              |  | Clear bintrace entries |
| forwarding         |  | forwarding             |
| trace              |  | internal trace         |
| mfib               |  | clear mfib entries     |
| v4-route-history   |  | v4 route history       |

## Command Mode

- /exec

# clear forwarding trace mfib v6-route-history

clear forwarding trace mfib v6-route-history

## Syntax Description

| Syntax Description |  |                        |
|--------------------|--|------------------------|
| clear              |  | Clear bintrace entries |
| forwarding         |  | forwarding             |
| trace              |  | internal trace         |
| mfib               |  | mfib entries           |
| v6-route-history   |  | v6 route history       |

## Command Mode

- /exec

# clear forwarding trace nve-ir-peer-history

clear forwarding trace nve-ir-peer-history [ module <module> ]

## Syntax Description

| Syntax Description  |  |                        |
|---------------------|--|------------------------|
| clear               |  | Clear bintrace entries |
| forwarding          |  | forwarding             |
| trace               |  | internal trace         |
| nve-ir-peer-history |  | NVE ir-peer history    |
| module              |  | (Optional) slot        |
| <i>module</i>       |  | (Optional) slot number |

## Command Mode

- /exec

# clear forwarding trace nve-l3-vni-history

clear forwarding trace nve-l3-vni-history [ module <module> ]

## Syntax Description

| Syntax Description |  |                        |
|--------------------|--|------------------------|
| clear              |  | Clear bintrace entries |
| forwarding         |  | forwarding             |
| trace              |  | internal trace         |
| nve-l3-vni-history |  | NVE L3 VNI history     |
| module             |  | (Optional) slot        |
| <i>module</i>      |  | (Optional) slot number |

## Command Mode

- /exec

# clear forwarding trace nve-peer-history

clear forwarding trace nve-peer-history [ module <module> ]

## Syntax Description

| Syntax Description |                        |                        |
|--------------------|------------------------|------------------------|
| clear              |                        | Clear bintrace entries |
| forwarding         | forwarding             |                        |
| trace              | internal trace         |                        |
| nve-peer-history   | NVE peer history       |                        |
| module             | (Optional) slot        |                        |
| <i>module</i>      | (Optional) slot number |                        |

## Command Mode

- /exec



# clear forwarding trace otv-adj-history

clear forwarding trace otv-adj-history [ module <module> ]

## Syntax Description

| Syntax Description |  |                        |
|--------------------|--|------------------------|
| clear              |  | Clear bintrace entries |
| forwarding         |  | forwarding             |
| trace              |  | internal trace         |
| otv-adj-history    |  | otv adj history        |
| module             |  | (Optional) slot        |
| <i>module</i>      |  | (Optional) slot number |

## Command Mode

- /exec

## clear forwarding trace otv-vlan-history

clear forwarding trace otv-vlan-history [ module <module> ]

### Syntax Description

| Syntax Description |  |                         |
|--------------------|--|-------------------------|
| clear              |  | Clear bintrace entries  |
| forwarding         |  | forwarding              |
| trace              |  | internal trace          |
| otv-vlan-history   |  | otv vlan prefix history |
| module             |  | (Optional) slot         |
| <i>module</i>      |  | (Optional) slot number  |

### Command Mode

- /exec

# clear forwarding trace v4-adj-history

clear forwarding trace v4-adj-history [ module <module> ]

## Syntax Description

| Syntax Description |  |                           |
|--------------------|--|---------------------------|
| clear              |  | Clear bintrace entries    |
| forwarding         |  | forwarding                |
| trace              |  | internal trace            |
| v4-adj-history     |  | V4 adjacency history      |
| module             |  | (Optional) slot           |
| <i>module</i>      |  | (Optional) slot<br>number |

## Command Mode

- /exec

## clear forwarding trace v4-pfx-history

clear forwarding trace v4-pfx-history [ module <module> ]

### Syntax Description

| Syntax Description |  |                        |
|--------------------|--|------------------------|
| clear              |  | Clear bintrace entries |
| forwarding         |  | forwarding             |
| trace              |  | internal trace         |
| v4-pfx-history     |  | V4 prefix history      |
| module             |  | (Optional) slot        |
| <i>module</i>      |  | (Optional) slot number |

### Command Mode

- /exec

# clear forwarding trace v4-rnh-history

clear forwarding trace v4-rnh-history [ module <module> ]

## Syntax Description

| Syntax Description |  |                           |
|--------------------|--|---------------------------|
| clear              |  | Clear bintrace entries    |
| forwarding         |  | forwarding                |
| trace              |  | internal trace            |
| v4-rnh-history     |  | V4 rnh history            |
| module             |  | (Optional) slot           |
| <i>module</i>      |  | (Optional) slot<br>number |

## Command Mode

- /exec

## clear forwarding trace v6-adj-history

clear forwarding trace v6-adj-history [ module <module> ]

### Syntax Description

| Syntax Description |  |                        |
|--------------------|--|------------------------|
| clear              |  | Clear bintrace entries |
| forwarding         |  | forwarding             |
| trace              |  | internal trace         |
| v6-adj-history     |  | V6 adjacency history   |
| module             |  | (Optional) slot        |
| <i>module</i>      |  | (Optional) slot number |

### Command Mode

- /exec

# clear forwarding trace v6-pfx-history

clear forwarding trace v6-pfx-history [ module <module> ]

## Syntax Description

| Syntax Description |  |                           |
|--------------------|--|---------------------------|
| clear              |  | Clear bintrace entries    |
| forwarding         |  | forwarding                |
| trace              |  | internal trace            |
| v6-pfx-history     |  | V6 prefix history         |
| module             |  | (Optional) slot           |
| <i>module</i>      |  | (Optional) slot<br>number |

## Command Mode

- /exec

## clear forwarding trace v6-rnh-history

clear forwarding trace v6-rnh-history [ module <module> ]

### Syntax Description

| Syntax Description |  |                        |
|--------------------|--|------------------------|
| clear              |  | Clear bintrace entries |
| forwarding         |  | forwarding             |
| trace              |  | internal trace         |
| v6-rnh-history     |  | V6 rnh history         |
| module             |  | (Optional) slot        |
| <i>module</i>      |  | (Optional) slot number |

### Command Mode

- /exec



# clear forwarding trace vobj-history

clear forwarding trace vobj-history [ module <module> ]

## Syntax Description

| Syntax Description |                        |
|--------------------|------------------------|
| clear              | Clear bintrace entries |
| forwarding         | forwarding             |
| trace              | internal trace         |
| vobj-history       | vobj history           |
| module             | (Optional) slot        |
| <i>module</i>      | (Optional) slot number |

## Command Mode

- /exec

# clear frame traffic

clear frame traffic

## Syntax Description

---

### Syntax Description

clear Reset functions

---

frame Clear layer-2 frame statistics to/from the Route Processor

---

traffic Clear layer-2 frame statistics to/from the Route Processor

---

## Command Mode

- /exec

# clear fs-daemon log

clear fs-daemon log

## Syntax Description

| Syntax Description |           |                         |
|--------------------|-----------|-------------------------|
|                    | clear     | Reset functions         |
|                    | fs-daemon | Clear the fs daemon log |
|                    | log       | Clear the fs daemon log |

## Command Mode

- /exec

# clear hardware flow ip

```
clear hardware flow ip [ { { monitor <mname> } | { profile <prof_id> } | { vlan <vlan_id> } | { interface
<interface> } } ] [ instance <inst> ] [ force-export ] [ module <num> ]
```

## Syntax Description

### Syntax Description

|                  |  |
|------------------|--|
| clear            | Reset functions                              |
| hardware         | Show hardware information                    |
| flow             | Netflow Module                               |
| ip               | Internet Protocol Version 4                  |
| monitor          | (Optional) Netflow Flow Monitor              |
| <i>mname</i>     | (Optional) Netflow Flow Monitor Name         |
| profile          | (Optional) Flow Profile                      |
| <i>prof_id</i>   | (Optional) Netflow Profile ID                |
| vlan             | (Optional) Vlan commands                     |
| <i>vlan_id</i>   | (Optional) VLAN ID 1-4094                    |
| interface        | (Optional) Interface                         |
| <i>interface</i> | (Optional) Interface Name                    |
| instance         | (Optional) Instance                          |
| <i>inst</i>      | (Optional) Earl Instance                     |
| force-export     | (Optional) Force to export data to collector |
| module           | (Optional) Line card module                  |
| <i>num</i>       | (Optional) slot number                       |

## Command Mode

- /exec

# clear hardware flow ipmac

```
clear hardware flow ipmac [ { { profile <prof_id> } | { vlan <vlan_id> } | { interface <interface> } } ] [
instance <inst> ] [ module <num> ]
```

## Syntax Description

### Syntax Description

|                  |                               |
|------------------|-------------------------------|
| clear            | Reset functions               |
| hardware         | Show hardware information     |
| flow             | Netflow Module                |
| ipmac            | IPv4+MAC                      |
| profile          | (Optional) Flow Profile       |
| <i>prof_id</i>   | (Optional) Netflow Profile ID |
| vlan             | (Optional) Vlan commands      |
| <i>vlan_id</i>   | (Optional) VLAN ID 1-4094     |
| interface        | (Optional) Interface          |
| <i>interface</i> | (Optional) Interface Name     |
| instance         | (Optional) Instance           |
| <i>inst</i>      | (Optional) Earl Instance      |
| module           | (Optional) Line card module   |
| <i>num</i>       | (Optional) slot number        |

## Command Mode

- /exec

## clear hardware flow ipv6

```
clear hardware flow ipv6 [ { { monitor <mname> } | { profile <prof_id> } | { vlan <vlan_id> } | { interface
<interface> } } ] [ instance <inst> ] [ force-export ] [ module <num> ]
```

### Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| clear              | Reset functions                              |  |
| hardware           | Show hardware information                    |  |
| flow               | Netflow Module                               |  |
| ipv6               | Internet Protocol Version 6                  |  |
| monitor            | (Optional) Netflow Flow Monitor              |  |
| <i>mname</i>       | (Optional) Netflow Flow Monitor Name         |  |
| profile            | (Optional) Flow Profile                      |  |
| <i>prof_id</i>     | (Optional) Netflow Profile ID                |  |
| vlan               | (Optional) Vlan commands                     |  |
| <i>vlan_id</i>     | (Optional) VLAN ID 1-4094                    |  |
| interface          | (Optional) Interface                         |  |
| <i>interface</i>   | (Optional) Interface Name                    |  |
| instance           | (Optional) Instance                          |  |
| <i>inst</i>        | (Optional) Earl Instance                     |  |
| force-export       | (Optional) Force to export data to collector |  |
| module             | (Optional) Line card module                  |  |
| <i>num</i>         | (Optional) slot number                       |  |

### Command Mode

- /exec

# clear hardware flow I2

```
clear hardware flow I2 [ { { monitor <mname> } | { profile <prof_id> } | { vlan <vlan_id> } } ] [ instance
<inst> ] [ force-export ] [ module <num> ]
```

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| clear              | Reset functions                              |  |
| hardware           | Show hardware information                    |  |
| flow               | Netflow Module                               |  |
| I2                 | Layer 2 Protocol                             |  |
| monitor            | (Optional) Netflow Flow Monitor              |  |
| <i>mname</i>       | (Optional) Netflow Flow Monitor Name         |  |
| profile            | (Optional) Flow Profile                      |  |
| <i>prof_id</i>     | (Optional) Netflow Profile ID                |  |
| vlan               | (Optional) Vlan commands                     |  |
| <i>vlan_id</i>     | (Optional) VLAN ID 1-4094                    |  |
| instance           | (Optional) Instance                          |  |
| <i>inst</i>        | (Optional) Earl Instance                     |  |
| force-export       | (Optional) Force to export data to collector |  |
| module             | (Optional) Line card module                  |  |
| <i>num</i>         | (Optional) slot number                       |  |

## Command Mode

- /exec

# clear hardware flow mpls

```
clear hardware flow mpls [ { { monitor <mname> } | { profile <prof_id> } | { vlan <vlan_id> } | { interface
<interface> } } ] [ instance <inst> ] [ force-export ] [ module <num> ]
```

## Syntax Description

### Syntax Description

|                  |  |
|------------------|--|
| clear            | Reset functions                              |
| hardware         | Show hardware information                    |
| flow             | Netflow Module                               |
| mpls             | MPLS Protocol                                |
| monitor          | (Optional) Netflow Flow Monitor              |
| <i>mname</i>     | (Optional) Netflow Flow Monitor Name         |
| profile          | (Optional) Flow Profile                      |
| <i>prof_id</i>   | (Optional) Netflow Profile ID                |
| vlan             | (Optional) Vlan commands                     |
| <i>vlan_id</i>   | (Optional) VLAN ID 1-4094                    |
| interface        | (Optional) Interface                         |
| <i>interface</i> | (Optional) Interface Name                    |
| instance         | (Optional) Instance                          |
| <i>inst</i>      | (Optional) Earl Instance                     |
| force-export     | (Optional) Force to export data to collector |
| module           | (Optional) Line card module                  |
| <i>num</i>       | (Optional) slot number                       |

## Command Mode

- /exec



# clear hardware internal fabric interface-all asic counters

clear hardware internal fabric interface-all asic counters [ module <module> ]

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| clear              | Reset functions                         |  |
| hardware           | Show hardware information               |  |
| internal           | Show hardware internal information      |  |
| fabric             | clear fabric interface counters         |  |
| interface-all      | Clear counters for fabric interfaces    |  |
| asic               | Clear interface asic counters           |  |
| counters           | Clear interface counters                |  |
| module             | (Optional) Limit clear to single module |  |
| <i>module</i>      | (Optional) Slot/module number           |  |

## Command Mode

- /exec

# clear hardware internal forwarding adjacency statistics default-route

clear hardware internal forwarding adjacency statistics default-route [ module <module> ]

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| clear              | Show running system information               |  |
| hardware           | SHOW_HW_HELP                                  |  |
| internal           | SHOW_HW_INT_HELP                              |  |
| forwarding         | Show hardware information for forwarding Asic |  |
| adjacency          | display adjacency utilization                 |  |
| statistics         | Show hardware statistics                      |  |
| default-route      | Show for adjacency of default route           |  |
| module             | (Optional) slot                               |  |
| <i>module</i>      | (Optional) Slot/module number                 |  |

## Command Mode

- /exec

# clear hardware internal forwarding l3 counters

clear hardware internal forwarding l3 counters [ module <module> ]

## Syntax Description

| Syntax Description |                                   |
|--------------------|-----------------------------------|
| clear              | clear running system information  |
| hardware           | clear hardware usage settings     |
| internal           | SHOW_HW_INT_HELP                  |
| forwarding         | clear forwarding related settings |
| l3                 | Layer-3                           |
| counters           | clear Layer-3 Counters            |
| module             | (Optional) Slot/module            |
| <i>module</i>      | (Optional) Slot/module number     |

## Command Mode

- /exec

# clear hardware internal interface-all asic counters

clear hardware internal interface-all asic counters [ module <module> ]

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| clear              | Reset functions                           |  |
| hardware           | Show hardware information                 |  |
| internal           | Show hardware internal information        |  |
| interface-all      | Clear counters for front panel interfaces |  |
| asic               | Clear interface asic counters             |  |
| counters           | Clear interface counters                  |  |
| module             | (Optional) Limit clear to single module   |  |
| <i>module</i>      | (Optional) Slot/module number             |  |

## Command Mode

- /exec

# clear hardware internal ns interrupts

clear hardware internal ns interrupts

## Syntax Description

|                           |            |                                     |
|---------------------------|------------|-------------------------------------|
| <b>Syntax Description</b> | clear      | Reset functions                     |
|                           | hardware   | Clear hardware information          |
|                           | internal   | Clear hardware internal information |
|                           | ns         | Northstar                           |
|                           | interrupts | Interrupts                          |

## Command Mode

- /exec

## clear hardware ip verify

```
clear hardware [ forwarding ] ip verify { all | address { source { broadcast | multicast } | class-e | destination
{ zero } | identical | reserved } | checksum | protocol | fragment | length { minimum | consistent | maximum {
max-frag | udp | max-tcp } } | tcp { tiny-frag } | version } [ module <module> ]
```

### Syntax Description

#### Syntax Description

|             |   |
|-------------|---|
| clear       | Reset functions   |
| hardware    | Show hardware information   |
| forwarding  | (Optional) Show hardware information for forwarding path                    |
| ip          | IPv4 and IPv6 protocols   |
| verify      | IP packet validation checks in hardware                                     |
| class-e     | Class E IDS check   |
| all         | All IP packet validation checks   |
| address     | IPv4 and IPv6 Source and destination address validation                     |
| source      | Check source address  |
| broadcast   | Source address is 255.255.255.255   |
| multicast   | Source address is 224.x.x.x   |
| destination | Check destination address   |
| zero        | Destination address is 0.0.0.0  |
| identical   | Same IP SA and DA   |
| reserved    | Source address is 127.x.x.x   |
| checksum    | Verify IPv4 and IPv6 packet checksum  |
| protocol    | Verify IP protocol  |
| fragment    | Check IPv4 and IPv6 fragment with non-zero offset and DF bit active         |
| length      | Validate IPv4 packet header and payload length                              |
| minimum     | Minimum IPv4 header length  |
| consistent  | Actual frame size is equal to or more than IPv4 length plus ethernet header |
| maximum     | Check max fragment offset and payload length                                |
| max-frag    | Fragment offset field value   |
| udp         | Maximum UDP length has to be less than IPv4 payload length                  |

|                        |  |
|------------------------|--|
| <code>max-tcp</code>   | Maximum TCP length has to be less than IPv4 payload length |
| <code>tcp</code>       | Validate TCP packet header                                 |
| <code>tiny-frag</code> | Check TCP tiny fragment                                    |
| <code>version</code>   | Must be 4 for an ethertype of IPv4 (0x0800)                |
| <code>module</code>    | (Optional) Specify a module number                         |
| <code>module</code>    | (Optional) Specify a module number                         |

**Command Mode**

- /exec

## clear hardware rate-limiter

```
clear hardware rate-limiter { all | layer-3 { <l3-opts> | multicast <mcast-opts> } | layer-2 <l2-opts> | <opts>
| f1 <f1-opts> | span-egress } [ module <module> ]
```

### Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| clear              | Reset functions                               |  |
| hardware           | Show hardware information                     |  |
| rate-limiter       | Clear Rate-Limiter statistics                 |  |
| all                | Clear all Rate-Limiter statistics             |  |
| layer-3            | Layer-3 control and Routed packets            |  |
| <i>l3-opts</i>     |   |  |
| multicast          | Multicast data packets                        |  |
| <i>mcast-opts</i>  |   |  |
| layer-2            | Layer-2 control and Bridged packets           |  |
| <i>l2-opts</i>     |   |  |
| <i>opts</i>        |   |  |
| f1                 | Control packets from F1 modules to supervisor |  |
| <i>f1-opts</i>     |   |  |
| span-egress        | SPAN/ERSPAN egress packets                    |  |
| module             | (Optional) Specify a module number            |  |
| <i>module</i>      | (Optional) Specify a module number            |  |

### Command Mode

- /exec



## clear hsrp counters clear hsrp state-history

clear hsrp counters [ <value> ] | clear hsrp state-history [ interface <interface-id> ] [ group <group-id> ]

### Syntax Description

| Syntax Description  |  |                                     |
|---------------------|--|-------------------------------------|
| clear               |  | Reset functions                     |
| hsrp                |  | HSRP commands                       |
| counters            |  | Internal counters                   |
| <i>value</i>        |  | (Optional) Counter to be cleared    |
| state-history       |  | Clear Groups' state history         |
| interface           |  | (Optional) Groups on this interface |
| <i>interface-id</i> |  | (Optional) Interface                |
| group               |  | (Optional) Group number             |
| <i>group-id</i>     |  | (Optional) Group Number             |

### Command Mode

- /exec

# clear icmpv6 cache

```
clear icmpv6 cache { { interface [ <intf> ] } }
```

## Syntax Description

---

**Syntax Description**

---

clear    Reset functions

---

icmpv6    ICMPv6 Commands

---

cache    Clear icmpv6 cache

---

interface    Clear icmpv6 interface information

---

*intf*    (Optional) Interface name to clear

---

## Command Mode

- /exec

# clear install all failed-standby

clear install all failed-standby

## Syntax Description

| Syntax Description |                |                              |
|--------------------|----------------|------------------------------|
|                    | clear          | Reset functions              |
|                    | install        | Clear the installer log      |
|                    | all            | Clear the install all log    |
|                    | failed-standby | Clear the failed-standby log |

## Command Mode

- /exec

# clear install failure-reason

clear install failure-reason

## Syntax Description

| Syntax Description |                |                                      |
|--------------------|----------------|--------------------------------------|
|                    | clear          | Reset functions                      |
|                    | install        | Clear the installer log              |
|                    | failure-reason | Clear the install failure-reason log |

## Command Mode

- /exec

# clear install log-history all

clear install log-history { all | oldest <i0> }

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| clear              | Reset functions   |  |
| install            | Install related show commands                           |  |
| log-history        | Patch installer historical logs                         |  |
| all                | Delete complete history log                             |  |
| oldest             | oldest Delete the oldest <n> install log-history points |  |
| <i>i0</i>          | Number of log-history points to delete                  |  |

## Command Mode

- /exec

# clear install status

clear install status

## Syntax Description

---

### Syntax Description

---

clear Reset functions

---

install Clear the installer log

---

status Clear the installer status  
log

---

## Command Mode

- /exec

# clear ip adjacency cache

```
clear ip adjacency cache { { interface [ <intf> ] } }
```

## Syntax Description

| Syntax Description |            |                                       |
|--------------------|------------|---------------------------------------|
| clear              |            | Reset functions                       |
| ip                 |            | Clear IP commands                     |
| adjacency          |            | Configure Adjmgr                      |
| cache              |            | Clear adjacency cache                 |
| interface          |            | Clear adjacency interface information |
| <i>intf</i>        | (Optional) | Interface name to clear               |

## Command Mode

- /exec

# clear ip adjacency no-ufdm

```
clear ip adjacency [ vrf { <vrf-name> | <vrf-known-name> } ] { <ip-addr> | * } no-ufdm
```

## Syntax Description

| Syntax Description    |  |  |
|-----------------------|--|--|
| clear                 |  | Reset functions                        |
| ip                    |  | Clear IP commands                      |
| adjacency             |  | Clear Adjacency                        |
| vrf                   |  | (Optional) Display per-VRF information |
| <i>vrf-name</i>       |  | (Optional) VRF name                    |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name              |
| <i>ip-addr</i>        |  | IPV4 source address                    |
| *                     |  | Delete all adjacency in this context   |
| no-ufdm               |  | Create inconsistency in adjacency      |

## Command Mode

- /exec



# clear ip adjacency statistics

clear ip adjacency statistics

## Syntax Description

| Syntax Description |            |                            |
|--------------------|------------|----------------------------|
|                    | clear      | Reset functions            |
|                    | ip         | Clear IP commands          |
|                    | adjacency  | Clear Adjacency            |
|                    | statistics | Clear Adjacency Statistics |

## Command Mode

- /exec

# clear ip amt tunnel

```
clear ip amt tunnel [ <address4> <port> ] [ vrf { <vrf-name> | <vrf-known-name> } ]
```

## Syntax Description

| Syntax Description | clear                 | AMT clear commands                       |
|--------------------|-----------------------|--|
|                    | amt                   | AMT show commands                        |
|                    | ip                    | Display IP information                   |
|                    | tunnel                | Display tunnel information               |
|                    | vrf                   | (Optional) Display information for VRF   |
|                    | <i>vrf-name</i>       | (Optional) VRF name                      |
|                    | <i>vrf-known-name</i> | (Optional) Known VRF name                |
|                    | <i>address4</i>       | (Optional) IP address of tunnel endpoint |
|                    | <i>port</i>           | (Optional) UDP port number of gateway    |

## Command Mode

- /exec

# clear ip arp

```
clear ip arp [ <interface> | <ip-address> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ force-delete ]
```

## Syntax Description

| Syntax Description    |  |   |
|-----------------------|--|---|
| clear                 |  | Reset functions   |
| ip                    |  | Clear IP commands   |
| arp                   |  | Clear ARP table and statistics                              |
| <i>interface</i>      |  | (Optional) ARP interface                                    |
| <i>ip-address</i>     |  | (Optional) IP address                                       |
| vrf                   |  | (Optional) Display per-VRF information                      |
| <i>vrf-name</i>       |  | (Optional) VRF name   |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name                                   |
| all                   |  | (Optional) Clear ARP entries for all vrfs                   |
| force-delete          |  | (Optional) Clear the entries from ARP table without refresh |

## Command Mode

- /exec

# clear ip arp cache

```
clear ip arp cache { { interface [ <intf> ] } }
```

## Syntax Description

---

### Syntax Description

---

|       |                 |
|-------|-----------------|
| clear | Reset functions |
|-------|-----------------|

---

|    |                   |
|----|-------------------|
| ip | Clear IP commands |
|----|-------------------|

---

|     |     |
|-----|-----|
| arp | arp |
|-----|-----|

---

|       |                 |
|-------|-----------------|
| cache | Clear arp cache |
|-------|-----------------|

---

|           |                                 |
|-----------|---------------------------------|
| interface | Clear arp interface information |
|-----------|---------------------------------|

---

|             |                                    |
|-------------|------------------------------------|
| <i>intf</i> | (Optional) Interface name to clear |
|-------------|------------------------------------|

---

## Command Mode

- /exec

# clear ip arp controller-statistics

clear ip arp controller-statistics

## Syntax Description

| Syntax Description |                       |                                  |
|--------------------|-----------------------|----------------------------------|
|                    | clear                 | Reset functions                  |
|                    | ip                    | Display IP information           |
|                    | arp                   | Display ARP table and statistics |
|                    | controller-statistics | Controller statistics            |

## Command Mode

- /exec

## clear ip arp event-history

```
clear ip arp event-history { packet | event | sync-event | ip-sync-event | control | ha | errors | lcache | lcache-errors
| client-event | client-errors | snmp | cli | suppression-event | suppression-errors | controller-errors | dme-event
| all } [ dump-to-file ]
```

### Syntax Description

#### Syntax Description

|                    |  |
|--------------------|--|
| clear              | Reset functions  |
| ip                 | Clear IP commands  |
| arp                | ARP events   |
| event-history      | Clear the event history buffers                          |
| packet             | inst packet logs   |
| event              | Internal event logs                                      |
| sync-event         | CFS and MCECM related event logs                         |
| ip-sync-event      | L3 over vpc related event logs                           |
| control            | ARP control event logs                                   |
| ha                 | HA and GR logs   |
| errors             | inst error logs  |
| lcache             | lcache logs  |
| lcache-errors      | lcache_error logs  |
| client-event       | Client_event logs  |
| client-errors      | Client_error logs  |
| cli                | clear cli logs   |
| snmp               | SNMP logs  |
| suppression-event  | ARP suppression event logs                               |
| suppression-errors | ARP suppression error logs                               |
| controller-errors  | Controller MAC-IP route error logs                       |
| dme-event          | ARP DME event logs                                       |
| all                | All event history buffers                                |
| dump-to-file       | (Optional) Dump the Arp event history logs into the file |

**Command Mode**

- /exec

# clear ip arp inspection log

clear ip arp inspection log

## Syntax Description

### Syntax Description

|            |                               |
|------------|-------------------------------|
| clear      | Reset functions               |
| ip         | Clear ip counters             |
| arp        | Clear State of ARP features   |
| inspection | Clear State of ARP Inspection |
| log        | Log Buffer                    |

## Command Mode

- /exec



# clear ip arp inspection statistics vlan

clear ip arp inspection statistics vlan <vlan-id>

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| clear              |  | Reset functions                                 |
| ip                 |  | Clear ip counters                               |
| arp                |  | Clear State of ARP features                     |
| inspection         |  | Clear State of ARP Inspection                   |
| statistics         |  | Statistics                                      |
| vlan               |  | Vlan range                                      |
| <i>vlan-id</i>     |  | VLAN ID 1-4094 or range(s): 1-5, 10 or 2-5,7-19 |

## Command Mode

- /exec

## clear ip arp multihoming-statistics

```
clear ip arp multihoming-statistics [ <interface> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ]
```

### Syntax Description

| Syntax Description     |  |  |
|------------------------|--|--|
| clear                  |  | Reset functions  |
| ip                     |  | Clear IP commands  |
| arp                    |  | Clear ARP table and statistics                           |
| <i>interface</i>       |  | (Optional) ARP interface                                 |
| multihoming-statistics |  | Display ARP Multihoming stats                            |
| vrf                    |  | (Optional) Display per-VRF information                   |
| <i>vrf-name</i>        |  | (Optional) VRF name                                      |
| <i>vrf-known-name</i>  |  | (Optional) Known VRF name                                |
| all                    |  | (Optional) Clear ARP Multihoming statistics for all vrfs |

### Command Mode

- /exec

# clear ip arp static-arps-outside-subnet-count

clear ip arp static-arps-outside-subnet-count

## Syntax Description

| Syntax Description |                                  |  |
|--------------------|----------------------------------|--|
|                    | clear                            | Reset functions                        |
|                    | ip                               | Clear IP commands                      |
|                    | arp                              | Display ARP table and statistics       |
|                    | static-arps-outside-subnet-count | Clear static ARPs outside subnet count |

## Command Mode

- /exec

# clear ip arp statistics

```
clear ip arp statistics [ <interface> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ]
```

## Syntax Description

| Syntax Description    |  |  |
|-----------------------|--|--|
| clear                 |  | Reset functions                              |
| ip                    |  | Clear IP commands                            |
| arp                   |  | Clear ARP table and statistics               |
| <i>interface</i>      |  | (Optional) ARP interface                     |
| statistics            |  | Clear ARP statistics                         |
| vrf                   |  | (Optional) Display per-VRF information       |
| <i>vrf-name</i>       |  | (Optional) VRF name                          |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name                    |
| all                   |  | (Optional) Clear ARP statistics for all vrfs |

## Command Mode

- /exec

# clear ip arp suppression-cache statistics

clear ip arp suppression-cache statistics

## Syntax Description

| Syntax Description |                   |                                |
|--------------------|-------------------|--------------------------------|
|                    | clear             | Reset functions                |
|                    | ip                | Clear IP commands              |
|                    | arp               | Clear ARP table and statistics |
|                    | suppression-cache | ARP-suppression cache          |
|                    | statistics        | clear suppression statistics   |

## Command Mode

- /exec

# clear ip arp tunnel-statistics

clear ip arp tunnel-statistics

## Syntax Description

| Syntax Description |                   |   |
|--------------------|-------------------|---|
|                    | clear             | Reset functions                           |
|                    | ip                | Clear IP commands                         |
|                    | arp               | Display ARP table and statistics          |
|                    | tunnel-statistics | Clear ARP statistics for tunneled packets |

## Command Mode

- /exec

# clear ip arp vpc-statistics

clear ip arp vpc-statistics

## Syntax Description

| Syntax Description |                |                                  |
|--------------------|----------------|----------------------------------|
|                    | clear          | Reset functions                  |
|                    | ip             | Clear IP commands                |
|                    | arp            | Display ARP table and statistics |
|                    | vpc-statistics | Clear ARP vPC statistics         |

## Command Mode

- /exec

# clear ip cache

```
clear ip cache { { interface [ <intf> ] } }
```

## Syntax Description

---

**Syntax Description**

---

clear    Reset functions

---

ip        Clear IP commands

---

cache    Clear ip cache

---

interface Clear ip interface information

---

*intf*    (Optional) Interface name to clear

---

## Command Mode

- /exec



# clear ip dhcp global statistics

clear ip dhcp global statistics

## Syntax Description

| Syntax Description |                                  |  |
|--------------------|----------------------------------|--|
| clear              | Reset functions                  |  |
| ip                 | Clear ip counters                |  |
| dhcp               | Clear State of DHCP features     |  |
| global             | Clear State of DHCP global stats |  |
| statistics         | DHCP snooping statistics         |  |

## Command Mode

- /exec

# clear ip dhcp relay statistics

```
clear ip dhcp relay statistics [ interface <intf> | { interface <intf> serverip <ip-addr-val> [ use-vrf <vrf-name> ] } ]
```

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| clear              |  | Reset functions                          |
| ip                 |  | Clear ip counters                        |
| dhcp               |  | Clear State of DHCP features             |
| relay              |  | Clear State of DHCP relay stats          |
| statistics         |  | DHCP Relay statistics                    |
| interface          |  | (Optional) input interface               |
| <i>intf</i>        |  | (Optional) interface                     |
| serverip           |  | (Optional) Helper address                |
| <i>ip-addr-val</i> |  | (Optional) IP address                    |
| use-vrf            |  | (Optional) helper address VRF membership |
| <i>vrf-name</i>    |  | (Optional) VRF name                      |

## Command Mode

- /exec

# clear ip dhcp snooping binding

```
clear ip dhcp snooping binding [ { vlan <vlan-id> mac <mac-addr> ip <ip-addr> interface <interface-id> } |
```

## Syntax Description

| Syntax Description  |  |                              |
|---------------------|--|------------------------------|
| clear               |  | Reset functions              |
| ip                  |  | Clear ip counters            |
| dhcp                |  | Clear State of DHCP features |
| snooping            |  | Clear State of DHCP Snooping |
| binding             |  | DHCP snooping bindings       |
| vlan                |  | (Optional) VLAN              |
| <i>vlan-id</i>      |  | (Optional) VLAN id           |
| mac                 |  | (Optional) MAC address       |
| <i>mac-addr</i>     |  | (Optional) MAC address       |
| ip                  |  | (Optional) IP address        |
| <i>ip-addr</i>      |  | (Optional) IP address        |
| interface           |  | (Optional) interface         |
| <i>interface-id</i> |  | (Optional) interface         |

## Command Mode

- /exec

# clear ip dhcp snooping statistics

```
clear ip dhcp snooping statistics [ { vlan <vlan-id> interface <intf> } ]
```

## Syntax Description

| Syntax Description |                                    |
|--------------------|------------------------------------|
| clear              | Reset functions                    |
| ip                 | Clear ip counters                  |
| dhcp               | Clear State of DHCP features       |
| snooping           | Clear State of DHCP snooping stats |
| statistics         | DHCP snooping statistics           |
| vlan               | (Optional) VLAN                    |
| <i>vlan-id</i>     | (Optional) VLAN id                 |
| interface          | (Optional) input interface         |
| <i>intf</i>        | (Optional) interface               |

## Command Mode

- /exec

# clear ip dns all config

clear ip dns all config

## Syntax Description

---

### Syntax Description

---

clear Clear entries

---

ip Configure ip feature

---

dns DNS related config

---

all All DNS related content

---

config Domain-name, name-server, domain-list, sortlist, options, results

---

## Command Mode

- /exec

# clear ip dns use-vrf config

clear ip dns use-vrf config

## Syntax Description

| Syntax Description |                                       |
|--------------------|---------------------------------------|
| clear              | Clear entries                         |
| ip                 | Configure ip feature                  |
| dns                | DNS related config                    |
| use-vrf            | Config with keyword use-vrf           |
| config             | Domain-name, name-server, domain-list |

## Command Mode

- /exec

# clear ip eigrp accounting

```
clear { ip | ipv6 } eigrp [ <eigrp-ptag> ] accounting [ vrf { <vrf-name> | <vrf-known-name> | all } ]
```

## Syntax Description

| Syntax Description    |  |   |
|-----------------------|--|---|
| clear                 |  | Reset functions                             |
| ip                    |  | Clear IP commands                           |
| ipv6                  |  | Clear IPv6 commands                         |
| eigrp                 |  | EIGRP clear commands                        |
| vrf                   |  | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       |  | (Optional) VRF name                         |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name                   |
| all                   |  | (Optional) Display information for all VRFs |
| <i>eigrp-ptag</i>     |  | (Optional) Process tag                      |
| accounting            |  | Clear IP-EIGRP accounting statistics        |

## Command Mode

- /exec

## clear ip eigrp event-history

clear { ip | ipv6 } eigrp [ <eigrp-ptag> ] event-history [ fsm | packet | rib | all ]

### Syntax Description

| Syntax Description |            |                                 |
|--------------------|------------|---------------------------------|
| clear              |            | Reset functions                 |
| ip                 |            | Clear IP commands               |
| ipv6               |            | Clear IPv6 commands             |
| eigrp              |            | EIGRP clear commands            |
| <i>eigrp-ptag</i>  | (Optional) | Process tag                     |
| event-history      |            | Clear the event history buffers |
| fsm                | (Optional) | FSM log of EIGRP                |
| packet             | (Optional) | Packet log of EIGRP             |
| rib                | (Optional) | RIB log of EIGRP                |
| all                | (Optional) | All event history buffers       |

### Command Mode

- /exec



# clear ip eigrp event-history bfd

clear { ip | ipv6 } eigrp [ <eigrp-ptag> ] event-history bfd

## Syntax Description

| Syntax Description |  |                                 |
|--------------------|--|---------------------------------|
| clear              |  | Reset functions                 |
| ip                 |  | Clear IP commands               |
| ipv6               |  | Clear IPv6 commands             |
| eigrp              |  | EIGRP clear commands            |
| <i>eigrp-ptag</i>  |  | (Optional) Process tag          |
| event-history      |  | Clear the event history buffers |
| bfd                |  | Show bfd log of EIGRP           |

## Command Mode

- /exec

## clear ip eigrp events

```
clear { ip | ipv6 } eigrp [ <eigrp-ptag> ] events [ vrf { <vrf-name> | <vrf-known-name> | all } ]
```

### Syntax Description

| Syntax Description | clear                 | Reset functions                             |
|--------------------|-----------------------|---|
|                    | ip                    | Clear IP commands                           |
|                    | ipv6                  | Clear IPv6 commands                         |
|                    | eigrp                 | EIGRP clear commands                        |
|                    | vrf                   | (Optional) Display per-VRF information      |
|                    | <i>vrf-name</i>       | (Optional) VRF name                         |
|                    | <i>vrf-known-name</i> | (Optional) Known VRF name                   |
|                    | all                   | (Optional) Display information for all VRFs |
|                    | <i>eigrp-ptag</i>     | (Optional) Process tag                      |
|                    | events                | Clear IP-EIGRP event logs                   |

### Command Mode

- /exec

# clear ip eigrp logging

```
clear { ip | ipv6 } eigrp [ <eigrp-ptag> ] logging [ vrf { <vrf-name> | <vrf-known-name> | all } ]
```

## Syntax Description

| Syntax Description    |  |   |
|-----------------------|--|---|
| clear                 |  | Reset functions                             |
| ip                    |  | Clear IP commands                           |
| ipv6                  |  | Clear IPv6 commands                         |
| eigrp                 |  | EIGRP clear commands                        |
| vrf                   |  | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       |  | (Optional) VRF name                         |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name                   |
| all                   |  | (Optional) Display information for all VRFs |
| <i>eigrp-ptag</i>     |  | (Optional) Process tag                      |
| logging               |  | Stop IP-EIGRP event logging                 |

## Command Mode

- /exec

# clear ip eigrp redistribution

```
clear { ip | ipv6 } eigrp [ <eigrp-ptag> ] redistribution [ vrf { <vrf-name> | <vrf-known-name> | all } ]
```

## Syntax Description

| Syntax Description    |  |   |
|-----------------------|--|---|
| clear                 |  | Reset functions                             |
| ip                    |  | Clear IP commands                           |
| ipv6                  |  | Clear IPv6 commands                         |
| eigrp                 |  | EIGRP clear commands                        |
| <i>eigrp-ptag</i>     |  | (Optional) Process tag                      |
| vrf                   |  | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       |  | (Optional) VRF name                         |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name                   |
| all                   |  | (Optional) Display information for all VRFs |
| redistribution        |  | Clear EIGRP redistributed information       |

## Command Mode

- /exec

# clear ip eigrp route-map statistics redistribute

```
clear ip eigrp [ <eigrp-ptag> ] route-map statistics redistribute { bgp <as> | { eigrp | isis | ospf | rip } <tag> |
static | direct | amt | lisp } [ vrf { <vrf-name> | <vrf-known-name> | all } ]
```

## Syntax Description

### Syntax Description

|                       |  |
|-----------------------|--|
| clear                 | Reset functions  |
| ip                    | Clear IP commands                                      |
| eigrp                 | EIGRP clear commands                                   |
| vrf                   | (Optional) Display per-VRF information                 |
| <i>vrf-name</i>       | (Optional) VRF name                                    |
| <i>vrf-known-name</i> | (Optional) Known VRF name                              |
| all                   | (Optional) Display information for all VRFs            |
| <i>eigrp-ptag</i>     | (Optional) Process tag                                 |
| route-map             | Route-map related information                          |
| statistics            | Route-map statistics                                   |
| redistribute          | Redistribute information from another routing protocol |
| bgp                   | Border Gateway Protocol (BGP)                          |
| <i>as</i>             | Autonomous system number                               |
| isis                  | IS-IS Routing for IPv4                                 |
| ospf                  | Open Shortest Path First (OSPF)                        |
| rip                   | Routing Information Protocol (RIP)                     |
| eigrp                 | Enhanced Interior Gateway Routing Protocol (EIGRP)     |
| <i>tag</i>            | Process tag  |
| static                | Static routes  |
| direct                | Directly connected                                     |
| amt                   | AMT Anycast prefix                                     |
| lisp                  | LISP EID-prefixes                                      |

## Command Mode

- /exec

# clear ip eigrp traffic

```
clear { ip | ipv6 } eigrp [ <eigrp-ptag> ] traffic [ vrf { <vrf-name> | <vrf-known-name> | all } ]
```

## Syntax Description

| Syntax Description    |  |   |
|-----------------------|--|---|
| clear                 |  | Reset functions                             |
| ip                    |  | Clear IP commands                           |
| ipv6                  |  | Clear IPv6 commands                         |
| eigrp                 |  | EIGRP clear commands                        |
| vrf                   |  | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       |  | (Optional) VRF name                         |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name                   |
| all                   |  | (Optional) Display information for all VRFs |
| <i>eigrp-ptag</i>     |  | (Optional) Process tag                      |
| traffic               |  | Clear IP-EIGRP traffic statistics           |

## Command Mode

- /exec

# clear ip ftm statistics

clear ip ftm statistics

## Syntax Description

| Syntax Description |            |                   |
|--------------------|------------|-------------------|
|                    | clear      | Reset functions   |
|                    | ip         | Clear IP commands |
|                    | ftm        | FTM API           |
|                    | statistics | Statistics        |

## Command Mode

- /exec

# clear ip igmp event-history

```
clear ip igmp event-history [ <igmp-event-hist-buf-name> ]
```

## Syntax Description

| Syntax Description |                                 |                                   |
|--------------------|---------------------------------|-----------------------------------|
|                    | clear                           | Reset functions                   |
|                    | ip                              | Clear IP commands                 |
|                    | igmp                            | Clear IGMP related information    |
|                    | event-history                   | Clear event-history buffers       |
|                    | <i>igmp-event-hist-buf-name</i> | (Optional) Event hist buffer name |

## Command Mode

- /exec



## clear ip igmp groups

```
clear ip igmp { groups | route } { <all> | <group-prefix> | <group> [ <source> ] } [ vrf { <vrf-name> | <vrf-known-name> | all } ]
```

### Syntax Description

| Syntax Description    |  |   |
|-----------------------|--|---|
| clear                 |  | Reset functions                                 |
| ip                    |  | Clear IP commands                               |
| igmp                  |  | Clear IGMP related information                  |
| groups                |  | Route information                               |
| route                 |  | Route information                               |
| all                   |  | Clear all routes                                |
| <i>group-prefix</i>   |  | Clear all routes within the Group prefix        |
| <i>group</i>          |  | Clear all routes matching the Group             |
| <i>source</i>         |  | (Optional) Clear a (S,G) route                  |
| vrf                   |  | (Optional) Clear information for particular VRF |
| <i>vrf-name</i>       |  | (Optional) VRF name                             |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name                       |
| all                   |  | (Optional) Display information for all VRFs     |

### Command Mode

- /exec

# clear ip igmp interface statistics

clear ip igmp interface statistics [ <interface> ]

## Syntax Description

| Syntax Description |                                    |  |
|--------------------|------------------------------------|--|
| clear              | Reset functions                    |  |
| ip                 | Clear IP commands                  |  |
| igmp               | Clear IGMP statistics information  |  |
| interface          | Interface related information      |  |
| statistics         | Packet/internal counter statistics |  |
| <i>interface</i>   | (Optional) Specific interface only |  |

## Command Mode

- /exec

# clear ip igmp internal mrib-cache

clear ip igmp internal mrib-cache [ vrf { <vrf-name> | <vrf-known-name> | all } ]

## Syntax Description

| Syntax Description    |  |   |
|-----------------------|--|---|
| clear                 |  | Reset functions                             |
| ip                    |  | Clear IP commands                           |
| igmp                  |  | Clear IGMP related information              |
| internal              |  | Commands for internal use                   |
| mrib-cache            |  | clear this vrf mrib-cache and repopulate    |
| vrf                   |  | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       |  | (Optional) VRF name                         |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name                   |
| all                   |  | (Optional) Display information for all VRFs |

## Command Mode

- /exec

## clear ip igmp snooping event-history

clear ip igmp snooping event-history [ <igmp-snoop-event-hist-buf-name> ]

### Syntax Description

| Syntax Description |                                       |  |
|--------------------|---------------------------------------|--|
|                    | clear                                 | Reset functions                        |
|                    | ip                                    | Clear IP commands                      |
|                    | igmp                                  | Clear IGMP Snooping event hist buffers |
|                    | snooping                              | Clear IGMP Snooping event hist buffers |
|                    | event-history                         | Clear event history buffers            |
|                    | <i>igmp-snoop-event-hist-buf-name</i> | (Optional) Event history buffer name   |

### Command Mode

- /exec

## clear ip igmp snooping explicit-tracking

```
clear ip igmp snooping explicit-tracking { vlan { <vlan> | all } | bridge-domain { <bdid> | all } }
```

### Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| clear              |  | Reset functions                              |
| ip                 |  | Clear IP commands                            |
| igmp               |  | Clear IGMP Snooping information              |
| snooping           |  | Clear IGMP Snooping information              |
| explicit-tracking  |  | Clear Explicit Host tracking information     |
| vlan               |  | Clear explicit tracking information for VLAN |
| <i>vlan</i>        |  | Specify VLAN                                 |
| bridge-domain      |  | Clear explicit tracking information for BD   |
| <i>bdid</i>        |  | Specify BD                                   |
| all                |  | Clear for all vlans/BD                       |

### Command Mode

- /exec

## clear ip igmp snooping groups

```
clear ip igmp snooping groups { <all> | { <group-prefix> | <group> } [ <source> ] } [ interface <if-name> ]
{ vlan { <vlan-id> | all } }
```

### Syntax Description

| Syntax Description  |  |   |
|---------------------|--|---|
| clear               |  | Reset functions                                   |
| ip                  |  | Clear IP commands                                 |
| igmp                |  | Clear IGMP Snooping                               |
| snooping            |  | Clear IGMP Snooping                               |
| groups              |  | Clear snooped groups                              |
| all                 |  | Clear all groups                                  |
| <i>group-prefix</i> |  | Group prefix to clear                             |
| <i>group</i>        |  | Group address to clear                            |
| <i>source</i>       |  | (Optional) Source address to clear                |
| interface           |  | (Optional) Specify interface to clear group state |
| <i>if-name</i>      |  | (Optional) Interface name to clear                |
| vlan                |  | Clear information for VLAN/BD                     |
| <i>vlan-id</i>      |  | Specify the VLAN/BD number                        |
| all                 |  | Clear for all VLAN/BDs                            |

### Command Mode

- /exec

## clear ip igmp snooping proxy querier ports vlan

clear ip igmp snooping proxy querier ports { vlan <vlan> | bridge-domain <bdid> } <if-name> [ purge ]

### Syntax Description

| Syntax Description |                |   |
|--------------------|----------------|---|
|                    | clear          | Reset functions                           |
|                    | ip             | Clear IP commands                         |
|                    | igmp           | Clear IGMP Snooping                       |
|                    | snooping       | Clear IGMP Snooping                       |
|                    | proxy          | Clear IGMP snooping proxy                 |
|                    | querier        | Clear IGMP snooping proxy querier         |
|                    | ports          | Clear IGMP snooping proxy querier ports   |
|                    | vlan           | Clear for a specific vlan                 |
|                    | <i>vlan</i>    | Specify the VLAN number                   |
|                    | bridge-domain  | Clear for a specific BD                   |
|                    | <i>bdid</i>    | Specify the BD number                     |
|                    | <i>if-name</i> | Interface name to clear                   |
|                    | purge          | (Optional) Remove port from priority list |

### Command Mode

- /exec

## clear ip igmp snooping report statistics

```
clear ip igmp snooping { report-policy | access-group } statistics [ vlan <vlan> ]
```

### Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| clear              |  | Reset functions   |
| ip                 |  | Clear IP commands   |
| igmp               |  | Clear IGMP Snooping information                                   |
| snooping           |  | Clear IGMP Snooping information                                   |
| report-policy      |  | IGMP Report Policy  |
| access-group       |  | IGMP access-group   |
| statistics         |  | Policy statistics   |
| vlan               |  | (Optional) Clear VLAN IGMP snooping policy statistics information |
| vlan               |  | (Optional) Specify VLAN   |

### Command Mode

- /exec



# clear ip igmp snooping statistics

clear ip igmp snooping statistics { vlan <vlan> | bridge-domain <bdid> | all }

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| clear              |  | Reset functions                            |
| ip                 |  | Clear IP commands                          |
| igmp               |  | Clear IGMP Snooping statistics information |
| snooping           |  | Clear IGMP Snooping statistics information |
| statistics         |  | Packet/internal counter statistics         |
| vlan               |  | Clear VLAN statistics                      |
| vlan               |  | Specify VLAN                               |
| bridge-domain      |  | Clear BD statistics                        |
| bdid               |  | Specify BD                                 |
| all                |  | All VLAN/BDS                               |

## Command Mode

- /exec

## clear ip igmp snooping vpc peer-link-exclude vlan

clear ip igmp snooping vpc peer-link-exclude vlan { <vlan-id> | all } [ group <group-addr> ]

### Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| clear              |  | Reset functions  |
| ip                 |  | Clear IP commands  |
| igmp               |  | Clear IGMP Snooping information                          |
| snooping           |  | Clear IGMP Snooping information                          |
| vpc                |  | Clear vPC information                                    |
| peer-link-exclude  |  | Clear vPC peer-link Exclude state                        |
| vlan               |  | Clear vpc peer-link Exclude state for VLAN/BD            |
| <i>vlan-id</i>     |  | Specify VLAN/BD  |
| all                |  | All VLAN/BDs   |
| group              |  | (Optional) Clear vpc peer-link Exclude state for VLAN/BD |
| <i>group-addr</i>  |  | (Optional) Specify Group address                         |

### Command Mode

- /exec

# clear ip interface statistics

clear ip interface statistics [ <interface> ]

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| clear              | Reset functions                              |
| ip                 | Clear IP commands                            |
| interface          | Clear IP related interface information       |
| statistics         | Clear IP interface statistics                |
| <i>interface</i>   | (Optional) Clear IP statistics for interface |

## Command Mode

- /exec

## clear ip internal event-history

```
clear ip internal event-history { errors | log | ipc | snmp | ha | ppf | cli | vrf-errors | arp-miss | static-rt | pkt-buffer
| all } [ dump-to-file ]
```

### Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| clear              |            | Reset functions                              |
| ip                 |            | CLEAR_IP_HELP                                |
| internal           |            | Commands for internal use                    |
| event-history      |            | Clear various event logs of IP               |
| errors             |            | Clear error logs of IP                       |
| log                |            | Clear syslog message of IP                   |
| ipc                |            | Clear ipc debug message of IP                |
| snmp               |            | Clear snmp debug message of IP               |
| ha                 |            | Clear ha debug message of IP                 |
| ppf                |            | Clear ppf debug message of IP                |
| cli                |            | Clear cli interaction debug messages for IP  |
| vrf-errors         |            | Clear vrf related errors                     |
| arp-miss           |            | Clear arp miss debug message of IP           |
| static-rt          |            | Clear ip static routing event buffer         |
| pkt-buffer         |            | Clear ip packet buffer event history         |
| all                |            | All event history buffers                    |
| dump-to-file       | (Optional) | Dump the IP event history logs into the file |

### Command Mode

- /exec

# clear ip lisp data-cache

```
clear ip lisp data-cache [ <eid> ] [ vrf { <vrf-name> | <vrf-known-name> } ]
```

## Syntax Description

| Syntax Description    |  |  |
|-----------------------|--|--|
| clear                 |  | Reset functions                                  |
| ip                    |  | Clear IP commands                                |
| lisp                  |  | LISP clear commands                              |
| data-cache            |  | Clear EID-to-RLOC data cache mapping in this ITR |
| <i>eid</i>            |  | (Optional) Clear mapping for IP destination EID  |
| vrf                   |  | (Optional) Display per-VRF information           |
| <i>vrf-name</i>       |  | (Optional) VRF name                              |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name                        |

## Command Mode

- /exec

## clear ip lisp map-cache

```
{ { clear ip lisp map-cache [ <eid-prefix> ] [ vrf { <vrf-name> | <vrf-known-name> } ] } | { clear ipv6 lisp
map-cache [ <eid-prefix6> ] [ vrf { <vrf-name> | <vrf-known-name> } ] } }
```

### Syntax Description

#### Syntax Description

|                       |  |
|-----------------------|--|
| clear                 | Reset functions                                      |
| ip                    | Clear IP commands                                    |
| ipv6                  | Clear IPv6 commands                                  |
| lisp                  | LISP clear commands                                  |
| map-cache             | Clear an EID-to-RLOC cache mapping in this ITR       |
| vrf                   | (Optional) Clear entry for particular vrf            |
| <i>vrf-name</i>       | (Optional) VRF name                                  |
| <i>vrf-known-name</i> | (Optional) Known VRF name                            |
| <i>eid-prefix</i>     | (Optional) Clear entry associated with IP EID-prefix |

### Command Mode

- /exec

# clear ip lisp statistics

```
clear ip lisp statistics [ vrf { <vrf-name> | <vrf-known-name> } ]
```

## Syntax Description

| Syntax Description    |  |                                     |
|-----------------------|--|-------------------------------------|
| clear                 |  | Reset functions                     |
| ip                    |  | Clear IP commands                   |
| lisp                  |  | LISP clear commands                 |
| statistics            |  | Clear global LISP statistics        |
| vrf                   |  | (Optional) Clear statistics for vrf |
| <i>vrf-name</i>       |  | (Optional) VRF name                 |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name           |

## Command Mode

- /exec

## clear ip mbgp dampening

```
{ { clear ip mbgp [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ] dampening
[ <ip-prefix> | <ip-addr> [ <ip-mask> ] ] } | { clear ip bgp [ vrf { <vrf-name> | <vrf-known-name> |
ALL_VRFS_012345678901234 } ] dampening [ <ip-prefix> | <ip-addr> [ <ip-mask> ] ] } | { clear ip bgp [
vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ] ipv4 { unicast | multicast }
dampening [ <ip-prefix> | <ip-addr> [ <ip-mask> ] ] } | { clear ip bgp [ vrf { <vrf-name> | <vrf-known-name>
| ALL_VRFS_012345678901234 } ] all dampening } | { clear bgp [ vrf { <vrf-name> | <vrf-known-name> |
ALL_VRFS_012345678901234 } ] { ipv4 { unicast | multicast } | vpnv4 unicast } dampening [ <ip-prefix>
| <ip-addr> [ <ip-mask> ] ] } | { clear bgp [ vrf { <vrf-name> | <vrf-known-name> |
ALL_VRFS_012345678901234 } ] { ipv6 { unicast | multicast } | vpnv6 unicast } dampening [ <ipv6-prefix>
] ] } | { clear bgp [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ] all dampening
} } [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ]
```

### Syntax Description

#### Syntax Description

|                       |   |
|-----------------------|---|
| clear                 | Reset functions                                       |
| ip                    | Clear IP commands                                     |
| vrf                   | (Optional) Virtual Router Context                     |
| <i>vrf-name</i>       | (Optional) VRF name                                   |
| <i>vrf-known-name</i> | (Optional) Known VRF name                             |
| bgp                   | Clear BGP sessions                                    |
| mbgp                  | Clear MBGP sessions                                   |
| dampening             | Clear route flap dampening information                |
| <i>ip-prefix</i>      | (Optional) Clear route flap dampening for prefix      |
| <i>ip-addr</i>        | (Optional) Clear route flap dampening for one network |
| <i>ip-mask</i>        | (Optional) Network mask                               |
| ipv4                  | Clear IPv4 address-family                             |
| ipv6                  | Clear IPv6 address-family                             |
| vpnv4                 | Clear VPNv4 address-family                            |
| vpnv6                 | Clear VPNv6 address-family                            |
| unicast               | Clear unicast address-family                          |
| multicast             | Clear multicast address-family                        |
| all                   | Clear all address-families                            |

### Command Mode



- /exec

## clear ip mbgp flap-statistics

```
{ { clear ip mbgp [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ] flap-statistics
[ <ip-prefix> | <ip-addr> [ <ip-mask> ] ] } | { clear ip bgp [ vrf { <vrf-name> | <vrf-known-name> |
ALL_VRFS_012345678901234 } ] flap-statistics [ <ip-prefix> | <ip-addr> [ <ip-mask> ] ] } | { clear ip bgp
[ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ] ipv4 { unicast | multicast }
flap-statistics [ <ip-prefix> | <ip-addr> [ <ip-mask> ] ] } | { clear ip bgp [ vrf { <vrf-name> | <vrf-known-name>
| ALL_VRFS_012345678901234 } ] all flap-statistics } | { clear bgp [ vrf { <vrf-name> | <vrf-known-name>
| ALL_VRFS_012345678901234 } ] ipv4 { unicast | multicast } | vpnv4 unicast } flap-statistics [ <ip-prefix>
| <ip-addr> [ <ip-mask> ] | regexp <regexp-str> ] } | { clear bgp [ vrf { <vrf-name> | <vrf-known-name> |
ALL_VRFS_012345678901234 } ] ipv6 { unicast | multicast } | vpnv6 unicast } flap-statistics [ <ip6-prefix>
| regexp <regexp-str> ] } | { clear bgp [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234
} ] all flap-statistics } } [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ]
```

### Syntax Description

#### Syntax Description

|                       |   |
|-----------------------|---|
| clear                 | Reset functions   |
| vrf                   | (Optional) Virtual Router Context   |
| <i>vrf-name</i>       | (Optional) VRF name   |
| <i>vrf-known-name</i> | (Optional) Known VRF name   |
| ip                    | Clear IP commands   |
| bgp                   | Clear BGP sessions  |
| mbgp                  | Clear MBGP sessions   |
| flap-statistics       | Clear flap statistics   |
| <i>ip-prefix</i>      | (Optional) Clear flap statistics for one prefix                             |
| <i>ip-addr</i>        | (Optional) Clear flap statistics for one network                            |
| <i>ip-mask</i>        | (Optional) Network mask   |
| ipv4                  | Clear IPv4 address-family   |
| ipv6                  | Clear IPv6 address-family   |
| vpnv4                 | Clear VPNv4 address-family  |
| vpnv6                 | Clear VPNv6 address-family  |
| unicast               | Clear unicast address-family  |
| multicast             | Clear multicast address-family  |
| all                   | Clear all address-families  |
| regexp                | (Optional) Clear flap statistics for routes matching the regular expression |

---

*regexp-str* (Optional) Regular expression to match the AS paths

---

**Command Mode**

- /exec

## clear ip mbgp peer-template

```
{ { clear ip mbgp [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ] { <neighbor-id>
| * | <asn> | <prefix-id> peer-template <peer-template-name> } [ soft [ in | out ] | dampened-paths | flap-statistics
| no-notify ] } } | { clear ip bgp [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ]
{ <neighbor-id> | * | <asn> | <prefix-id> | peer-template <peer-template-name> } [ soft [ in | out ] |
dampened-paths | flap-statistics | no-notify ] { { ipv4 { unicast | multicast } | { vpnv4 | vpnv6 } unicast | all } {
soft [ in | out ] | dampened-paths | flap-statistics | no-notify } } } | { clear bgp [ vrf { <vrf-name> |
<vrf-known-name> | ALL_VRFS_012345678901234 } ] { ipv4 { unicast | multicast | mvpn | labeled-unicast
} | ipv6 { unicast | multicast | mvpn | labeled-unicast } | { vpnv4 | vpnv6 } unicast | l2vpn evpn | l2vpn vpls |
all } { <neighbor-id> | <ipv6-neighbor-id> | * | <asn> | peer-template <peer-template-name> | <prefix-id> |
<ipv6-prefix-id> } [ soft [ in | out ] | dampened-paths | flap-statistics | no-notify ] } } [ vrf { <vrf-name> |
<vrf-known-name> | ALL_VRFS_012345678901234 } ] }
```

### Syntax Description

#### Syntax Description

|                           |  |
|---------------------------|--|
| clear                     | Reset functions                                |
| ip                        | Clear IP commands                              |
| vrf                       | (Optional) Virtual Router Context              |
| <i>vrf-name</i>           | (Optional) VRF name                            |
| <i>vrf-known-name</i>     | (Optional) Known VRF name                      |
| bgp                       | Clear BGP sessions                             |
| mbgp                      | Clear MBGP sessions                            |
| <i>neighbor-id</i>        | IP address of the neighbor to clear            |
| <i>prefix-id</i>          | Clear all neighbors matching the prefix        |
| *                         | Clear all neighbors (Should be a * character)  |
| <i>asn</i>                | Clear all neighbors in an AS                   |
| peer-template             | Clear all neighbors in a peer-template         |
| <i>peer-template-name</i> | Peer-template name                             |
| soft                      | (Optional) Soft reconfiguration                |
| in                        | (Optional) Clear soft reconfiguration inbound  |
| out                       | (Optional) Clear soft reconfiguration outbound |
| ipv4                      | (Optional) Clear IPv4 address-family           |
| ipv6                      | Clear IPv6 address-family                      |
| vpnv4                     | (Optional) Clear VPNv4 address-family          |

|                 |  |
|-----------------|--|
| vpn6            | (Optional) Clear VPNv6 address-family                      |
| unicast         | (Optional) Clear unicast address-family                    |
| multicast       | (Optional) Clear multicast address-family                  |
| l2vpn           | Display BGP information for L2VPN address family           |
| vpls            | Display BGP information for L2VPN VPLS address family      |
| mvpn            | Display BGP information for MVPN address family            |
| l2vpn           | Display BGP information for L2VPN address family           |
| evpn            | Display BGP information for L2VPN EVPN address family      |
| labeled-unicast | Display BGP information for labeled-unicast address family |
| all             | (Optional) Clear all address-families                      |
| dampened-paths  | (Optional) Clear dampened paths for neighbor               |
| flap-statistics | (Optional) Clear flap statistics for neighbor              |
| no-notify       | (Optional) Clear without sending notification              |

**Command Mode**

- /exec

# clear ip msdp event-history

clear ip msdp event-history [ <msdp-event-hist-buf-name> ]

## Syntax Description

| Syntax Description |                                 |  |
|--------------------|---------------------------------|--|
|                    | clear                           | Reset functions  |
|                    | ip                              | Clear IP commands  |
|                    | msdp                            | MSDP global configuration commands                                     |
|                    | event-history                   | Clear the event-history buffer instances                               |
|                    | <i>msdp-event-hist-buf-name</i> | (Optional) Specify the particular instance of the event-history buffer |

## Command Mode

- /exec

# clear ip msdp peer

```
clear ip msdp peer <peer-address> [ vrf { <vrf-name> | <vrf-known-name> } ]
```

## Syntax Description

| Syntax Description    |  |   |
|-----------------------|--|---|
| clear                 |  | Reset functions                                 |
| ip                    |  | Clear IP commands                               |
| msdp                  |  | MSDP clear commands                             |
| peer                  |  | Clear MSDP peer connection                      |
| <i>peer-address</i>   |  | IP address of MSDP peer                         |
| vrf                   |  | (Optional) Clear information for particular VRF |
| <i>vrf-name</i>       |  | (Optional) VRF name                             |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name                       |

## Command Mode

- /exec

## clear ip msdp policy statistics sa-policy in

```
clear ip msdp policy statistics sa-policy <peer-address> { in | out } [ vrf { <vrf-name> | <vrf-known-name>
} ]
```

### Syntax Description

#### Syntax Description

|                       |   |
|-----------------------|---|
| clear                 | Reset functions                                 |
| ip                    | Clear IP commands                               |
| msdp                  | MSDP global configuration commands              |
| policy                | Policy information                              |
| statistics            | Policy statistics                               |
| sa-policy             | Configured SA policy for MSDP peer              |
| <i>peer-address</i>   | IP address of MSDP peer for SA policy           |
| in                    | Input policy                                    |
| out                   | Output policy                                   |
| vrf                   | (Optional) Clear information for particular VRF |
| <i>vrf-name</i>       | (Optional) VRF name                             |
| <i>vrf-known-name</i> | (Optional) Known VRF name                       |

### Command Mode

- /exec



## clear ip msdp sa

```
clear ip msdp { sa-cache | route } { <all> | <group-prefix> | <group> [ <source> ] } [ vrf { <vrf-name> |
<vrf-known-name> | all } ]
```

### Syntax Description

| Syntax Description    |  |   |
|-----------------------|--|---|
| clear                 |  | Reset functions                                 |
| ip                    |  | Clear IP commands                               |
| msdp                  |  | MSDP clear commands                             |
| sa-cache              |  | Clear contents of SA cache                      |
| route                 |  | Clear contents of SA cache                      |
| all                   |  | Clear all routes                                |
| <i>group-prefix</i>   |  | Clear all routes within the Group prefix        |
| <i>group</i>          |  | Clear all routes matching the Group             |
| <i>source</i>         |  | (Optional) Clear a (S,G) route                  |
| vrf                   |  | (Optional) Clear information for particular VRF |
| <i>vrf-name</i>       |  | (Optional) VRF name                             |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name                       |
| all                   |  | (Optional) Display information for all VRFs     |

### Command Mode

- /exec

# clear ip msdp statistics

```
clear ip msdp statistics [ <peer-address> ] [ vrf { <vrf-name> | <vrf-known-name> } ]
```

## Syntax Description

| Syntax Description    |  |   |
|-----------------------|--|---|
| clear                 |  | Reset functions                                 |
| ip                    |  | Clear IP commands                               |
| msdp                  |  | MSDP clear commands                             |
| statistics            |  | Clear statistics for peers                      |
| <i>peer-address</i>   |  | (Optional) IP address of MSDP peer              |
| vrf                   |  | (Optional) Clear information for particular VRF |
| <i>vrf-name</i>       |  | (Optional) VRF name                             |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name                       |

## Command Mode

- /exec

# clear ip nat translation

```
clear ip nat translation { all | inside <insideGlobalIP> <insideLocalIP> [ outside <outsideLocalIP>
<outsideGlobalIP> ] | outside <outsideLocalIP> <outsideGlobalIP> }
```

## Syntax Description

| Syntax Description     |  |                                      |
|------------------------|--|--------------------------------------|
| clear                  |  | Reset functions                      |
| ip                     |  | Clear ip counters                    |
| nat                    |  | Clear NAT                            |
| translation            |  | Clear dynamic translation            |
| all                    |  | Delete all dynamic translations      |
| inside                 |  | Inside addresses                     |
| <i>insideGlobalIP</i>  |  | Inside global IP address             |
| <i>insideLocalIP</i>   |  | Inside local IP address              |
| outside                |  | (Optional) Outside addresses         |
| <i>outsideLocalIP</i>  |  | (Optional) Outside local IP address  |
| <i>outsideGlobalIP</i> |  | (Optional) Outside global IP address |

## Command Mode

- /exec

# clear ip ospf database

clear ip ospf [ <tag> ] database

## Syntax Description

| Syntax Description |                                  |  |
|--------------------|----------------------------------|--|
| clear              | Reset functions                  |  |
| ip                 | Clear IP commands                |  |
| ospf               | Clear OSPF tables                |  |
| tag                | (Optional) Process tag           |  |
| database           | Clear the LSDB and all neighbors |  |

## Command Mode

- /exec

# clear ip ospf event-history

clear ip ospf [ <tag> ] event-history [ adjacency | event | ha | flooding | lsa | spf | redistribution | cli | ldp | te | rib | hello | spf-trigger | objstore | all ]

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| clear              | Reset functions                             |  |
| ip                 | IP events                                   |  |
| ospf               | Debug OSPF events                           |  |
| <i>tag</i>         | (Optional) Process tag                      |  |
| event-history      | Clear the event history buffers             |  |
| adjacency          | (Optional) Adjacency formation logs         |  |
| event              | (Optional) Internal event logs              |  |
| ha                 | (Optional) HA and GR logs                   |  |
| flooding           | (Optional) LSA flooding logs                |  |
| lsa                | (Optional) LSA generation and database logs |  |
| spf                | (Optional) SPF calculation logs             |  |
| redistribution     | (Optional) Redistribution logs              |  |
| cli                | (Optional) Cli logs                         |  |
| ldp                | (Optional) LDP related logs                 |  |
| te                 | (Optional) MPLS TE related logs             |  |
| rib                | (Optional) RIB related logs                 |  |
| hello              | (Optional) HELLO related logs               |  |
| spf-trigger        | (Optional) SPF TRIGGER related logs         |  |
| objstore           | (Optional) DME OBJSTORE related logs        |  |
| all                | (Optional) All event history buffers        |  |

## Command Mode

- /exec

# clear ip ospf event-history detail

clear ip ospf [ <tag> ] event-history detail

## Syntax Description

| Syntax Description |  |                                |
|--------------------|--|--------------------------------|
| clear              |  | Reset functions                |
| ip                 |  | IP events                      |
| ospf               |  | Debug OSPF events              |
| <i>tag</i>         |  | (Optional) Process tag         |
| event-history      |  | Clear the event history buffer |
| detail             |  | Detailed event history buffer  |

## Command Mode

- /exec

# clear ip ospf interface

```
clear ip ospf [ <tag> ] interface { * | <interface> }
```

## Syntax Description

| Syntax Description |                              |  |
|--------------------|------------------------------|--|
| clear              | Reset functions              |  |
| ip                 | Clear IP commands            |  |
| ospf               | Clear OSPF tables            |  |
| <i>tag</i>         | (Optional) Process tag       |  |
| interface          | Clear one or more interfaces |  |
| *                  | Clear all interfaces         |  |
| <i>interface</i>   | Interface to clear           |  |

## Command Mode

- /exec

## clear ip ospf internal interface-cache

```
clear ip ospf [ <tag> ] internal interface-cache [ <interface> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ]
```

### Syntax Description

#### Syntax Description

|                       |  |
|-----------------------|--|
| clear                 | Reset functions                                      |
| ip                    | IP events  |
| ospf                  | Debug OSPF events                                    |
| <i>tag</i>            | (Optional) Process tag                               |
| internal              | Commands for internal use                            |
| interface-cache       | Interface-cache                                      |
| <i>interface</i>      | (Optional) Interface to clear the interface cache on |
| vrf                   | (Optional) Display per-VRF information               |
| <i>vrf-name</i>       | (Optional) VRF name                                  |
| <i>vrf-known-name</i> | (Optional) Known VRF name                            |
| all                   | (Optional) Display information for all VRFs          |

### Command Mode

- /exec



# clear ip ospf neighbor

```
clear ip ospf [ <tag> ] neighbor { { { * | <neighborid> } [ vrf { <vrf-name> | <vrf-known-name> | all } ] } |
{ <interface> } }
```

## Syntax Description

| Syntax Description    |  |   |
|-----------------------|--|---|
| clear                 |  | Reset functions                                 |
| ip                    |  | Clear IP commands                               |
| ospf                  |  | Clear OSPF tables                               |
| <i>tag</i>            |  | (Optional) Process tag                          |
| vrf                   |  | (Optional) Display per-VRF information          |
| <i>vrf-name</i>       |  | (Optional) VRF name                             |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name                       |
| all                   |  | (Optional) Display information for all VRFs     |
| neighbor              |  | Clear one or more neighbors                     |
| *                     |  | Clear all neighbors                             |
| <i>neighborid</i>     |  | Source IP address, or router ID of the neighbor |
| <i>interface</i>      |  | Interface to clear all neighbors on             |

## Command Mode

- /exec

## clear ip ospf policy statistics

```
clear ip ospf [ <tag> ] policy statistics { { redistribute { bgp <as> | { eigrp | isis | ospf | rip } <tag> | static |
direct | amt | lisp } } | { area <area-id-ip> filter-list { in | out } } } [ vrf { <vrf-name> | <vrf-known-name> |
all } ]
```

### Syntax Description

#### Syntax Description

|                       |   |
|-----------------------|---|
| clear                 | Reset functions                             |
| ip                    | Clear IP commands                           |
| ospf                  | Clear OSPF tables                           |
| <i>tag</i>            | (Optional) Process tag                      |
| vrf                   | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       | (Optional) VRF name                         |
| <i>vrf-known-name</i> | (Optional) Known VRF name                   |
| all                   | (Optional) Display information for all VRFs |
| policy                | Clear Policy related information            |
| statistics            | Display Route Filter statistics             |
| redistribute          | Statistics for redistribution               |
| isis                  | ISO Intermediate-to-Intermediate (IS-IS)    |
| bgp                   | Border Gateway Protocol (BGP)               |
| <i>as</i>             | Autonomous system number                    |
| ospf                  | Open Shortest Path First (OSPFv2)           |
| eigrp                 | Enhanced Interior Gateway Protocol (EIGRP)  |
| rip                   | Routing Information Protocol (RIP)          |
| static                | Static                                      |
| direct                | Directly connected                          |
| amt                   | AMT anycast prefix                          |
| lisp                  | LISP EID-prefixes                           |
| area                  | Configure area properties                   |
| <i>area-id-ip</i>     | Area Id as an integer or ip address         |
| filter-list           | Filter prefixes between OSPF areas          |

---

|            |                                     |
|------------|-------------------------------------|
| in         | Filter networks sent to this area   |
| out        | Filter networks sent from this area |
| <i>tag</i> |                                     |

---

**Command Mode**

- /exec

# clear ip ospf redistribution

```
clear ip ospf [ <tag> ] redistribution [ vrf { <vrf-name> | <vrf-known-name> | all } ]
```

## Syntax Description

| Syntax Description    |  |   |
|-----------------------|--|---|
| clear                 |  | Reset functions                             |
| ip                    |  | Clear IP commands                           |
| ospf                  |  | Clear OSPF tables                           |
| <i>tag</i>            |  | (Optional) Process tag                      |
| vrf                   |  | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       |  | (Optional) VRF name                         |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name                   |
| all                   |  | (Optional) Display information for all VRFs |
| redistribution        |  | Clear OSPF route redistribution             |

## Command Mode

- /exec

# clear ip ospf statistics

```
clear ip ospf [ <tag> ] statistics [ vrf { <vrf-name> | <vrf-known-name> | all } ]
```

## Syntax Description

| Syntax Description    |  |   |
|-----------------------|--|---|
| clear                 |  | Reset functions                             |
| ip                    |  | Clear IP commands                           |
| ospf                  |  | Clear OSPF tables                           |
| <i>tag</i>            |  | (Optional) Process tag                      |
| vrf                   |  | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       |  | (Optional) VRF name                         |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name                   |
| all                   |  | (Optional) Display information for all VRFs |
| statistics            |  | Clear event counters                        |

## Command Mode

- /exec

# clear ip ospf traffic

```
clear ip ospf [ <tag> ] traffic [ <interface> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ]
```

## Syntax Description

| Syntax Description    |  |  |
|-----------------------|--|--|
| clear                 |  | Reset functions                              |
| ip                    |  | Clear IP commands                            |
| ospf                  |  | Clear OSPF tables                            |
| <i>tag</i>            |  | (Optional) Process tag                       |
| vrf                   |  | (Optional) Display per-VRF information       |
| <i>vrf-name</i>       |  | (Optional) VRF name                          |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name                    |
| all                   |  | (Optional) Display information for all VRFs  |
| traffic               |  | Clear packet counters                        |
| <i>interface</i>      |  | (Optional) Interface to clear all traffic on |

## Command Mode

- /exec

# clear ip pim event-history

clear ip pim event-history [ <pim-event-hist-buf-name> ]

## Syntax Description

| Syntax Description |                                |  |
|--------------------|--------------------------------|--|
|                    | clear                          | Reset functions                          |
|                    | ip                             | Clear IP commands                        |
|                    | pim                            | PIM clear commands                       |
|                    | event-history                  | Clear event history buffers              |
|                    | <i>pim-event-hist-buf-name</i> | (Optional) Event history buffer instance |

## Command Mode

- /exec

# clear ip pim interface statistics

clear ip pim interface statistics [ <interface> | vrf { <vrf-name> | <vrf-known-name> | all } ]

## Syntax Description

| Syntax Description    |            |                                     |
|-----------------------|------------|-------------------------------------|
| clear                 |            | Reset functions                     |
| ip                    |            | Clear IP commands                   |
| pim                   |            | Clear PIM information               |
| interface             |            | Interface related information       |
| statistics            |            | Packet interface counter statistics |
| <i>interface</i>      | (Optional) | Interface name to clear             |
| vrf                   | (Optional) | Display per-VRF information         |
| <i>vrf-name</i>       | (Optional) | VRF name                            |
| <i>vrf-known-name</i> | (Optional) | Known VRF name                      |
| all                   | (Optional) | Display information for all VRFs    |

## Command Mode

- /exec



## clear ip pim policy statistics

```
clear ip pim policy statistics { register-policy | bsr { bsr-policy | rp-candidate-policy } | auto-rp {
rp-candidate-policy | mapping-agent-policy } } [ vrf { <vrf-name> | <vrf-known-name> | all } ]
```

### Syntax Description

| Syntax Description    |  |   |
|-----------------------|--|---|
| clear                 |  | Reset functions                             |
| ip                    |  | Clear IP commands                           |
| pim                   |  | PIM global configuration commands           |
| policy                |  | Policy related information                  |
| statistics            |  | Policy statistics                           |
| register-policy       |  | Show statistics for register-policy         |
| bsr                   |  | Bootstrap protocol RP-distribution policy   |
| bsr-policy            |  | Statistics for BSR messages                 |
| rp-candidate-policy   |  | Statistics for RP candidate messages        |
| auto-rp               |  | Statistics for auto-rp messages             |
| rp-candidate-policy   |  | Statistics for RP candidate messages        |
| mapping-agent-policy  |  | Statistics for mapping agent messages       |
| vrf                   |  | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       |  | (Optional) VRF name                         |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name                   |
| all                   |  | (Optional) Display information for all VRFs |

### Command Mode

- /exec

# clear ip pim policy statistics jp

clear ip pim policy statistics { jp-policy | neighbor-policy } <interface>

## Syntax Description

| Syntax Description |  |                                   |
|--------------------|--|-----------------------------------|
| clear              |  | Reset functions                   |
| ip                 |  | Clear IP commands                 |
| pim                |  | PIM global configuration commands |
| policy             |  | Policy related information        |
| statistics         |  | Policy statistics                 |
| jp-policy          |  | Statistics for jp-policy          |
| neighbor-policy    |  | Statistics for neighbor-policy    |
| <i>interface</i>   |  | Interface                         |

## Command Mode

- /exec

# clear ip pim route

```
clear ip pim route { <all> | <group-prefix> | <group> [ <source> ] } [ vrf { <vrf-name> | <vrf-known-name>
| all } ]
```

## Syntax Description

### Syntax Description

|                       |   |
|-----------------------|---|
| clear                 | Reset functions                                 |
| ip                    | Clear IP commands                               |
| pim                   | PIM clear commands                              |
| route                 | Route information                               |
| all                   | Clear all routes                                |
| <i>group-prefix</i>   | Clear all routes within the Group prefix        |
| <i>group</i>          | Clear all routes matching the Group             |
| <i>source</i>         | (Optional) Clear a (S,G) route                  |
| vrf                   | (Optional) Clear information for particular VRF |
| <i>vrf-name</i>       | (Optional) VRF name                             |
| <i>vrf-known-name</i> | (Optional) Known VRF name                       |
| all                   | (Optional) Display information for all VRFs     |

## Command Mode

- /exec

# clear ip pim statistics

```
clear ip pim statistics [ vrf { <vrf-name> | <vrf-known-name> | all } ]
```

## Syntax Description

| Syntax Description    |  |   |
|-----------------------|--|---|
| clear                 |  | Reset functions                             |
| ip                    |  | Clear IP commands                           |
| pim                   |  | Clear PIM information                       |
| statistics            |  | Packet global counter statistics            |
| vrf                   |  | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       |  | (Optional) VRF name                         |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name                   |
| all                   |  | (Optional) Display information for all VRFs |

## Command Mode

- /exec

# clear ip rip policy statistics redistribute bgp

```
{ { clear ip rip policy statistics redistribute bgp <as> } | { clear ip rip policy statistics redistribute eigrp <tag> } | { clear ip rip policy statistics redistribute isis <tag> } | { clear ip rip policy statistics redistribute rip <tag> } | { clear ip rip policy statistics redistribute ospf <tag> } | { clear ip rip policy statistics redistribute direct } | { clear ip rip policy statistics redistribute static } } [ vrf { <vrf-name> | <vrf-known-name> | all } ]
```

## Syntax Description

### Syntax Description

|                       |   |
|-----------------------|---|
| clear                 | Reset functions                                     |
| ip                    | Clear IP commands                                   |
| rip                   | Routing Information Protocol (RIP)                  |
| policy                | Policy related information                          |
| statistics            | Policy statistics                                   |
| redistribute          | RIP redistribute routes from other routing protocol |
| bgp                   | Border Gateway Protocol (BGP)                       |
| eigrp                 | Enhanced Interior Gateway Routing Protocol (EIGRP)  |
| <i>as</i>             | Autonomous system number                            |
| isis                  | Intermediate-to-intermediate (ISIS)                 |
| ospf                  | Open Shortest Path First (OSPFv2)                   |
| <i>tag</i>            | Process tag   |
| static                | Static routes                                       |
| direct                | Directly connected routes                           |
| vrf                   | (Optional) Display per-VRF information              |
| <i>vrf-name</i>       | (Optional) VRF name                                 |
| <i>vrf-known-name</i> | (Optional) Known VRF name                           |
| all                   | (Optional) Display information for all VRFs         |

## Command Mode

- /exec

## clear ip rip statistics

```
clear { ipv6 | ip } rip statistics [ * | <interface> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ]
```

### Syntax Description

| Syntax Description    |  |  |
|-----------------------|--|--|
| clear                 |  | Reset functions                              |
| ipv6                  |  | Clear IPv6 commands                          |
| ip                    |  | Clear IP commands                            |
| rip                   |  | Routing Information Protocol (RIP)           |
| statistics            |  | Clear RIP statistics                         |
| *                     |  | (Optional) RIP statistics for all interfaces |
| <i>interface</i>      |  | (Optional) RIP interface                     |
| vrf                   |  | (Optional) Display per-VRF information       |
| <i>vrf-name</i>       |  | (Optional) VRF name                          |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name                    |
| all                   |  | (Optional) Display information for all VRFs  |

### Command Mode

- /exec

# clear ip rsvp authentication

clear ip rsvp authentication [ <nbr-addr> ]

## Syntax Description

| Syntax Description |  |                                  |
|--------------------|--|----------------------------------|
| clear              |  | Reset functions                  |
| ip                 |  | Clear IP commands                |
| rsvp               |  | Clear RSVP information           |
| authentication     |  | Clear security associations      |
| <i>nbr-addr</i>    |  | (Optional) RSVP Neighbor address |

## Command Mode

- /exec

# clear ip rsvp counters

clear ip rsvp counters [ teardown | authentication | all ]

## Syntax Description

### Syntax Description

|                |  |
|----------------|--|
| clear          | Reset functions  |
| ip             | Clear IP commands  |
| rsvp           | Clear RSVP information                                   |
| counters       | RSVP counters  |
| teardown       | (Optional) Clear signaling tear information              |
| authentication | (Optional) Display RSVP Security Association information |
| all            | (Optional) Clear all information                         |

## Command Mode

- /exec



# clear ip rsvp hello instance counters

clear ip rsvp hello instance counters

## Syntax Description

| Syntax Description |                                   |
|--------------------|-----------------------------------|
| clear              | Reset functions                   |
| ip                 | Clear IP commands                 |
| rsvp               | Clear RSVP information            |
| hello              | RSVP Hello configuration commands |
| instance           | Clear Hello instance information  |
| counters           | Clear RSVP statistics             |

## Command Mode

- /exec

## clear ip rsvp internal counters

clear ip rsvp internal counters [ error | client | mts | pss | refresh | reliable | batch-history ]

### Syntax Description

#### Syntax Description

|               |   |
|---------------|---|
| clear         | Reset functions                               |
| ip            | Clear IP commands                             |
| rsvp          | Clear RSVP information                        |
| internal      | Clear RSVP internal information               |
| counters      | Clear RSVP statistics                         |
| error         | (Optional) Clear signaling error information  |
| client        | (Optional) Clear client information           |
| mts           | (Optional) Clear message service information  |
| pss           | (Optional) Clear persistent store information |
| refresh       | (Optional) Clear refresh information          |
| reliable      | (Optional) Clear reliable message information |
| batch-history | (Optional) Clear batching history             |

### Command Mode

- /exec

# clear ip rsvp reservation

```
clear ip rsvp reservation { [ destination <dest> ] [ source <src> ] [ ip-protocol <proto> ] [ dst-port <dport> ]
[ src-port <sport> ] | <all> }
```

## Syntax Description

### Syntax Description

|              |   |
|--------------|---|
| clear        | Reset functions                               |
| ip           | Clear IP commands                             |
| rsvp         | Clear RSVP information                        |
| reservation  | Clear RSVP reservation state                  |
| destination  | (Optional) Clear based on destination address |
| <i>dest</i>  | (Optional) Destination address                |
| source       | (Optional) Clear based on a source address    |
| <i>src</i>   | (Optional) Source address                     |
| ip-protocol  | (Optional) Clear based on IP protocol         |
| <i>proto</i> | (Optional) IP protocol value                  |
| dst-port     | (Optional) Clear based on destination port    |
| <i>dport</i> | (Optional) Destination Port value             |
| src-port     | (Optional) Clear based on a source port       |
| <i>sport</i> | (Optional) Source port value                  |
| all          | Clear all state                               |

## Command Mode

- /exec

# clear ip rsvp sender

```
clear ip rsvp sender { [ destination <dest> ] [ source <src> ] [ ip-protocol <proto> ] [ dst-port <dport> ] [
src-port <sport> ] | <all> }
```

## Syntax Description

### Syntax Description

|              |   |
|--------------|---|
| clear        | Reset functions                               |
| ip           | Clear IP commands                             |
| rsvp         | Clear RSVP information                        |
| sender       | Clear RSVP sender state                       |
| destination  | (Optional) Clear based on destination address |
| <i>dest</i>  | (Optional) Destination address                |
| source       | (Optional) Clear based on a source address    |
| <i>src</i>   | (Optional) Source address                     |
| ip-protocol  | (Optional) Clear based on IP protocol         |
| <i>proto</i> | (Optional) IP protocol value                  |
| dst-port     | (Optional) Clear based on destination port    |
| <i>dport</i> | (Optional) Destination Port value             |
| src-port     | (Optional) Clear based on a source port       |
| <i>sport</i> | (Optional) Source port value                  |
| all          | Clear all state                               |

## Command Mode

- /exec

# clear ip rsvp signalling

clear ip rsvp signalling [ rate-limit | refresh-reduction ]

## Syntax Description

| Syntax Description |            |                                       |
|--------------------|------------|---------------------------------------|
| clear              |            | Reset functions                       |
| ip                 |            | Clear IP commands                     |
| rsvp               |            | Clear RSVP information                |
| signalling         |            | Configure RSVP Signalling information |
| rate-limit         | (Optional) | Clear rate-limit counters             |
| refresh-reduction  | (Optional) | Clear refresh-reduction counters      |

## Command Mode

- /exec

# clear ip stats

clear ip stats

## Syntax Description

---

### Syntax Description

---

**clear** Reset functions

---

**ip** Clear IP commands

---

**stats** Clear IP internal stats

---

## Command Mode

- /exec

# clear ip traffic

```
clear ip traffic [ vrf { <vrf-name> | <vrf-known-name> } ]
```

## Syntax Description

| Syntax Description    |  |  |
|-----------------------|--|--|
| clear                 |  | Reset functions                        |
| ip                    |  | Clear IP commands                      |
| traffic               |  | Clear IP global statistics             |
| vrf                   |  | (Optional) Display per-VRF information |
| <i>vrf-name</i>       |  | (Optional) VRF name                    |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name              |

## Command Mode

- /exec

# clear ip vip

```
clear ip vip { uuid <uuid> | <vip-addr> vrf { <vrf-name> | <vrf-known-name> } }
```

## Syntax Description

| Syntax Description | clear                 | Reset functions                               |
|--------------------|-----------------------|---|
|                    | ip                    | Clear IP commands                             |
|                    | vip                   | Clear virtual ip address                      |
|                    | uuid                  | UUID of client                                |
|                    | <i>uuid</i>           | UUID of client whose vips needs to be cleared |
|                    | <i>vip-addr</i>       | VIP in format A.B.C.D                         |
|                    | vrf                   | Display per-VRF information                   |
|                    | <i>vrf-name</i>       | VRF name                                      |
|                    | <i>vrf-known-name</i> | Known VRF name                                |

## Command Mode

- /exec



# clear ipv6 adjacency no-ufdm

```
clear ipv6 adjacency [ vrf { <vrf-name> | <vrf-known-name> } ] { <ipv6-addr> | * } no-ufdm
```

## Syntax Description

| Syntax Description    |  |  |
|-----------------------|--|--|
| clear                 |  | Reset functions                        |
| ipv6                  |  | Clear IPv6 commands                    |
| adjacency             |  | Clear Adjacency                        |
| vrf                   |  | (Optional) Display per-VRF information |
| <i>vrf-name</i>       |  | (Optional) VRF name                    |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name              |
| *                     |  | Delete all adjacency in this context   |
| no-ufdm               |  | Create inconsistency in adjacency      |

## Command Mode

- /exec

# clear ipv6 adjacency statistics

clear ipv6 adjacency statistics

## Syntax Description

---

### Syntax Description

---

|       |                 |
|-------|-----------------|
| clear | Reset functions |
|-------|-----------------|

---

|      |                     |
|------|---------------------|
| ipv6 | Clear IPv6 commands |
|------|---------------------|

---

|           |                 |
|-----------|-----------------|
| adjacency | Clear Adjacency |
|-----------|-----------------|

---

|            |                               |
|------------|-------------------------------|
| statistics | Clear Adjacency<br>Statistics |
|------------|-------------------------------|

---

## Command Mode

- /exec

# clear ipv6 amt tunnel

```
clear ipv6 amt tunnel [ <address6> <port> ] [ vrf { <vrf-name> | <vrf-known-name> } ]
```

## Syntax Description

| Syntax Description    |  |  |
|-----------------------|--|--|
| clear                 |  | AMT clear commands                     |
| amt                   |  | AMT show commands                      |
| ipv6                  |  | Display IP information                 |
| tunnel                |  | Display tunnel information             |
| vrf                   |  | (Optional) Display information for VRF |
| <i>vrf-name</i>       |  | (Optional) VRF name                    |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name              |
| <i>port</i>           |  | (Optional) UDP port number of gateway  |

## Command Mode

- /exec

# clear ipv6 cache

```
clear ipv6 cache { { interface [ <intf> ] } }
```

## Syntax Description

---

### Syntax Description

---

|       |                 |
|-------|-----------------|
| clear | Reset functions |
|-------|-----------------|

---

|      |                     |
|------|---------------------|
| ipv6 | Clear IPv6 commands |
|------|---------------------|

---

|       |                  |
|-------|------------------|
| cache | Clear ipv6 cache |
|-------|------------------|

---

|           |                                  |
|-----------|----------------------------------|
| interface | Clear ipv6 interface information |
|-----------|----------------------------------|

---

|             |                                    |
|-------------|------------------------------------|
| <i>intf</i> | (Optional) Interface name to clear |
|-------------|------------------------------------|

---

## Command Mode

- /exec

# clear ipv6 dhcp relay statistics

```
clear ipv6 dhcp relay statistics [ interface <intf> [ [ server-ip <ip-addr-val> [ use-vrf <vrf-name> ] [ interface
<dest-interface> ] ] ] [ server-ip <ip-addr-val> [ interface <dest-interface> ] [ use-vrf <vrf-name> ] ] ] ]
```

## Syntax Description

| Syntax Description    |  |   |
|-----------------------|--|---|
| clear                 |  | Reset functions   |
| ipv6                  |  | IPv6  |
| dhcp                  |  | Clear State of DHCPv6 features                          |
| relay                 |  | Clear State of DHCPv6 relay stats                       |
| statistics            |  | DHCPv6 Relay statistics                                 |
| interface             |  | (Optional) input interface                              |
| <i>intf</i>           |  | (Optional) interface                                    |
| server-ip             |  | (Optional) Server address                               |
| use-vrf               |  | (Optional) Server address VRF membership                |
| <i>vrf-name</i>       |  | (Optional) VRF name                                     |
| interface             |  | (Optional) Destination interface for the server address |
| <i>dest-interface</i> |  | (Optional) Destination interface                        |

## Command Mode

- /exec

## clear ipv6 eigrp route-map statistics redistribute

```
clear ipv6 eigrp [ <eigrp-ptag> ] route-map statistics redistribute { bgp <as> | { eigrp | isis | ospfv3 | rip }
<tag> | static | direct | amt | lisp } [ vrf { <vrf-name> | <vrf-known-name> | all } ]
```

### Syntax Description

| Syntax Description    |  |  |
|-----------------------|--|--|
| clear                 |  | Reset functions  |
| ipv6                  |  | Clear IPv6 commands                                    |
| eigrp                 |  | EIGRP clear commands                                   |
| vrf                   |  | (Optional) Display per-VRF information                 |
| <i>vrf-name</i>       |  | (Optional) VRF name                                    |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name                              |
| all                   |  | (Optional) Display information for all VRFs            |
| <i>eigrp-ptag</i>     |  | (Optional) Process tag                                 |
| route-map             |  | Route-map related information                          |
| statistics            |  | Route-map statistics                                   |
| redistribute          |  | Redistribute information from another routing protocol |
| bgp                   |  | Border Gateway Protocol (BGP)                          |
| <i>as</i>             |  | Autonomous system number                               |
| isis                  |  | IS-IS Routing for IPv4                                 |
| ospfv3                |  | Open Shortest Path First (OSPF) V3                     |
| rip                   |  | Routing Information Protocol (RIP)                     |
| eigrp                 |  | Enhanced Interior Gateway Routing Protocol (EIGRP)     |
| <i>tag</i>            |  | Process tag  |
| static                |  | Static routes  |
| direct                |  | Directly connected                                     |
| amt                   |  | AMT Anycast prefix                                     |
| lisp                  |  | LISP EID-prefixes                                      |

### Command Mode

- /exec

# clear ipv6 icmp

clear ipv6 { icmp | nd } { interface statistics [ <interface> ] | global statistics }

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| clear              | Reset functions                                |  |
| ipv6               | Clear IPv6 commands                            |  |
| icmp               | Clear ICMPv6 information                       |  |
| nd                 | Clear Neighbor Discovery interface information |  |
| interface          | Clear ICMPv6 related interface information     |  |
| statistics         | Clear ICMPv6 interface statistics              |  |
| global             | Clear ICMPv6 global statistics                 |  |
| <i>interface</i>   | (Optional) Interface to clear statistics for   |  |

## Command Mode

- /exec

## clear ipv6 icmp internal event-history

```
clear ipv6 icmp internal event-history { errors | icmpv6-internal | nd | mld { debugs | events } | ha | sync-event
| ipv6-sync-event | vrf | cli | all } [ dump-to-file ]
```

### Syntax Description

| Syntax Description |            |   |
|--------------------|------------|---|
| clear              |            | Reset functions                                       |
| ipv6               |            | Clear IPv6 commands                                   |
| icmp               |            | Clear ICMPv6 information                              |
| internal           |            | Commands for internal use                             |
| event-history      |            | various event logs of ICMPV6                          |
| errors             |            | error logs ICMPV6                                     |
| icmpv6-internal    |            | internal debug events of ICMPV6                       |
| nd                 |            | ICMPV6 ND debugs                                      |
| mld                |            | ICMPV6 MLD Information                                |
| events             |            | ICMPV6 MLD non-periodic events                        |
| debugs             |            | ICMPV6 MLD debug messages                             |
| ha                 |            | ICMPV6 debugs for HA events                           |
| sync-event         |            | ICMPV6 debugs for CFS and MCECM related events        |
| ipv6-sync-event    |            | ICMPV6 debugs for CFS and MCECM related events for L3 |
| vrf                |            | ICMPV6 VRF related events                             |
| cli                |            | ICMPV6 CLI related events                             |
| all                |            | All event history buffers                             |
| dump-to-file       | (Optional) | Dump the ICMPV6 event history logs into the file      |

### Command Mode

- /exec



# clear ipv6 icmp vpc-statistics

clear ipv6 icmp vpc-statistics

## Syntax Description

| Syntax Description |  |                                |
|--------------------|--|--------------------------------|
| clear              |  | Reset functions                |
| ipv6               |  | Clear IPv6 commands            |
| icmp               |  | Clear ICMPv6 information       |
| vpc-statistics     |  | Clear ICMPv6 ND vPC statistics |

## Command Mode

- /exec

# clear ipv6 interface statistics

clear ipv6 interface statistics [ <interface> ]

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| clear              | Reset functions                              |
| ipv6               | Clear IPv6 commands                          |
| interface          | Clear IPv6 related interface information     |
| statistics         | Clear IPv6 interface statistics              |
| <i>interface</i>   | (Optional) Interface to clear statistics for |

## Command Mode

- /exec

# clear ipv6 internal event-history

clear ipv6 internal event-history { errors | log | ipc | snmp | ha | sdb | bfd | all } [ dump-to-file ]

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| clear              | Reset functions   |  |
| ipv6               | Clear IPv6 commands                                       |  |
| internal           | Commands for internal use                                 |  |
| event-history      | Clear various event logs of IPV6                          |  |
| errors             | Clear error logs of IPV6                                  |  |
| log                | Clear syslog message of IPV6                              |  |
| ipc                | Clear ipc debug message of IPV6                           |  |
| snmp               | Clear snmp debug message of IPV6                          |  |
| ha                 | Clear ha debug message of IPV6                            |  |
| sdb                | Clear sdb debug message buffer size of IPV6               |  |
| bfd                | clear bfd debug messages for IPV6                         |  |
| all                | All event history buffers                                 |  |
| dump-to-file       | (Optional) Dump the IPv6 event history logs into the file |  |

## Command Mode

- /exec

# clear ipv6 lisp data-cache

```
clear ipv6 lisp data-cache [ <eid6> ] [ vrf { <vrf-name> | <vrf-known-name> } ]
```

## Syntax Description

| Syntax Description    |  |   |
|-----------------------|--|---|
| clear                 |  | Reset functions                                   |
| ipv6                  |  | Clear IPv6 commands                               |
| lisp                  |  | LISP clear commands                               |
| data-cache            |  | Clear EID-to-RLOC data cache mapping in this ITR  |
| <i>eid6</i>           |  | (Optional) Clear mapping for IPv6 destination EID |
| vrf                   |  | (Optional) Display per-VRF information            |
| <i>vrf-name</i>       |  | (Optional) VRF name                               |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name                         |

## Command Mode

- /exec

# clear ipv6 lisp statistics

```
clear ipv6 lisp statistics [ vrf { <vrf-name> | <vrf-known-name> } ]
```

## Syntax Description

| Syntax Description    |  |                                     |
|-----------------------|--|-------------------------------------|
| clear                 |  | Reset functions                     |
| ipv6                  |  | Clear IPv6 commands                 |
| lisp                  |  | LISP clear commands                 |
| statistics            |  | Clear global LISP statistics        |
| vrf                   |  | (Optional) Clear statistics for vrf |
| <i>vrf-name</i>       |  | (Optional) VRF name                 |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name           |

## Command Mode

- /exec

# clear ipv6 mld groups

```
clear ipv6 [ icmp ] mld { groups | route } { <all> | <group-prefix> | <group> [ <source> ] } [ vrf { <vrf-name>
| <vrf-known-name> | all } ]
```

## Syntax Description

### Syntax Description

|                       |   |
|-----------------------|---|
| clear                 | Reset functions                                 |
| ipv6                  | Clear IPv6 commands                             |
| icmp                  | (Optional) Clear ICMPv6 information             |
| mld                   | Clear Multicast Listener Discovery information  |
| groups                | Route information                               |
| route                 | Route information                               |
| all                   | Clear all routes                                |
| vrf                   | (Optional) Clear information for particular VRF |
| <i>vrf-name</i>       | (Optional) VRF name                             |
| <i>vrf-known-name</i> | (Optional) Known VRF name                       |
| all                   | (Optional) Display information for all VRFs     |

## Command Mode

- /exec

# clear ipv6 mtu

```
clear ipv6 mtu [ <ipv6-addr> ] [ vrf { <vrf-name> | <vrf-known-name> } ]
```

## Syntax Description

| Syntax Description    |  |   |
|-----------------------|--|---|
| clear                 |  | Reset functions                                 |
| ipv6                  |  | Clear IPv6 commands                             |
| mtu                   |  | Display IPV6 Path MTU Cache                     |
| vrf                   |  | (Optional) Clear information for particular VRF |
| <i>vrf-name</i>       |  | (Optional) VRF name                             |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name                       |

## Command Mode

- /exec

# clear ipv6 neighbor

```
clear ipv6 neighbor [ [ <nbr-addr> [ <intf> ] ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] | vrf { <vrf-name>
| <vrf-known-name> | all } | <interface> ] [ force-delete ]
```

## Syntax Description

| Syntax Description    |            |   |
|-----------------------|------------|---|
| clear                 |            | Reset functions                         |
| ipv6                  |            | Clear IPv6 commands                     |
| neighbor              |            | Clear ICMPv6 neighbor cache             |
| <i>intf</i>           | (Optional) | Clear cache entries for given interface |
| <i>interface</i>      | (Optional) | Clear cache entries for given interface |
| force-delete          | (Optional) | Clear the cache entries without refresh |
| vrf                   | (Optional) | Display per-VRF information             |
| <i>vrf-name</i>       | (Optional) | VRF name                                |
| <i>vrf-known-name</i> | (Optional) | Known VRF name                          |
| all                   | (Optional) | Display information for all VRFs        |

## Command Mode

- /exec



# clear ipv6 netstack mroute

```
clear ipv6 netstack mroute { <all> | <group-prefix> | <group> [ <source> ] } [ vrf { <vrf-name> |
<vrf-known-name> | all } ]
```

## Syntax Description

### Syntax Description

|                       |   |
|-----------------------|---|
| clear                 | Reset functions                                 |
| ipv6                  | Clear IPv6 commands                             |
| netstack              | Netstack's local cache                          |
| mroute                | Multicast route information                     |
| all                   | Clear all routes                                |
| vrf                   | (Optional) Clear information for particular VRF |
| <i>vrf-name</i>       | (Optional) VRF name                             |
| <i>vrf-known-name</i> | (Optional) Known VRF name                       |
| all                   | (Optional) Display information for all VRFs     |

## Command Mode

- /exec

## clear ipv6 pim event-history

clear ipv6 pim event-history [ <pim6-event-hist-buf-name> ]

### Syntax Description

| Syntax Description              |            |                                 |
|---------------------------------|------------|---------------------------------|
| clear                           |            | Reset functions                 |
| ipv6                            |            | Clear IPv6 commands             |
| pim                             |            | Clear PIM event history buffers |
| event-history                   |            | Clear event-history buffers     |
| <i>pim6-event-hist-buf-name</i> | (Optional) | Event-history buffer instance   |

### Command Mode

- /exec

# clear ipv6 pim interface statistics

clear ipv6 pim interface statistics [ <interface> ]

## Syntax Description

| Syntax Description |            |                                     |
|--------------------|------------|-------------------------------------|
| clear              |            | Reset functions                     |
| ipv6               |            | Clear IPv6 commands                 |
| pim                |            | Clear PIM6 information              |
| interface          |            | Interface related information       |
| statistics         |            | Packet interface counter statistics |
| <i>interface</i>   | (Optional) | Interface name to clear             |

## Command Mode

- /exec

# clear ipv6 pim policy statistics jp

clear ipv6 pim policy statistics { jp-policy | neighbor-policy } <interface>

## Syntax Description

| Syntax Description |  |                                |
|--------------------|--|--------------------------------|
| clear              |  | Reset functions                |
| ipv6               |  | Clear IPv6 commands            |
| pim                |  | Clear PIM information          |
| policy             |  | Policy related information     |
| statistics         |  | Policy statistics              |
| jp-policy          |  | Statistics for jp-policy       |
| neighbor-policy    |  | Statistics for neighbor-policy |
| <i>interface</i>   |  | Interface                      |

## Command Mode

- /exec

# clear ipv6 pim route

```
clear ipv6 pim route { <all> | <group-prefix> | <group> [ <source> ] } [ vrf { <vrf-name> | <vrf-known-name>
| all } ]
```

## Syntax Description

| Syntax Description    |  |   |
|-----------------------|--|---|
| clear                 |  | Reset functions                                 |
| ipv6                  |  | Clear IPv6 commands                             |
| pim                   |  | PIM6 clear commands                             |
| route                 |  | Route information                               |
| all                   |  | Clear all routes                                |
| vrf                   |  | (Optional) Clear information for particular VRF |
| <i>vrf-name</i>       |  | (Optional) VRF name                             |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name                       |
| all                   |  | (Optional) Display information for all VRFs     |

## Command Mode

- /exec

## clear ipv6 pim statistics

```
clear ipv6 pim statistics [ vrf { <vrf-name> | <vrf-known-name> | all } ]
```

### Syntax Description

| Syntax Description    |  |   |
|-----------------------|--|---|
| clear                 |  | Reset functions                             |
| ipv6                  |  | Clear IPv6 commands                         |
| pim                   |  | Clear PIM6 information                      |
| statistics            |  | Packet global counter statistics            |
| vrf                   |  | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       |  | (Optional) VRF name                         |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name                   |
| all                   |  | (Optional) Display information for all VRFs |

### Command Mode

- /exec

# clear ipv6 raguard statistics

clear ipv6 raguard statistics

## Syntax Description

| Syntax Description |                      |
|--------------------|----------------------|
| clear              | Reset functions      |
| ipv6               | IPv6                 |
| raguard            | IPV6 raguard         |
| statistics         | RA packet drop count |

## Command Mode

- /exec

## clear ipv6 rip policy statistics redistribute bgp

```
{ { clear ipv6 rip policy statistics redistribute bgp <as> } | { clear ipv6 rip policy statistics redistribute eigrp <tag> } | { clear ipv6 rip policy statistics redistribute isis <tag> } | { clear ipv6 rip policy statistics redistribute rip <tag> } | { clear ipv6 rip policy statistics redistribute ospfv3 <tag> } | { clear ipv6 rip policy statistics redistribute direct } | { clear ipv6 rip policy statistics redistribute static } } [ vrf { <vrf-name> | <vrf-known-name> | all } ]
```

### Syntax Description

#### Syntax Description

|                       |   |
|-----------------------|---|
| clear                 | Reset functions                                     |
| ipv6                  | Clear IPv6 commands                                 |
| rip                   | Routing Information Protocol (RIP)                  |
| policy                | Policy related information                          |
| statistics            | Policy statistics                                   |
| redistribute          | RIP redistribute routes from other routing protocol |
| bgp                   | Border Gateway Protocol (BGP)                       |
| <i>as</i>             | Autonomous system number                            |
| eigrp                 | Enhanced Interior Gateway Routing Protocol (EIGRP)  |
| isis                  | Intermediate-to-intermediate (ISIS)                 |
| ospfv3                | Open Shortest Path First (OSPFv3)                   |
| <i>tag</i>            | Process tag   |
| static                | Static routes                                       |
| direct                | Directly connected routes                           |
| vrf                   | (Optional) Display per-VRF information              |
| <i>vrf-name</i>       | (Optional) VRF name                                 |
| <i>vrf-known-name</i> | (Optional) Known VRF name                           |
| all                   | (Optional) Display information for all VRFs         |

### Command Mode

- /exec



# clear ipv6 statistics

clear ipv6 statistics

## Syntax Description

| Syntax Description |                              |
|--------------------|------------------------------|
| clear              | Reset functions              |
| ipv6               | Clear IPv6 commands          |
| statistics         | Clear IPv6 global statistics |

## Command Mode

- /exec

# clear ipv6 traffic

```
clear ipv6 traffic [ vrf { <vrf-name> | <vrf-known-name> } ]
```

## Syntax Description

| Syntax Description    |  |  |
|-----------------------|--|--|
| clear                 |  | Reset functions                        |
| ipv6                  |  | Clear IPv6 commands                    |
| traffic               |  | Clear IPv6 traffic statistics          |
| vrf                   |  | (Optional) Display per-VRF information |
| <i>vrf-name</i>       |  | (Optional) VRF name                    |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name              |

## Command Mode

- /exec

# clear isis adjacency

```
clear isis [ <isis-tag> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] adjacency { * | { <interface> | system-id
<sid> } + } [ vrf { <vrf-name> | <vrf-known-name> | all } ]
```

## Syntax Description

| Syntax Description    |  |   |
|-----------------------|--|---|
| clear                 |  | Reset functions                                       |
| isis                  |  | Clear IS-IS information                               |
| <i>isis-tag</i>       |  | (Optional) Routing process tag                        |
| vrf                   |  | (Optional) Display per-VRF information                |
| <i>vrf-name</i>       |  | (Optional) VRF name                                   |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name                             |
| all                   |  | (Optional) Display information for all VRFs           |
| adjacency             |  | Clear IS-IS adjacency state                           |
| *                     |  | IS-IS adjacencies on all interfaces                   |
| <i>interface</i>      |  | IS-IS interface                                       |
| system-id             |  | Hostname or System ID                                 |
| <i>sid</i>            |  | Hostname or System ID (in the form of XXXX.XXXX.XXXX) |

## Command Mode

- /exec

# clear isis dpi

```
clear isis [ <isis-tag> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] dpi [ vrf { <vrf-name> | <vrf-known-name> | all } ]
```

## Syntax Description

| Syntax Description    |            |                                  |
|-----------------------|------------|----------------------------------|
| clear                 |            | Reset functions                  |
| isis                  |            | Clear IS-IS information          |
| <i>isis-tag</i>       | (Optional) | Routing process tag              |
| vrf                   | (Optional) | Display per-VRF information      |
| <i>vrf-name</i>       | (Optional) | VRF name                         |
| <i>vrf-known-name</i> | (Optional) | Known VRF name                   |
| all                   | (Optional) | Display information for all VRFs |
| dpi                   |            | Clear IS-IS DPI logs             |

## Command Mode

- /exec

# clear isis event-history

```
clear isis [ <isis-tag> ] event-history [ <isis-event-hist-buf-name> ]
```

## Syntax Description

| Syntax Description              |  |  |
|---------------------------------|--|--|
| clear                           |  | Reset functions                                    |
| isis                            |  | Clear IS-IS information                            |
| <i>isis-tag</i>                 |  | (Optional) Routing process tag                     |
| event-history                   |  | Clear event history buffers                        |
| <i>isis-event-hist-buf-name</i> |  | (Optional) Clear the specific event history buffer |

## Command Mode

- /exec

# clear isis internal packet queue counters

clear isis [ <isis-tag> ] internal packet queue counters

## Syntax Description

| Syntax Description |                                 |
|--------------------|---------------------------------|
| clear              | Reset functions                 |
| isis               | Clear IS-IS information         |
| <i>isis-tag</i>    | (Optional) Routing process tag  |
| internal           | Commands for internal use       |
| packet             | Packet counters                 |
| queue              | Packet queue counters           |
| counters           | Clear packet queue max counters |

## Command Mode

- /exec

## clear isis ipv6 route-map statistics

```
clear isis [ <isis-tag> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] ipv6 route-map statistics { { redistribute
{ bgp <as> | { <src-isis> | eigrp | ospfv3 | rip } <tag> } } | { redistribute { static | direct | amt } } | { distribute
<src-level> into <dst-level> } } [ vrf { <vrf-name> | <vrf-known-name> | all } ]
```

### Syntax Description

| Syntax Description    |  |  |
|-----------------------|--|--|
| clear                 | Reset functions  |  |
| isis                  | Clear IS-IS information                                |  |
| <i>isis-tag</i>       | (Optional) Routing process tag                         |  |
| vrf                   | (Optional) Display per-VRF information                 |  |
| <i>vrf-name</i>       | (Optional) VRF name                                    |  |
| <i>vrf-known-name</i> | (Optional) Known VRF name                              |  |
| all                   | (Optional) Display information for all VRFs            |  |
| ipv6                  | Clear IS-IS IPv6 information                           |  |
| statistics            | Clear IS-IS route-map statistics                       |  |
| redistribute          | Redistribute information from another routing protocol |  |
| bgp                   | Border Gateway Protocol (BGP)                          |  |
| eigrp                 | Enhanced Interior Gateway Protocol                     |  |
| <i>as</i>             | Autonomous system number                               |  |
| src-isis              | IS-IS Routing for IPv6                                 |  |
| ospfv3                | Open Shortest Path First (OSPF) V3                     |  |
| rip                   | RIP for IPv6 (RIPNG)                                   |  |
| <i>tag</i>            | Process tag  |  |
| static                | Static routes  |  |
| direct                | Directly connected                                     |  |
| amt                   | AMT anycast prefix                                     |  |
| route-map             | Route-map to constrain redistribution                  |  |
| distribute            | Distribute routes between ISIS levels                  |  |
| into                  | from level-n into level-m                              |  |
| <i>src-level</i>      | Route-distribution between levels                      |  |

---

*dst-level*      Route-distribution between levels

---

**Command Mode**

- /exec



# clear isis redistribution

```
clear isis [ <isis-tag> ] redistribution [ vrf { <vrf-name> | <vrf-known-name> | all } ]
```

## Syntax Description

| Syntax Description    |  |   |
|-----------------------|--|---|
| clear                 |  | Reset functions                             |
| isis                  |  | Clear IS-IS information                     |
| <i>isis-tag</i>       |  | (Optional) Routing process tag              |
| vrf                   |  | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       |  | (Optional) VRF name                         |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name                   |
| all                   |  | (Optional) Display information for all VRFs |
| redistribution        |  | Clear IS-IS redistributed information       |

## Command Mode

- /exec

## clear isis route-map statistics

```
clear isis [ <isis-tag> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ ip ] route-map statistics { { redistribute
{ bgp <as> | { <src-isis> | eigrp | ospf | rip } <tag> } } | { redistribute { static | direct | amt } } | { distribute
<src-level> into <dst-level> } } [ vrf { <vrf-name> | <vrf-known-name> | all } ]
```

### Syntax Description

| Syntax Description    |  |  |
|-----------------------|--|--|
| clear                 |  | Reset functions  |
| isis                  |  | Clear IS-IS information                                |
| <i>isis-tag</i>       |  | (Optional) Routing process tag                         |
| vrf                   |  | (Optional) Display per-VRF information                 |
| <i>vrf-name</i>       |  | (Optional) VRF name                                    |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name                              |
| all                   |  | (Optional) Display information for all VRFs            |
| ip                    |  | (Optional) Clear IS-IS IPv4 information                |
| route-map             |  | Clear IS-IS route-map information                      |
| statistics            |  | Clear IS-IS route-map statistics                       |
| redistribute          |  | Redistribute information from another routing protocol |
| bgp                   |  | Border Gateway Protocol (BGP)                          |
| eigrp                 |  | Enhanced Interior Gateway Protocol                     |
| <i>as</i>             |  | Autonomous system number                               |
| src-isis              |  | IS-IS Routing for IPv4                                 |
| ospf                  |  | Open Shortest Path First (OSPF)                        |
| rip                   |  | RIP for IPv4   |
| <i>tag</i>            |  | Process tag  |
| static                |  | Static routes  |
| direct                |  | Directly connected                                     |
| amt                   |  | AMT anycast prefix                                     |
| distribute            |  | Distribute routes between ISIS levels                  |
| into                  |  | from level-n into level-m                              |
| <i>src-level</i>      |  | Route-distribution between levels                      |

---

*dst-level*      Route-distribution between levels

---

**Command Mode**

- /exec

# clear isis spf-log

```
clear isis [ <isis-tag> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] spf-log [ vrf { <vrf-name> | <vrf-known-name> | all } ]
```

## Syntax Description

| Syntax Description    |  |   |
|-----------------------|--|---|
| clear                 |  | Reset functions                             |
| isis                  |  | Clear IS-IS information                     |
| <i>isis-tag</i>       |  | (Optional) Routing process tag              |
| vrf                   |  | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       |  | (Optional) VRF name                         |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name                   |
| all                   |  | (Optional) Display information for all VRFs |
| spf-log               |  | Display IS-IS SPF information               |

## Command Mode

- /exec

## clear isis statistics

```
clear isis [ <isis-tag> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] statistics { * | <interface> } [ vrf { <vrf-name> | <vrf-known-name> | all } ]
```

### Syntax Description

| Syntax Description    |  |   |
|-----------------------|--|---|
| clear                 |  | Reset functions                             |
| isis                  |  | Clear IS-IS information                     |
| <i>isis-tag</i>       |  | (Optional) Routing process tag              |
| vrf                   |  | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       |  | (Optional) VRF name                         |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name                   |
| all                   |  | (Optional) Display information for all VRFs |
| statistics            |  | Clear IS-IS protocol statistics             |
| *                     |  | All IS-IS protocol statistics               |
| <i>interface</i>      |  | IS-IS interface                             |

### Command Mode

- /exec

## clear isis traffic

```
clear isis [ <isis-tag> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] traffic { * | <interface> } [ vrf {
<vrf-name> | <vrf-known-name> | all } ]
```

### Syntax Description

| Syntax Description    |  |   |
|-----------------------|--|---|
| clear                 |  | Reset functions                             |
| isis                  |  | Clear IS-IS information                     |
| <i>isis-tag</i>       |  | (Optional) Routing process tag              |
| vrf                   |  | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       |  | (Optional) VRF name                         |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name                   |
| all                   |  | (Optional) Display information for all VRFs |
| traffic               |  | Clear IS-IS traffic information             |
| *                     |  | All IS-IS traffic information               |
| <i>interface</i>      |  | IS-IS interface                             |

### Command Mode

- /exec

# clear itd statistics

clear itd statistics <service-name>

## Syntax Description

| Syntax Description |                     |                     |
|--------------------|---------------------|---------------------|
|                    | clear               | Reset functions     |
|                    | itd                 | ITD service         |
|                    | statistics          | ITD statistics      |
|                    | <i>service-name</i> | ITD<br>service-name |

## Command Mode

- /exec

# clear itd statistics

clear itd statistics <service-name>

## Syntax Description

| Syntax Description |                     |                     |
|--------------------|---------------------|---------------------|
|                    | clear               | Reset functions     |
|                    | itd                 | ITD service         |
|                    | statistics          | ITD statistics      |
|                    | <i>service-name</i> | ITD<br>service-name |

## Command Mode

- /exec



# clear keystore

clear { keystore | sksd } [ <index> | <name> ]

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| clear              | Reset functions                             |
| keystore           | Clear all records in the keystore           |
| sksd               | Clear all records in the keystore/sksd-chip |
| <i>index</i>       | (Optional) Clear secret at index <index>    |
| <i>name</i>        | (Optional) Clear secret with name <name>    |

## Command Mode

- /exec

# clear l2fwder statistics

clear l2fwder statistics

## Syntax Description

---

### Syntax Description

---

clear    Reset functions

---

l2fwder    Clear L2FWDER related information

---

statistics    Clear the L2FWDER packet counters

---

## Command Mode

- /exec

# clear l3vm event-history

clear l3vm event-history { pss | errors | mts | reinit | cli | vrf | topology | all }

## Syntax Description

| Syntax Description |     |  |
|--------------------|-----|--|
| clear              |     | Reset functions                        |
| l3vm               |     | Debug L3VM information                 |
| event-history      | log | debug events into event history buffer |
| pss                |     | L3VM pss operation                     |
| errors             |     | L3VM errors                            |
| mts                |     | L3VM MTS messages                      |
| reinit             |     | L3VM reinit events                     |
| cli                |     | Log L3VM CLI related events            |
| vrf                |     | Log VRF related events                 |
| topology           |     | Log Topology related events            |
| all                |     | All L3VM debugging                     |

## Command Mode

- /exec

# clear lacp counters

clear lacp counters [ interface <if0> ]

## Syntax Description

---

**Syntax Description**

---

clear    Reset functions

---

lacp    LACP protocol

---

counters    LACP counters

---

interface    (Optional) Specify a port-channel

---

*if0*        (Optional)

---

## Command Mode

- /exec

## clear ldap-server statistics

```
clear ldap-server statistics <host0> [ __readonly__ { <server_state> [ <clock_time> { monitoring_statistics
<time_in_pstate> <ndead> <tt_in_dstate> } ] } { { auth_statistics <auth_failed_transactions>
<auth_succ_transactions> <auth_req_sent> <auth_req_timedout> <auth_resp_no_match>
<auth_resp_not_processed> <auth_resp_error> } { acct_statistics <acct_failed_transactions>
<acct_succ_transactions> <acct_req_sent> <acct_req_timedout> <acct_resp_no_match>
<acct_resp_not_processed> <acct_resp_error> } } ]
```

### Syntax Description

#### Syntax Description

|                                 |   |
|---------------------------------|---|
| clear                           | Reset functions   |
| ldap-server                     | Clear LDAP related parameters                                     |
| statistics                      | Clear LDAP statistics   |
| <i>host0</i>                    | DNS name or IP address  |
| <i>__readonly__</i>             | (Optional)  |
| <i>server_state</i>             | (Optional) Show state of server                                   |
| <i>clock_time</i>               | (Optional) Show clock time in terms of hours, minutes and seconds |
| monitoring_statistics           | (Optional) Monitoring Statistics                                  |
| <i>time_in_pstate</i>           | (Optional) Time in previous state                                 |
| <i>ndead</i>                    | (Optional) Number of times dead                                   |
| <i>tt_in_dstate</i>             | (Optional) Total time in dead state                               |
| auth_statistics                 | (Optional) Authentication Statistics                              |
| acct_statistics                 | (Optional) Accounting Statistics                                  |
| <i>auth_failed_transactions</i> | (Optional) Authentication: Failed transactions                    |
| <i>auth_succ_transactions</i>   | (Optional) Authentication: Successful transactions                |
| <i>auth_req_sent</i>            | (Optional) Authentication: Requests sent                          |
| <i>auth_req_timedout</i>        | (Optional) Authentication: Requests timedout                      |
| <i>auth_resp_no_match</i>       | (Optional) Authentication: Responses with no matching requests    |
| <i>auth_resp_not_processed</i>  | (Optional) Authentication: Responses not processed                |
| <i>auth_resp_error</i>          | (Optional) Authentication: Responses containing errors            |
| <i>acct_failed_transactions</i> | (Optional) Accounting: Failed transactions                        |
| <i>acct_succ_transactions</i>   | (Optional) Accounting: Successful transactions                    |

---

|                                |  |
|--------------------------------|--|
| <i>acct_req_sent</i>           | (Optional) Accounting: Requests sent                       |
| <i>acct_req_timedout</i>       | (Optional) Accounting: Requests timedout                   |
| <i>acct_resp_no_match</i>      | (Optional) Accounting: Responses with no matching requests |
| <i>acct_resp_not_processed</i> | (Optional) Accounting: Responses not processed             |
| <i>acct_resp_error</i>         | (Optional) Accounting: Responses containing errors         |

---

**Command Mode**

- /exec

# clear license

```
clear license { <license-file> [ force ] | sprom | <s0> }
```

## Syntax Description

### Syntax Description

|                     |   |
|---------------------|---|
| clear               | Reset functions                               |
| license             | clear license                                 |
| <i>license-file</i> | License file to be uninstalled                |
| force               | (Optional) Force license clear (don't prompt) |
| sprom               | clear license contents in sprom               |
| <i>s0</i>           | License file to be uninstalled                |

## Command Mode

- /exec

# clear lim counters

clear lim counters [ timeline ]

## Syntax Description

---

### Syntax Description

---

clear Clear lim counters

---

lim clear lim counters

---

counters clear lim counters

---

timeline (Optional) Clear all lim counters

---

## Command Mode

- /exec



# clear line

clear line <s0>

## Syntax Description

---

### Syntax Description

---

**clear** Reset functions

---

**line** Kill a session on particular  
vty

---

**s0** Enter the vty name

---

## Command Mode

- /exec

## clear lisp ddt referral-cache

```
clear lisp ddt referral-cache [ instance-id <iid> ] [ <eid-prefix> | <eid-prefix6> ] [ vrf { <vrf-name> | <vrf-known-name> } ]
```

### Syntax Description

| Syntax Description    |  |  |
|-----------------------|--|--|
| clear                 |  | Reset functions                                      |
| lisp                  |  | LISP clear commands                                  |
| ddt                   |  | LISP Delegated Database Tree                         |
| referral-cache        |  | Clear the DDT referral cache                         |
| vrf                   |  | (Optional) Clear entry for particular vrf            |
| <i>vrf-name</i>       |  | (Optional) VRF name                                  |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name                            |
| instance-id           |  | (Optional) Clear entry for specific instance-ID      |
| <i>iid</i>            |  | (Optional) 24-bit instance-ID value                  |
| <i>eid-prefix</i>     |  | (Optional) Clear entry associated with IP EID-prefix |

### Command Mode

- /exec

# clear lisp dynamic-eid

```
clear lisp dynamic-eid { <dyn-eid-name> | <dyn-eid> } [ vrf { <vrf-name> | <vrf-known-name> } ]
```

## Syntax Description

| Syntax Description    |  |  |
|-----------------------|--|--|
| clear                 |  | Reset functions                                  |
| lisp                  |  | LISP clear commands                              |
| dynamic-eid           |  | Clear dynamic-EID state                          |
| <i>dyn-eid</i>        |  | IPv4 address of dynamic-EID entry                |
| <i>dyn-eid-name</i>   |  | Clear entries discovered for a dynamic-EID range |
| vrf                   |  | (Optional) Clear dynamic-EID entries for vrf     |
| <i>vrf-name</i>       |  | (Optional) VRF name                              |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name                        |

## Command Mode

- /exec

# clear lisp internal event-history

clear lisp internal event-history <lisp-event-hist>

## Syntax Description

| Syntax Description |                        |                           |
|--------------------|------------------------|---------------------------|
|                    | clear                  | Reset functions           |
|                    | lisp                   | LISP clear commands       |
|                    | internal               | Commands for internal use |
|                    | event-history          | Clear LISP event log      |
|                    | <i>lisp-event-hist</i> | Clear LISP event log      |

## Command Mode

- /exec

# clear lisp proxy-itr

```
clear lisp proxy-itr [ <addr> | <addr6> ] [ vrf { <vrf-name> | <vrf-known-name> } ]
```

## Syntax Description

| Syntax Description    |  |  |
|-----------------------|--|--|
| clear                 |  | Reset functions                          |
| lisp                  |  | LISP clear commands                      |
| proxy-itr             |  | Clear discovered PITRs                   |
| <i>addr</i>           |  | (Optional) IPv4 locator address of PITR  |
| vrf                   |  | (Optional) Clear proxy-itr state for vrf |
| <i>vrf-name</i>       |  | (Optional) VRF name                      |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name                |

## Command Mode

- /exec

# clear lisp site

```
clear lisp site <site-name> [ instance-id <iid> ] [ vrf { <vrf-name> | <vrf-known-name> } ]
```

## Syntax Description

### Syntax Description

|                       |  |
|-----------------------|--|
| clear                 | Reset functions  |
| lisp                  | LISP clear commands  |
| site                  | Clear site registration data   |
| <i>site-name</i>      | Clear registration data for a single site                            |
| instance-id           | (Optional) Clear registration for a single instance-id within a site |
| <i>iid</i>            | (Optional) 24-bit instance-ID value                                  |
| vrf                   | (Optional) Clear site entries for vrf                                |
| <i>vrf-name</i>       | (Optional) VRF name  |
| <i>vrf-known-name</i> | (Optional) Known VRF name  |

## Command Mode

- /exec

# clear lldp counters

clear lldp counters

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| clear              | Reset functions                         |
| lldp               | Reset the lldp counters                 |
| counters           | Reset the lldp traffic counters to zero |

## Command Mode

- /exec

# clear lldp counters interface

```
clear lldp counters interface <if0>
```

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| clear              | Reset functions                           |
| lldp               | Reset the lldp counters                   |
| counters           | Reset the lldp traffic counters to zero   |
| interface          | Clear lldp traffic counters per interface |
| <i>if0</i>         | Enter interface                           |

## Command Mode

- /exec



# clear logging logfile

clear logging logfile

## Syntax Description

|                           |         |                           |
|---------------------------|---------|---------------------------|
| <b>Syntax Description</b> | clear   | Reset functions           |
|                           | logging | Clear logging information |
|                           | logfile | Clear logfile messages    |

## Command Mode

- /exec

# clear logging nvram

clear logging nvram

## Syntax Description

---

### Syntax Description

---

clear   Reset functions

---

logging   Clear logging  
          information

---

nvram   Clear nvram logs

---

## Command Mode

- /exec

# clear logging onboard

```
clear logging onboard [ { counter-stats | epld-log | internal { <dc3_options> } | module <module> [ {
counter-stats | internal { <dc3_options> } } ] } ]
```

## Syntax Description

| Syntax Description |            |                                   |
|--------------------|------------|-----------------------------------|
| clear              |            | Reset functions                   |
| logging            |            | Clear logging information         |
| onboard            |            | Clear OBFL information            |
| counter-stats      | (Optional) | Clear OBFL counter statistics     |
| epld-log           | (Optional) | Clear EPLD log                    |
| internal           | (Optional) | Clear Logging Onboard Internal    |
| module             | (Optional) | Clear OBFL information for Module |
| <i>module</i>      | (Optional) | Enter module number               |
| counter-stats      | (Optional) | Clear OBFL counter statistics     |
| <i>dc3_options</i> | (Optional) | dc3 options                       |

## Command Mode

- /exec

## clear logging onboard

```
clear logging onboard [ { card-boot-history | card-first-power-on | environmental-history | error-stats |
exception-log | interrupt-stats | module <module> [ { environmental-history | error-stats | exception-log |
interrupt-stats | obfl-logs | stack-trace | card-boot-history | card-first-power-on } ] | obfl-logs | stack-trace } ]
```

### Syntax Description

#### Syntax Description

|                       |  |
|-----------------------|--|
| clear                 | Reset functions  |
| logging               | Clear logging information  |
| onboard               | Clear OBFL information   |
| environmental-history | (Optional) Clear OBFL environmental history                      |
| error-stats           | (Optional) Clear OBFL error statistics                           |
| exception-log         | (Optional) Clear OBFL exception log                              |
| interrupt-stats       | (Optional) Clear OBFL interrupt statistics                       |
| card-boot-history     | (Optional) Clear Card Boot History                               |
| card-first-power-on   | (Optional) Clear Card First Power On                             |
| module                | (Optional) Clear OBFL information for Module                     |
| <i>module</i>         | (Optional) Enter module number                                   |
| obfl-logs             | (Optional) Clear OBFL (boot-uptime/device-version/obfl-history). |
| stack-trace           | (Optional) Clear OBFL stack trace                                |

### Command Mode

- /exec

# clear logging session

clear logging session

## Syntax Description

| Syntax Description |                           |
|--------------------|---------------------------|
| clear              | Reset functions           |
| logging            | Clear logging information |
| session            | Clear logging session     |

## Command Mode

- /exec

## clear mac address-table datapath

```
clear mac address-table datapath { dynamic [ vlan <id> ] | static [ vlan <id> ] | { statistics [ interface ] } |
isis_intf_stats }
```

### Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| clear              |  | Clear   |
| mac                |  | MAC configuration commands  |
| address-table      |  | MAC Address Table   |
| datapath           |  | Titanium Datapath Table   |
| dynamic            |  | clear dynamic entries from Titanium PD Forwarding Table                   |
| static             |  | USE WITH CAUTION!! clear static entries from Titanium PD Forwarding Table |
| vlan               |  | (Optional) VLAN   |
| <i>id</i>          |  | (Optional) VLAN ID  |
| statistics         |  | Clear datapath statistics   |
| interface          |  | (Optional) Clear datapath interface statistics                            |
| isis_intf_stats    |  | Statistics of ISIS Frames Tx/Rx   |

### Command Mode

- /exec

# clear macsec mka statistics

clear macsec mka statistics [ interface <ifname> ]

## Syntax Description

| Syntax Description |                              |
|--------------------|------------------------------|
| clear              | Reset functions              |
| macsec             | Clear MACsec parameters      |
| mka                | Clear MKA parameters         |
| statistics         | Clear MKA statistics         |
| interface          | (Optional) Specify interface |
| <i>ifname</i>      | (Optional) Interface list    |

## Command Mode

- /exec

# clear mmode database

clear mmode database

## Syntax Description

---

### Syntax Description

---

clear    Reset functions

---

mmode   Clear mmode

---

database   Clear mmode  
              database

---

## Command Mode

- /exec



# clear mpls forwarding statistics

clear mpls forwarding statistics [ interface { <interface> | all } ]

## Syntax Description

### Syntax Description

|                  |   |
|------------------|---|
| clear            | Reset functions                                 |
| mpls             | MPLS events                                     |
| forwarding       | Clear MPLS software forwarded                   |
| statistics       | Traffic statistics                              |
| interface        | (Optional) Interface specific information       |
| <i>interface</i> | (Optional) Interface chosen to clear statistics |
| all              | (Optional) All interfaces                       |

## Command Mode

- /exec

# clear mpls ldp internal counters

clear mpls ldp internal counters { all | system | forwarding }

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| clear              | Reset functions                         |  |
| mpls               | MPLS clear commands                     |  |
| ldp                | Clear LDP state                         |  |
| internal           | Clear LDP internal information          |  |
| counters           | Clear LDP statistics                    |  |
| all                | Clear all LDP statistics                |  |
| system             | Clear LDP system statistics             |  |
| forwarding         | Clear LDP forwarding related statistics |  |

## Command Mode

- /exec

# clear mpls ldp neighbor

```
clear mpls ldp neighbor [ vrf { <vrf-name> | <vrf-known-name> } ] { <address> | * }
```

## Syntax Description

| Syntax Description    |  |  |
|-----------------------|--|--|
| clear                 |  | Reset functions  |
| mpls                  |  | MPLS clear commands                                    |
| ldp                   |  | Clear LDP state  |
| neighbor              |  | Clear LDP neighbor sessions                            |
| vrf                   |  | (Optional) VRF Routing/Forwarding instance information |
| <i>vrf-name</i>       |  | (Optional) VPN Routing/Forwarding instance name        |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name                              |
| <i>address</i>        |  | IP address for LDP neighbor                            |
| *                     |  | Clear all neighbors                                    |

## Command Mode

- /exec

# clear mpls static trace

```
clear mpls static trace { error | warning | event }
```

## Syntax Description

| Syntax Description |                                |
|--------------------|--------------------------------|
| clear              | Clear MPLS static trace buffer |
| mpls               | MPLS configuration commands    |
| static             | MPLS static                    |
| trace              | MPLS static trace              |
| error              | MPLS static error trace        |
| warning            | MPLS static warning trace      |
| event              | MPLS static event trace        |

## Command Mode

- /exec

# clear mpls strip labels

clear mpls strip labels { static | dynamic | all }

## Syntax Description

| Syntax Description |                           |
|--------------------|---------------------------|
| clear              | Reset functions           |
| mpls               | Configure MPLS settings   |
| strip              | Stripping of MPLS headers |
| labels             | labels in database        |
| all                | all labels [default]      |
| static             | labels learned using cli  |
| dynamic            | dynamically learned       |

## Command Mode

- /exec

## clear mpls switching label statistics

clear mpls switching label statistics { all | <label-value> }

### Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| clear              |  | Reset functions                                 |
| mpls               |  | MPLS clear commands                             |
| switching          |  | Clear MPLS label switching database information |
| label              |  | Clear MPLS label information                    |
| statistics         |  | Clear label statistics                          |
| all                |  | Clear statistics for all labels                 |
| <i>label-value</i> |  | Label   |

### Command Mode

- /exec

# clear mpls traffic-eng auto-bw timers

clear mpls traffic-eng auto-bw timers

## Syntax Description

---

### Syntax Description

---

auto-bw Clear auto-bw collection

---

timers Clear tunnel counters

---

clear Reset functions

---

mpls MPLS clear commands

---

traffic-eng Clear MPLS Traffic-Engineering statistical information

---

## Command Mode

- /exec

# clear mpls traffic-eng internal counters

clear mpls traffic-eng internal counters { forwarding | mts | rsvp-client | threads }

## Syntax Description

### Syntax Description

|             |  |
|-------------|--|
| counters    | Clear internal counters                                |
| forwarding  | Clear forwarding programming stats                     |
| mts         | Clear MTS send and receive stats                       |
| rsvp-client | Clear rsvp client call stats                           |
| threads     | Clear thread event stats                               |
| clear       | Reset functions  |
| mpls        | MPLS clear commands                                    |
| traffic-eng | Clear MPLS Traffic-Engineering statistical information |
| internal    | Clear internal information                             |

## Command Mode

- /exec



# clear mpls traffic-eng link-management counters

clear mpls traffic-eng link-management counters

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| link-management    | Clear Link-Management statistical information          |
| counters           | Clear Link-Management counters                         |
| clear              | Reset functions  |
| mpls               | MPLS clear commands                                    |
| traffic-eng        | Clear MPLS Traffic-Engineering statistical information |

## Command Mode

- /exec

# clear mpls traffic-eng tunnel counters

clear mpls traffic-eng tunnel counters

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| tunnel             | Clear Tunnel statistics                                |
| counters           | Clear tunnel counters                                  |
| clear              | Reset functions  |
| mpls               | MPLS clear commands                                    |
| traffic-eng        | Clear MPLS Traffic-Engineering statistical information |

## Command Mode

- /exec

# clear nbm flow statistics

clear nbm flow statistics

## Syntax Description

| Syntax Description |                           |
|--------------------|---------------------------|
| clear              | Clear                     |
| nbm                | Non blocking Multicast    |
| flow               | NBM flows                 |
| statistics         | Clear nbm flow statistics |

## Command Mode

- /exec

# clear ngoam

```
clear ngoam { loopback { { session { <ses-hdl> | all } } } | { statistics { summary | { session { <ses-hdl> | all } } } } } | database [ session <ses-hdl> ] } [ force ] }
```

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| clear              | Reset functions                            |
| ngoam              | ngoam information                          |
| loopback           | clear ngoam loopback                       |
| statistics         | clear ngoam statistics                     |
| summary            | clear ngoam statistics summary             |
| database           | clear ngoam database                       |
| session            | clear ngoam information by session handle  |
| <i>ses-hdl</i>     | specify session handle                     |
| all                | clear stats for all ping sessions          |
| force              | (Optional) Clear it, do not ask to confirm |

## Command Mode

- /exec

# clear ngoam

```
clear ngoam { traceroute { { session { <handle> | all } } | { statistics { summary | { session { <handle> | all } } } } } [ force ] }
```

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| clear              | Reset functions                            |
| ngoam              | ngoam information                          |
| traceroute         | clear ngoam traceroute                     |
| statistics         | clear ngoam statistics                     |
| summary            | clear ngoam statistics summary             |
| session            | clear ngoam information by session handle  |
| <i>handle</i>      | specify session handle                     |
| all                | clear stats for all traceroute sessions    |
| force              | (Optional) Clear it, do not ask to confirm |

## Command Mode

- /exec

# clear ngoam

```
clear ngoam { probe { statistics { summary | { session { <handle> | all } } } } }
```

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| clear              | Reset functions                           |
| ngoam              | ngoam information                         |
| probe              | clear ngoam probe                         |
| statistics         | clear ngoam statistics                    |
| summary            | clear ngoam statistics summary            |
| session            | clear ngoam information by session handle |
| <i>handle</i>      | specify session handle                    |
| all                | clear stats for all probe sessions        |

## Command Mode

- /exec

# clear ngoam

```
clear ngoam { { interface statistics } }
```

## Syntax Description

---

**Syntax Description**

---

|       |                 |
|-------|-----------------|
| clear | Reset functions |
|-------|-----------------|

---

|       |                   |
|-------|-------------------|
| ngoam | ngoam information |
|-------|-------------------|

---

|           |                           |
|-----------|---------------------------|
| interface | probe packet<br>interface |
|-----------|---------------------------|

---

|            |                        |
|------------|------------------------|
| statistics | clear ngoam statistics |
|------------|------------------------|

---

## Command Mode

- /exec

# clear ngoam pathtrace

```
clear ngoam pathtrace { { statistics { summary | { session { <handle> | all } } } } | { database { session { <handle> | all } } } } [ force ]
```

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| clear              | Reset functions                            |
| ngoam              | ngoam information                          |
| pathtrace          | clear ngoam pathtrace                      |
| database           | clear ngoam pathtrace database             |
| statistics         | clear ngoam statistics                     |
| summary            | clear ngoam statistics summary             |
| session            | clear ngoam information by session handle  |
| <i>handle</i>      | specify session handle                     |
| all                | clear stats for all pathtrace sessions     |
| force              | (Optional) Clear it, do not ask to confirm |

## Command Mode

- /exec



# clear ntp session

clear ntp session

## Syntax Description

|                           |         |                                     |
|---------------------------|---------|-------------------------------------|
| <b>Syntax Description</b> | clear   | Reset functions                     |
|                           | ntp     | Network Time Protocol               |
|                           | session | Clear the ntp configuration session |

## Command Mode

- /exec

# clear ntp statistics

clear ntp statistics { all-peers | io | local | memory }

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| clear              | Reset functions                                  |
| ntp                | Network Time Protocol                            |
| statistics         | Clear NTP Statistics                             |
| all-peers          | Clear per-peer statistics counter of all peers   |
| io                 | Clear input-output statistics                    |
| local              | Clear counters maintained by the local NTP       |
| memory             | Clear statistics counters related to memory code |

## Command Mode

- /exec

# clear nve peers history-log

clear nve peers history-log

## Syntax Description

| Syntax Description |                                 |                           |
|--------------------|---------------------------------|---------------------------|
| clear              |                                 | Reset functions           |
| nve                |                                 | Configure NVE information |
| peers              |                                 | NVE Peer                  |
| history-log        | nve_clear_peers_history_log_cmd |                           |

## Command Mode

- /exec

# clear nve peers interface counters

```
clear nve peers <addr> interface <nve-if>counters
```

## Syntax Description

| Syntax Description |             |                           |
|--------------------|-------------|---------------------------|
|                    | clear       | Reset functions           |
|                    | nve         | Configure NVE information |
|                    | peers       | NVE Peer                  |
|                    | <i>addr</i> | Remote Peer IP Address    |
|                    | interface   | Interface                 |

## Command Mode

- /exec

# clear nve peers vni interface counters

```
clear nve peers { <addr> | all } vni { <vni-id> | all } interface <nve-if>counters
```

## Syntax Description

| Syntax Description |                                   |  |
|--------------------|-----------------------------------|--|
| clear              | Reset functions                   |  |
| nve                | Configure NVE information         |  |
| peers              | NVE Peer                          |  |
| <i>addr</i>        | Remote Peer IP Address            |  |
| all                | Clear counters for all peers/VNIs |  |
| vni                | Virtual Network Identifier        |  |
| <i>vni-id</i>      | Virtual Network Identifier        |  |
| interface          | Interface                         |  |

## Command Mode

- /exec

# clear nve vni counters

```
clear nve vni { <vni-id> | all } counters
```

## Syntax Description

### Syntax Description

|               |                             |
|---------------|-----------------------------|
| clear         | Reset functions             |
| nve           | Configure NVE information   |
| vni           | Virtual Network Identifier  |
| <i>vni-id</i> | Virtual Network Identifier  |
| counters      | Counters                    |
| all           | Clear counters for all vnis |

## Command Mode

- /exec

# clear nvram

clear nvram

## Syntax Description

---

### Syntax Description

---

clear Reset  
functions

---

nvram purge  
NVRAM

---

### Command Mode

- /exec

# clear nxapi-server logs

clear nxapi-server logs

## Syntax Description

| Syntax Description |  |                          |
|--------------------|--|--------------------------|
| clear              |  | Reset functions          |
| nxapi-server       |  | Clear NX-API Server      |
| logs               |  | Clear NX-API Server logs |

## Command Mode

- /exec



# clear onep error

clear onep error

## Syntax Description

| Syntax Description |                              |
|--------------------|------------------------------|
| <code>clr</code>   | Reset functions              |
| <code>osp</code>   | One Platform                 |
| <code>enr</code>   | Clear the ONE-P error buffer |

## Command Mode

- /exec

# clear onep history

```
clear onep history { { archived } | { all } | { session { all | <onep-session-id> } } }
```

## Syntax Description

### Syntax Description

|                        |                               |
|------------------------|-------------------------------|
| clear                  | Reset functions               |
| onep                   | One Platform                  |
| history                | One Platform history trails   |
| archived               | One Platform archived session |
| session                | One Platform session          |
| all                    | All sessions                  |
| <i>onep-session-id</i> | Specific session name         |

## Command Mode

- /exec

# clear onep internal api statistics

```
clear onep internal api statistics { session { all | <onep-session-id> } }
```

## Syntax Description

| Syntax Description     |  |                                 |
|------------------------|--|---------------------------------|
| clear                  |  | Clear command                   |
| onep                   |  | ONE-P clear commands            |
| internal               |  | Internal commands               |
| api                    |  | Thrift API calls                |
| statistics             |  | Clear internal ONE-P statistics |
| session                |  | session                         |
| all                    |  | All current sessions            |
| <i>onep-session-id</i> |  | Specific session                |

## Command Mode

- /exec

# clear onep session rate-limit

clear onep session rate-limit

## Syntax Description

---

### Syntax Description

---

|            |                               |
|------------|-------------------------------|
| clear      | Reset functions               |
| onep       | One Platform                  |
| session    | One Platform session          |
| rate-limit | rate limiting feature<br>info |

---

## Command Mode

- /exec

# clear onep statistics

```
clear onep statistics [ session { all | <onep-session-id> } ]
```

## Syntax Description

| Syntax Description     |  |                                  |
|------------------------|--|----------------------------------|
| clear                  |  | Reset functions                  |
| onep                   |  | One Platform                     |
| statistics             |  | statistics                       |
| session                |  | (Optional) One Platform session  |
| all                    |  | (Optional) All sessions          |
| <i>onep-session-id</i> |  | (Optional) Specific session name |

## Command Mode

- /exec

# clear onep trace

clear onep trace

## Syntax Description

---

### Syntax Description

---

**clear** Reset functions

---

**onep** One Platform

---

**trace** Clear the ONE-P trace  
buffer

---

### Command Mode

- /exec

# clear openflow internal counters

```
clear openflow internal counters { mts | plifnxos | arp [ interface <ifname> ] }
```

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| clear              | Reset functions                        |
| openflow           | Clear OpenFlow switch information      |
| internal           | Commands for internal use              |
| counters           | Clear internal counters                |
| mts                | Clear MTS send and receive stats       |
| plifnxos           | Clear counters for the L2RIB flow mods |
| arp                | Clear ARP packet counters              |
| interface          | (Optional) Interface                   |
| <i>ifname</i>      | (Optional) Interface name              |

## Command Mode

- /exec

# clear openflow internal pktflowdb

clear openflow internal pktflowdb

## Syntax Description

| Syntax Description |                                   |
|--------------------|-----------------------------------|
| clear              | Reset functions                   |
| openflow           | Clear OpenFlow switch information |
| internal           | Commands for internal use         |
| pktflowdb          | Clear internal pktflowdb          |

## Command Mode

- /exec



# clear openflow internal switch flows stats table-id

clear openflow internal switch <switch-id> flows stats table-id <table-id> [ interface <ifname> ]

## Syntax Description

| Syntax Description |                                   |
|--------------------|-----------------------------------|
| clear              | Reset functions                   |
| internal           | Commands for internal use         |
| openflow           | Clear OpenFlow switch flows stats |
| switch             | Logical switch id                 |
| <i>switch-id</i>   | Logical switch-id                 |
| flows              | Flows                             |
| stats              | Clear packet count and bytes      |
| table-id           | Table-id for the pipeline         |
| <i>table-id</i>    | Table ID                          |
| interface          | (Optional) Interface              |
| <i>ifname</i>      | (Optional) Interface name         |

## Command Mode

- /exec

# clear openflow switch controller all

clear openflow switch <switch-id> controller all

## Syntax Description

| Syntax Description |                                   |  |
|--------------------|-----------------------------------|--|
| clear              | Reset functions                   |  |
| openflow           | Clear OpenFlow switch information |  |
| switch             | Logical switch id                 |  |
| <i>switch-id</i>   | Logical switch-id                 |  |
| controller         | Controller                        |  |
| all                | All                               |  |

## Command Mode

- /exec

# clear ospfv3 database

```
clear ospfv3 [ <tag> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] database [ vrf { <vrf-name> | <vrf-known-name> | all } ]
```

## Syntax Description

| Syntax Description    |  |   |
|-----------------------|--|---|
| clear                 |  | Reset functions                             |
| ospfv3                |  | Clear OSPF tables                           |
| <i>tag</i>            |  | (Optional) Process tag                      |
| vrf                   |  | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       |  | (Optional) VRF name                         |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name                   |
| all                   |  | (Optional) Display information for all VRFs |
| database              |  | Clear the LSDB and all neighbors            |

## Command Mode

- /exec

## clear ospfv3 event-history

clear ospfv3 [ <tag> ] event-history [ adjacency | event | ha | flooding | lsa | spf | redistribution | cli | hello | spf-trigger | all ]

### Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| clear              |  | Reset functions                            |
| ospfv3             |  | Debugging functions                        |
| tag                |  | (Optional) Process tag                     |
| event-history      |  | Clear the event history buffers            |
| adjacency          |  | (Optional) Adjacency formation logs        |
| event              |  | (Optional) Internal event logs             |
| ha                 |  | (Optional) HA and GR logs                  |
| flooding           |  | (Optional) LSA flooding logs               |
| lsa                |  | (Optional) LSA generation and databse logs |
| spf                |  | (Optional) SPF calculation logs            |
| redistribution     |  | (Optional) Redistribution logs             |
| cli                |  | (Optional) Cli logs                        |
| hello              |  | (Optional) HELLO related logs              |
| spf-trigger        |  | (Optional) SPF TRIGGER related logs        |
| all                |  | (Optional) All event history buffers       |

### Command Mode

- /exec

# clear ospfv3 event-history detail

clear ospfv3 [ <tag> ] event-history detail

## Syntax Description

| Syntax Description |  |                                |
|--------------------|--|--------------------------------|
| clear              |  | Reset functions                |
| ospfv3             |  | Debugging functions            |
| <i>tag</i>         |  | (Optional) Process tag         |
| event-history      |  | Clear the event history buffer |
| detail             |  | Detailed event history buffer  |

## Command Mode

- /exec

## clear ospfv3 interface

```
clear ospfv3 [ <tag> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] interface { * | <interface> } [ vrf {
<vrf-name> | <vrf-known-name> | all } ]
```

### Syntax Description

| Syntax Description    |  |   |
|-----------------------|--|---|
| clear                 |  | Reset functions                             |
| ospfv3                |  | Clear OSPF tables                           |
| <i>tag</i>            |  | (Optional) Process tag                      |
| vrf                   |  | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       |  | (Optional) VRF name                         |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name                   |
| all                   |  | (Optional) Display information for all VRFs |
| interface             |  | Clear one or more interfaces                |
| *                     |  | Clear all interfaces                        |
| <i>interface</i>      |  | Interface to clear                          |

### Command Mode

- /exec

## clear ospfv3 internal interface-cache

```
clear ospfv3 [ <tag> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] internal interface-cache [ <interface> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ]
```

### Syntax Description

| Syntax Description    |  |  |
|-----------------------|--|--|
| clear                 |  | Reset functions                                      |
| ospfv3                |  | Clear OSPF tables                                    |
| <i>tag</i>            |  | (Optional) Process tag                               |
| internal              |  | Commands for internal use                            |
| interface-cache       |  | Interface-cache                                      |
| <i>interface</i>      |  | (Optional) Interface to clear the interface-cache on |
| vrf                   |  | (Optional) Display per-VRF information               |
| <i>vrf-name</i>       |  | (Optional) VRF name                                  |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name                            |
| all                   |  | (Optional) Display information for all VRFs          |

### Command Mode

- /exec

## clear ospfv3 neighbor

```
clear ospfv3 [ <tag> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] neighbor { * | <neighborid> | <interface>
} [ vrf { <vrf-name> | <vrf-known-name> | all } ]
```

### Syntax Description

| Syntax Description    |  |   |
|-----------------------|--|---|
| clear                 |  | Reset functions                                 |
| ospfv3                |  | Clear OSPF tables                               |
| <i>tag</i>            |  | (Optional) Process tag                          |
| vrf                   |  | (Optional) Display per-VRF information          |
| <i>vrf-name</i>       |  | (Optional) VRF name                             |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name                       |
| all                   |  | (Optional) Display information for all VRFs     |
| neighbor              |  | Clear one or more neighbors                     |
| *                     |  | Clear all neighbors                             |
| <i>neighborid</i>     |  | Source IP address, or router ID of the neighbor |
| <i>interface</i>      |  | Interface to clear all neighbors on             |

### Command Mode

- /exec



## clear ospfv3 policy statistics

```
clear ospfv3 [ <tag> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] policy statistics { { redistribute { bgp
<as> | { eigrp | isis | rip } <tag> | static | direct | amt | lisp } } | { area <area-id-ip> filter-list { in | out } } } [
vrf { <vrf-name> | <vrf-known-name> | all } ]
```

### Syntax Description

#### Syntax Description

|                |   |
|----------------|---|
| clear          | Reset functions                             |
| ospfv3         | Display OSPFv3 status and configuration     |
| tag            | (Optional) Process tag                      |
| vrf            | (Optional) Display per-VRF information      |
| vrf-name       | (Optional) VRF name                         |
| vrf-known-name | (Optional) Known VRF name                   |
| all            | (Optional) Display information for all VRFs |
| policy         | Clear Policy related information            |
| statistics     | Display Route Filter statistics             |
| redistribute   | Statistics for redistribution               |
| eigrp          | Enhanced Interior Gateway Protocol (EIGRP)  |
| rip            | Routing Information Protocol (RIP)          |
| isis           | ISO Intermediate-to-Intermediate (IS-IS)    |
| bgp            | Border Gateway Protocol (BGP)               |
| as             | Autonomous system number                    |
| static         | Static                                      |
| direct         | Directly connected                          |
| amt            | AMT anycast prefix                          |
| lisp           | LISP EID-prefixes                           |
| area           | Configure area properties                   |
| area-id-ip     | Area Id as an integer or ip address         |
| filter-list    | Filter prefixes between OSPF areas          |
| in             | Filter networks sent to this area           |
| out            | Filter networks sent from this area         |

---

*tag*

---

**Command Mode**

- /exec

# clear ospfv3 redistribution

```
clear ospfv3 [ <tag> ] redistribution [ vrf { <vrf-name> | <vrf-known-name> | all } ]
```

## Syntax Description

| Syntax Description    |  |   |
|-----------------------|--|---|
| clear                 |  | Reset functions                             |
| ospfv3                |  | Clear OSPF tables                           |
| <i>tag</i>            |  | (Optional) Process tag                      |
| vrf                   |  | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       |  | (Optional) VRF name                         |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name                   |
| all                   |  | (Optional) Display information for all VRFs |
| redistribution        |  | Clear OSPFv3 route redistribution           |

## Command Mode

- /exec

## clear ospfv3 statistics

```
clear ospfv3 [ <tag> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] statistics [ vrf { <vrf-name> | <vrf-known-name> | all } ]
```

### Syntax Description

| Syntax Description    |  |   |
|-----------------------|--|---|
| clear                 |  | Reset functions                             |
| ospfv3                |  | Clear OSPF tables                           |
| <i>tag</i>            |  | (Optional) Process tag                      |
| vrf                   |  | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       |  | (Optional) VRF name                         |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name                   |
| all                   |  | (Optional) Display information for all VRFs |
| statistics            |  | Clear statistics counters                   |

### Command Mode

- /exec

# clear ospfv3 traffic

```
clear ospfv3 [ <tag> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] traffic [ <interface> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ]
```

## Syntax Description

| Syntax Description    |  |  |
|-----------------------|--|--|
| clear                 |  | Reset functions                              |
| ospfv3                |  | Clear OSPF tables                            |
| <i>tag</i>            |  | (Optional) Process tag                       |
| vrf                   |  | (Optional) Display per-VRF information       |
| <i>vrf-name</i>       |  | (Optional) VRF name                          |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name                    |
| all                   |  | (Optional) Display information for all VRFs  |
| traffic               |  | Clear traffic counters                       |
| <i>interface</i>      |  | (Optional) Interface to clear all traffic on |

## Command Mode

- /exec

# clear otv arp-nd

```
clear otv arp-nd [ <l3_addr> ]
```

## Syntax Description

---

### Syntax Description

---

|       |                 |
|-------|-----------------|
| clear | Reset functions |
|-------|-----------------|

---

|     |            |
|-----|------------|
| otv | OTV events |
|-----|------------|

---

|        |                    |
|--------|--------------------|
| arp-nd | Log ARP/ND caching |
| clear  |                    |

---

*l3\_addr* (Optional) L3 IP address

---

## Command Mode

- /exec

## clear otv internal event-history

clear otv internal event-history { event | learn | debug | arp-nd | packet | cli | delivery | fc | stp | all }

### Syntax Description

| Syntax Description |  |                                  |
|--------------------|--|----------------------------------|
| clear              |  | Reset functions                  |
| otv                |  | OTV events                       |
| internal           |  | Display OTV internal information |
| event-history      |  | Clear the event history buffers  |
| event              |  | OTV Event logs                   |
| fc                 |  | OTV FC logs                      |
| learn              |  | OTV Learn logs                   |
| debug              |  | OTV Internal debug logs          |
| arp-nd             |  | OTV arp-nd logs                  |
| packet             |  | OTV packet logs                  |
| cli                |  | CLI logs                         |
| delivery           |  | OTV Delivery logs                |
| stp                |  | OTV STP logs                     |
| all                |  | All event history buffers        |

### Command Mode

- /exec

## clear otv isis adjacency

```
clear otv isis [ <otv-isis-tag> ] adjacency { * | { <interface> | system-id <sid> } } [ vpn { <vrf-name> | all } ]
```

### Syntax Description

#### Syntax Description

|                     |   |
|---------------------|---|
| clear               | Reset functions                                       |
| otv                 | Clear OTV commands                                    |
| isis                | Clear IS-IS information                               |
| <i>otv-isis-tag</i> | (Optional) Routing process tag                        |
| vpn                 | (Optional) Display VPN information                    |
| <i>vrf-name</i>     | (Optional) VPN name                                   |
| all                 | (Optional) All configured VPNs                        |
| adjacency           | Clear IS-IS adjacency state                           |
| *                   | IS-IS adjacencies on all interfaces                   |
| <i>interface</i>    | IS-IS interface                                       |
| system-id           | Hostname or System ID                                 |
| <i>sid</i>          | Hostname or System ID (in the form of XXXX.XXXX.XXXX) |

### Command Mode

- /exec



# clear otv isis event-history

```
clear otv isis [ <isis-tag> ] event-history [ <isis-event-hist-buf-name> ]
```

## Syntax Description

| Syntax Description              |  |  |
|---------------------------------|--|--|
| clear                           |  | Reset functions                                    |
| otv                             |  | Clear OTV commands                                 |
| isis                            |  | Clear IS-IS information                            |
| <i>isis-tag</i>                 |  | (Optional) Routing process tag                     |
| event-history                   |  | Clear event history buffers                        |
| <i>isis-event-hist-buf-name</i> |  | (Optional) Clear the specific event history buffer |

## Command Mode

- /exec

# clear otv isis internal packet queue counters

clear otv isis [ <otv-isis-tag> ] internal packet queue counters

## Syntax Description

| Syntax Description  |            |  |
|---------------------|------------|--|
| clear               |            | Reset functions                        |
| otv                 |            | Display OTV information                |
| isis                |            | Display IS-IS status and configuration |
| <i>otv-isis-tag</i> | (Optional) | Routing process tag                    |
| internal            |            | Commands for internal use              |
| packet              |            | Packet counters                        |
| queue               |            | Packet queue counters                  |
| counters            |            | Clear packet queue max counters        |

## Command Mode

- /exec

# clear otv isis internal perf timer

```
clear otv isis [ <otv-isis-tag> ] internal perf timer
```

## Syntax Description

| Syntax Description  |            |  |
|---------------------|------------|--|
| clear               |            | Reset functions                        |
| otv                 |            | Display OTV information                |
| isis                |            | Display IS-IS status and configuration |
| <i>otv-isis-tag</i> | (Optional) | Routing process tag                    |
| internal            |            | Commands for internal use              |
| perf                |            | Performance                            |
| timer               |            | Timer performance                      |

## Command Mode

- /exec

## clear otv isis route-map statistics

```
clear otv isis [ <otv-isis-tag> ] [ ip ] route-map statistics [ vpn { <vrf-name> | all } ]
```

### Syntax Description

| Syntax Description  |            |                                   |
|---------------------|------------|-----------------------------------|
| clear               |            | Reset functions                   |
| otv                 |            | Clear OTV commands                |
| isis                |            | Clear IS-IS information           |
| <i>otv-isis-tag</i> | (Optional) | Routing process tag               |
| vpn                 | (Optional) | Display VPN information           |
| <i>vrf-name</i>     | (Optional) | VPN name                          |
| all                 | (Optional) | All configured VPNs               |
| ip                  | (Optional) | Clear IS-IS IPv4 information      |
| route-map           |            | Clear IS-IS route-map information |
| statistics          |            | Clear IS-IS route-map statistics  |

### Command Mode

- /exec

# clear otv isis statistics

```
clear otv isis [ <otv-isis-tag> ] statistics { * | <interface> } [ vpn { <vrf-name> | all } ]
```

## Syntax Description

| Syntax Description  |                                    |  |
|---------------------|------------------------------------|--|
| clear               | Reset functions                    |  |
| otv                 | Clear OTV commands                 |  |
| isis                | Clear IS-IS information            |  |
| <i>otv-isis-tag</i> | (Optional) Routing process tag     |  |
| vpn                 | (Optional) Display VPN information |  |
| <i>vrf-name</i>     | (Optional) VPN name                |  |
| all                 | (Optional) All configured VPNs     |  |
| statistics          | Clear IS-IS protocol statistics    |  |
| *                   | All IS-IS protocol statistics      |  |
| <i>interface</i>    | IS-IS interface                    |  |

## Command Mode

- /exec

## clear otv isis traffic

```
clear otv isis [ <otv-isis-tag> ] traffic { * | <interface> } [ vpn { <vrf-name> | all } ]
```

### Syntax Description

| Syntax Description  |            |                                 |
|---------------------|------------|---------------------------------|
| clear               |            | Reset functions                 |
| otv                 |            | Clear OTV commands              |
| isis                |            | Clear IS-IS information         |
| <i>otv-isis-tag</i> | (Optional) | Routing process tag             |
| vpn                 | (Optional) | Display VPN information         |
| <i>vrf-name</i>     | (Optional) | VPN name                        |
| all                 | (Optional) | All configured VPNs             |
| traffic             |            | Clear IS-IS traffic information |
| *                   |            | All IS-IS traffic information   |
| <i>interface</i>    |            | IS-IS interface                 |

### Command Mode

- /exec

# clear pktmgr cache interface

```
clear pktmgr cache { { interface [ <intf> ] } | { vlan [ <vl> ] } }
```

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| clear              | Reset functions                            |
| pktmgr             | Clear Packet Manager information           |
| cache              | Clear pktmgr cache                         |
| interface          | Clear pktmgr related interface information |
| vlan               | Clear pktmgr related vlan information      |
| <i>intf</i>        | (Optional) Interface name to clear         |
| <i>vl</i>          | (Optional) Vlan                            |

## Command Mode

- /exec

# clear pktmgr client

clear pktmgr client [ <uuid> ]

## Syntax Description

---

### Syntax Description

---

clear Reset functions

---

pktmgr Clear Packet Manager information

---

client Clear pktmgr clients counters

---

*uuid* (Optional) Clear pktmgr client counters for given uuid

---

## Command Mode

- /exec



# clear pktmgr interface

```
clear pktmgr interface [ <interface> ]
```

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| clear              | Reset functions                            |
| pktmgr             | Clear Packet Manager information           |
| interface          | Clear pktmgr related interface information |
| <i>interface</i>   | (Optional) Interface name to display       |

## Command Mode

- /exec

# clear plb statistics

clear plb statistics <service-name>

## Syntax Description

---

### Syntax Description

---

|       |                 |
|-------|-----------------|
| clear | Reset functions |
|-------|-----------------|

---

|     |             |
|-----|-------------|
| plb | PLB service |
|-----|-------------|

---

|            |                |
|------------|----------------|
| statistics | PLB statistics |
|------------|----------------|

---

|                     |                     |
|---------------------|---------------------|
| <i>service-name</i> | PLB<br>service-name |
|---------------------|---------------------|

---

## Command Mode

- /exec

# clear port-profile command-cache

```
clear port-profile command-cache [ interface <intfname> ]
```

## Syntax Description

| Syntax Description |  |                                  |
|--------------------|--|----------------------------------|
| clear              |  | Reset functions                  |
| port-profile       |  | Clear port-profiles              |
| command-cache      |  | Clear port-profile command cache |
| interface          |  | (Optional) Name of interface     |
| <i>intfname</i>    |  | (Optional) Name of interface     |

## Command Mode

- /exec

# clear port-profile database

clear port-profile database

## Syntax Description

---

### Syntax Description

---

|       |                 |
|-------|-----------------|
| clear | Reset functions |
|-------|-----------------|

---

|              |                     |
|--------------|---------------------|
| port-profile | Clear port-profiles |
|--------------|---------------------|

---

|          |                             |
|----------|-----------------------------|
| database | Clear port-profile database |
|----------|-----------------------------|

---

## Command Mode

- /exec

# clear port-security dynamic address vlan

clear port-security dynamic address <mac-address> vlan <vlanid>

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| clear              |  | Reset functions                           |
| port-security      |  | Clear port-security information           |
| dynamic            |  | dynamic addresses                         |
| address            |  | secure address                            |
| <i>mac-address</i> |  | 48 bit mac address                        |
| vlan               |  | vlan information                          |
| <i>vlanid</i>      |  | vlan id. Enter a value between 1 and 4094 |

## Command Mode

- /exec

## clear port-security dynamic interface

clear port-security dynamic interface <if\_index> [ vlan <vlanid> ]

### Syntax Description

#### Syntax Description

|                 |  |
|-----------------|--|
| clear           | Reset functions                                      |
| port-security   | Clear port-security information                      |
| dynamic         | dynamic addresses                                    |
| interface       | interface  |
| <i>if_index</i> | ethernet   |
| vlan            | (Optional) vlan information                          |
| <i>vlanid</i>   | (Optional) vlan id. Enter a value between 1 and 4094 |

### Command Mode

- /exec

# clear port-security nvram

clear port-security nvram

## Syntax Description

| Syntax Description |  |                                 |
|--------------------|--|---------------------------------|
| clear              |  | Reset functions                 |
| port-security      |  | Clear port-security information |
| nvram              |  | port-security nvram             |

## Command Mode

- /exec

# clear processes log all

clear processes log all

## Syntax Description

---

### Syntax Description

---

|           |                                |
|-----------|--------------------------------|
| clear     | Reset functions                |
| processes | process-related clear commands |
| log       | Delete log files               |
| all       | Delete all the log files       |

---

## Command Mode

- /exec



# clear processes log all vdc-all

clear processes log all vdc-all

## Syntax Description

| Syntax Description |                                       |
|--------------------|---------------------------------------|
| clear              | Reset functions                       |
| processes          | process-related clear commands        |
| log                | Delete log files                      |
| all                | Delete all the log files              |
| vdc-all            | Delete all the log files in all vdc's |

## Command Mode

- /exec

# clear processes log archive

```
clear processes log archive [ file <s0> ]
```

## Syntax Description

---

**Syntax Description**

---

|       |                 |
|-------|-----------------|
| clear | Reset functions |
|-------|-----------------|

---

|           |                                  |
|-----------|----------------------------------|
| processes | system manager spawned processes |
|-----------|----------------------------------|

---

|     |                  |
|-----|------------------|
| log | Delete log files |
|-----|------------------|

---

|         |  |
|---------|--|
| archive | clear all process logs for this vdc from logflash on this module |
|---------|--|

---

|      |  |
|------|--|
| file | (Optional) delete a log file on logflash |
|------|--|

---

|    |  |
|----|--|
| s0 | (Optional) Name of file in directory 'log' |
|----|--|

---

## Command Mode

- /exec

# clear processes log pid

clear processes log pid <i0>

## Syntax Description

| Syntax Description |                                       |
|--------------------|---------------------------------------|
| clear              | Reset functions                       |
| processes          | process-related clear commands        |
| log                | Delete log files                      |
| pid                | Delete log file of a specific process |
| <i>i0</i>          | pid of the process                    |

## Command Mode

- /exec

# clear processes vdc log all

```
clear processes vdc <e-vdc2> log all
```

## Syntax Description

| Syntax Description |                                       |  |
|--------------------|---------------------------------------|--|
| clear              | Reset functions                       |  |
| processes          | process-related clear commands        |  |
| vdc                | process-related clear commands in vdc |  |
| <i>e-vdc2</i>      | Enter Virtual Device Context <vdc-id> |  |
| log                | Delete log files                      |  |
| all                | Delete all the log files              |  |

## Command Mode

- /exec

# clear processes vdc log pid

clear processes vdc <e-vdc2> log pid <i1>

## Syntax Description

| Syntax Description |                                       |
|--------------------|---------------------------------------|
| clear              | Reset functions                       |
| processes          | process-related clear commands        |
| vdc                | process-related clear commands in vdc |
| <i>e-vdc2</i>      | Enter Virtual Device Context <vdc-id> |
| log                | Delete log files                      |
| pid                | Delete log file of a specific process |
| <i>i1</i>          | pid of the process                    |

## Command Mode

- /exec

# clear ptp counters interface

```
clear ptp counters { interface <if0> | all }
```

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| clear              | Reset functions                               |
| ptp                | Precision Time Protocol (IEEE 1588) Subsystem |
| counters           | Display PTP packet counters                   |
| interface          | Enter the port interface                      |
| all                | Displays all information                      |
| <i>if0</i>         |   |

## Command Mode

- /exec

# clear qos mpls-snmp

clear qos mpls-snmp

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| clear              | Reset functions                                |
| mpls-snmp          | MPLS default table-map and snmp indices in pss |

## Command Mode

- /exec

# clear qos policies

clear qos policies

## Syntax Description

---

### Syntax Description

---

clear    Reset functions

---

policies    Clear default  
              policies

---

## Command Mode

- /exec



# clear qos policies force

clear qos policies force

## Syntax Description

| Syntax   | Description            |
|----------|------------------------|
| clear    | Reset functions        |
| policies | Clear default policies |
| force    | Clear forcefully       |

## Command Mode

- /exec

# clear qos statistics

```
clear qos statistics [ { interface [ <iface-list> ] | vlan [ <vlan-list> ] } [ input | output ] [ type <qos-or-q> ] ]
```

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| clear              | Reset functions                            |
| statistics         | Clear statistics                           |
| interface          | (Optional) Clear statistics on a interface |
| <i>iface-list</i>  | (Optional) List of Interfaces              |
| vlan               | (Optional) 802.1Q vlan                     |
| <i>vlan-list</i>   | (Optional) List of vlan ids                |
| input              | (Optional) Input Service policy            |
| output             | (Optional) Output Service policy           |
| type               | (Optional) Policy type                     |
| <i>qos-or-q</i>    | (Optional)                                 |

## Command Mode

- /exec

# clear queuing burst-detect

```
clear queuing burst-detect [ interface <if_name> [ queue <queue_num> ] ] [ module <module> ]
```

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| clear              |            | Clear all entries                        |
| queuing            |            | Queuing related information              |
| burst-detect       |            | Out of Band micro-burst queue statistics |
| interface          | (Optional) | Interface                                |
| <i>if_name</i>     | (Optional) | interface name                           |
| queue              | (Optional) | Queue number for displaying statistics   |
| <i>queue_num</i>   | (Optional) | Queue number                             |
| module             | (Optional) | Slot/module                              |
| <i>module</i>      | (Optional) | Slot/module number                       |

## Command Mode

- /exec

# clear queuing pfc-queue

```
clear queuing pfc-queue [ interface <if_list> ]
```

## Syntax Description

| Syntax Description |                                |
|--------------------|--------------------------------|
| clear              | Reset functions                |
| queuing            | clear queuing related counters |
| pfc-queue          | clear watchdog timers          |
| interface          | (Optional) Interface           |
| <i>if_list</i>     | (Optional) List of interfaces  |

## Command Mode

- /exec

# clear queuing pfc-queue interface

clear queuing pfc-queue interface <if\_list>

## Syntax Description

| Syntax Description |                                |
|--------------------|--------------------------------|
| clear              | Reset functions                |
| queuing            | clear queuing related counters |
| pfc-queue          | clear watchdog timers          |
| interface          | Interface                      |
| <i>if_list</i>     | List of interfaces             |

## Command Mode

- /exec

# clear queuing tah-pfc-queue

```
clear queuing tah-pfc-queue [ interface <if_list> ] [ module <module> ]
```

## Syntax Description

### Syntax Description

|                |   |
|----------------|---|
| clear          | Clear   |
| queuing        | Queuing related information                     |
| tah-pfc-queue  | PFC watchdog queuing related stats              |
| interface      | (Optional) Interface for clearing queuing stats |
| <i>if_list</i> | (Optional) List of interfaces                   |
| module         | (Optional) Slot/module                          |
| <i>module</i>  | (Optional) Slot/module number                   |

## Command Mode

- /exec

## clear radius-server statistics

```
clear radius-server statistics <host0> [ __readonly__ { <server_state> [ <clock_time> { monitoring_statistics
<time_in_pstate> <ndead> <tt_in_dstate> } ] } { { auth_statistics <auth_failed_transactions>
<auth_succ_transactions> <auth_req_sent> <auth_req_timedout> <auth_resp_no_match>
<auth_resp_not_processed> <auth_resp_error> } { acct_statistics <acct_failed_transactions>
<acct_succ_transactions> <acct_req_sent> <acct_req_timedout> <acct_resp_no_match>
<acct_resp_not_processed> <acct_resp_error> } } ]
```

### Syntax Description

#### Syntax Description

|                                 |   |
|---------------------------------|---|
| clear                           | Reset functions   |
| radius-server                   | Clear RADIUS related parameters                                   |
| statistics                      | Clear RADIUS statistics   |
| <i>host0</i>                    | DNS name or IP address  |
| <i>__readonly__</i>             | (Optional)  |
| <i>server_state</i>             | (Optional) Show state of server                                   |
| <i>clock_time</i>               | (Optional) Show clock time in terms of hours, minutes and seconds |
| <i>monitoring_statistics</i>    | (Optional) Monitoring Statistics                                  |
| <i>time_in_pstate</i>           | (Optional) Time in previous state                                 |
| <i>ndead</i>                    | (Optional) Number of times dead                                   |
| <i>tt_in_dstate</i>             | (Optional) Total time in dead state                               |
| <i>auth_statistics</i>          | (Optional) Authentication Statistics                              |
| <i>acct_statistics</i>          | (Optional) Accounting Statistics                                  |
| <i>auth_failed_transactions</i> | (Optional) Authentication: Failed transactions                    |
| <i>auth_succ_transactions</i>   | (Optional) Authentication: Successful transactions                |
| <i>auth_req_sent</i>            | (Optional) Authentication: Requests sent                          |
| <i>auth_req_timedout</i>        | (Optional) Authentication: Requests timedout                      |
| <i>auth_resp_no_match</i>       | (Optional) Authentication: Responses with no matching requests    |
| <i>auth_resp_not_processed</i>  | (Optional) Authentication: Responses not processed                |
| <i>auth_resp_error</i>          | (Optional) Authentication: Responses containing errors            |
| <i>acct_failed_transactions</i> | (Optional) Accounting: Failed transactions                        |
| <i>acct_succ_transactions</i>   | (Optional) Accounting: Successful transactions                    |

---

|                                |  |
|--------------------------------|--|
| <i>acct_req_sent</i>           | (Optional) Accounting: Requests sent                       |
| <i>acct_req_timedout</i>       | (Optional) Accounting: Requests timedout                   |
| <i>acct_resp_no_match</i>      | (Optional) Accounting: Responses with no matching requests |
| <i>acct_resp_not_processed</i> | (Optional) Accounting: Responses not processed             |
| <i>acct_resp_error</i>         | (Optional) Accounting: Responses containing errors         |

---

**Command Mode**

- /exec



# clear radius session

clear radius session

## Syntax Description

---

### Syntax Description

---

clear Reset functions

---

radius clear to be committed RADIUS config and lock in fabric

---

session clear to be committed RADIUS config and lock in fabric

---

## Command Mode

- /exec

# clear rmon

clear rmon { alarms | events | logs | hcalarms | all-alarms }

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| clear              | Reset functions                                  |  |
| rmon               | Clear RMON tables                                |  |
| alarms             | Clear all 32 bit alarms                          |  |
| events             | Clear rmon log this also clears rmon event table |  |
| logs               | Clear rmon log                                   |  |
| hcalarms           | Clear all 64 bit rmon alarms                     |  |
| all-alarms         | Clear all 32 bit and 64 bit rmon alarms          |  |

## Command Mode

- /exec

# clear route-map pbr-statistics

```
clear route-map { <route-map-name> | <route-map-cfg-name> } pbr-statistics
```

## Syntax Description

| Syntax Description        |  |                                     |
|---------------------------|--|-------------------------------------|
| clear                     |  | Reset functions                     |
| route-map                 |  | Route-map used for PBR              |
| <i>route-map-name</i>     |  | Route-map name                      |
| <i>route-map-cfg-name</i> |  | Known route-map name                |
| pbr-statistics            |  | Statistics for policy based routing |

## Command Mode

- /exec

## clear routing event-history

```
clear routing [ ip | ipv4 ] [ unicast ] event-history { add-route | cli | delete-route | detail | errors | general | ha |
loop-detection | modify-route | notifications | recursive-next-hop | summary | ufdm | ufdm-detail | ufdm-summary
}
```

### Syntax Description

#### Syntax Description

|                    |                                      |
|--------------------|--------------------------------------|
| clear              | Reset functions                      |
| routing            | Clear routing information            |
| ip                 | (Optional) Clear IP commands         |
| ipv4               | (Optional) Clear IP commands         |
| unicast            | (Optional) Clear unicast information |
| event-history      | Clear routing event log              |
| add-route          | Add route                            |
| cli                | CLI                                  |
| delete-route       | Delete route                         |
| detail             | Detail                               |
| errors             | Errors                               |
| general            | General                              |
| ha                 | HA                                   |
| loop-detection     | Loop detection                       |
| modify-route       | Modify route                         |
| notifications      | Notification                         |
| recursive-next-hop | Recursive next hop                   |
| summary            | Summary                              |
| ufdm               | UFDM                                 |
| ufdm-detail        | UFDM Detail                          |
| ufdm-summary       | UFDM Summary                         |

### Command Mode

- /exec

## clear routing ipv6 event-history

clear routing ipv6 [ unicast ] event-history { am | cli | detail | errors | general | ha | lfe | recursive-next-hop | summary | ufdm | ufdm-detail | ufdm-summary }

### Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| clear              |  | Reset functions                      |
| routing            |  | Clear routing information            |
| ipv6               |  | Clear IPv6 commands                  |
| unicast            |  | (Optional) Clear unicast information |
| event-history      |  | Clear routing event log              |
| am                 |  | AM                                   |
| cli                |  | CLI                                  |
| detail             |  | Detail                               |
| errors             |  | Errors                               |
| general            |  | General                              |
| ha                 |  | HA                                   |
| lfe                |  | LFE                                  |
| recursive-next-hop |  | Recursive next hop                   |
| summary            |  | Summary                              |
| ufdm               |  | UFDM                                 |
| ufdm-detail        |  | UFDM Detail                          |
| ufdm-summary       |  | UFDM Summary                         |

### Command Mode

- /exec

# clear routing memstats

```
clear routing [ ip | ipv4 ] [ unicast ] memstats
```

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| clear              | Reset functions                        |
| routing            | Clear routing information              |
| ip                 | (Optional) Clear IP commands           |
| ipv4               | (Optional) Clear IP commands           |
| unicast            | (Optional) Display unicast information |
| memstats           | Clear urib memory statistics           |

## Command Mode

- /exec

# clear rpm pss

```
clear rpm pss { running | startup | all }
```

## Syntax Description

### Syntax Description

---

|       |                 |
|-------|-----------------|
| clear | Reset functions |
|-------|-----------------|

---

|     |                            |
|-----|----------------------------|
| rpm | Route Policy Manager (RPM) |
|-----|----------------------------|

---

|     |                               |
|-----|-------------------------------|
| pss | Clear PSS related information |
|-----|-------------------------------|

---

|         |  |
|---------|--|
| running | Clear the running PSS commands configuration |
|---------|--|

---

|         |  |
|---------|--|
| startup | Clear the startup PSS commands configuration |
|---------|--|

---

|     |                                      |
|-----|--------------------------------------|
| all | Clear all PSS commands configurarion |
|-----|--------------------------------------|

---

## Command Mode

- /exec

# clear scheduler logfile

clear scheduler logfile

## Syntax Description

---

### Syntax Description

---

|       |                 |
|-------|-----------------|
| clear | Reset functions |
|-------|-----------------|

---

|           |                          |
|-----------|--------------------------|
| scheduler | Scheduler clear commands |
|-----------|--------------------------|

---

|         |                          |
|---------|--------------------------|
| logfile | Clear scheduler log file |
|---------|--------------------------|

---

## Command Mode

- /exec



# clear screen

clear screen

## Syntax Description

---

### Syntax Description

---

|       |                 |
|-------|-----------------|
| clear | Reset functions |
|-------|-----------------|

---

|        |              |
|--------|--------------|
| screen | Clear screen |
|--------|--------------|

---

## Command Mode

- /exec

# clear session state name

clear session state name <s4>

## Syntax Description

---

### Syntax Description

---

clear Reset functions

---

session Reset cfg session internals

---

state Reset cfg session internal state

---

name Reset cfg session internal state for a given name

---

s4 Enter the name of the session

---

## Command Mode

- /exec

# clear sflow statistics

clear sflow statistics

## Syntax Description

| Syntax Description |                            |
|--------------------|----------------------------|
| clear              | Reset functions            |
| sflow              | sFlow global configuration |
| statistics         | Clear sFlow statistics     |

## Command Mode

- /exec

# clear snmp counters

clear snmp counters

## Syntax Description

---

### Syntax Description

---

|       |                 |
|-------|-----------------|
| clear | Reset functions |
|-------|-----------------|

---

|      |                   |
|------|-------------------|
| snmp | Clear SNMP Tables |
|------|-------------------|

---

|          |                        |
|----------|------------------------|
| counters | Clear SNMP<br>counters |
|----------|------------------------|

---

## Command Mode

- /exec

# clear snmp hostconfig

clear snmp hostconfig

## Syntax Description

| Syntax Description |                      |  |
|--------------------|----------------------|--|
| clear              | Reset functions      |  |
| snmp               | Clear SNMP Tables    |  |
| hostconfig         | Clear SNMP Host List |  |

## Command Mode

- /exec

## clear sockets internal event-history

clear sockets internal event-history { errors | setup | ha | event | proto | log | all } [ dump-to-file ]

### Syntax Description

#### Syntax Description

|               |  |
|---------------|--|
| clear         | Reset functions  |
| sockets       | Display sockets status and configuration                     |
| internal      | Commands for internal use                                    |
| event-history | various event logs of sockets                                |
| errors        | Clear error logs of sockets                                  |
| setup         | Clear setup debug message buffer of sockets                  |
| ha            | Clear ha debug message buffer of sockets                     |
| event         | Clear events/pcb debug message of sockets                    |
| proto         | Clear tcp/udp/raw ip debug message of sockets                |
| log           | Clear syslog message of sockets                              |
| all           | Clear all event history buffers                              |
| dump-to-file  | (Optional) Dump the sockets event history logs into the file |

### Command Mode

- /exec

# clear sockets statistics

clear sockets statistics { all | tcp | tcp6 | udp | udp6 | raw | raw6 }

## Syntax Description

| Syntax Description |                                    |
|--------------------|------------------------------------|
| clear              | Reset functions                    |
| sockets            | Clear sockets statistics           |
| statistics         | Clear sockets statistics           |
| all                | Clear TCP/UDP/RAW v4/v6 statistics |
| tcp                | Clear TCP v4 statistics            |
| tcp6               | Clear TCP v6 statistics            |
| udp                | Clear UDP v4 statistics            |
| udp6               | Clear UDP v6 statistics            |
| raw                | Clear RAW v4 statistics            |
| raw6               | Clear RAW v6 statistics            |

## Command Mode

- /exec

# clear spanning-tree counters

clear spanning-tree counters [ interface <interface-id> | vlan <vlan-id> | bridge-domain <bd-id> ]

## Syntax Description

| Syntax Description  |            |  |
|---------------------|------------|--|
| clear               |            | Reset functions                                  |
| spanning-tree       |            | Spanning Tree Subsystem                          |
| counters            |            | Clear spanning tree statistics                   |
| interface           | (Optional) | Specify an interface as a target for the command |
| <i>interface-id</i> | (Optional) | Specify an interface as a target for the command |
| vlan                | (Optional) | VLAN Switch Spanning Trees                       |
| bridge-domain       | (Optional) | Bridge-Domain Switch Spanning Trees              |
| <i>vlan-id</i>      | (Optional) | vlan range, Example: 1,3-5,7,9-11                |
| <i>bd-id</i>        | (Optional) | Bridge-Domain range, Example: 2,4-5,7,9-11       |

## Command Mode

- /exec



# clear spanning-tree detected-protocols

clear spanning-tree detected-protocols [ interface <interface-id> ]

## Syntax Description

| Syntax Description  |  |   |
|---------------------|--|---|
| clear               |  | Reset functions   |
| spanning-tree       |  | Spanning Tree Subsystem                                     |
| detected-protocols  |  | Restart the protocol migration process                      |
| interface           |  | (Optional) Specify an interface as a target for the command |
| <i>interface-id</i> |  | (Optional) Specify an interface as a target for the command |

## Command Mode

- /exec

# clear spanning-tree sps-hist

clear spanning-tree sps-hist

## Syntax Description

| Syntax Description |  |                         |
|--------------------|--|-------------------------|
| clear              |  | Reset functions         |
| spanning-tree      |  | Spanning Tree Subsystem |
| sps-hist           |  | Set port state stats    |

## Command Mode

- /exec

# clear ssh hosts

clear ssh hosts

## Syntax Description

---

### Syntax Description

---

**clear** Reset functions

---

**ssh** Clear ssh values

---

**hosts** Clear the list of trusted ssh hosts

---

## Command Mode

- /exec

## clear system internal adjmgr event-history

clear system internal adjmgr event-history { control | errors | ipc | stats | ha | cli | sdb | snmp | ksink | nb | dme-event | event | all } [ dump-to-file ]

### Syntax Description

#### Syntax Description

|               |   |
|---------------|---|
| clear         | Reset functions   |
| system        | System-related show commands                                |
| internal      | Commands for internal use                                   |
| adjmgr        | AM information  |
| event-history | various event logs of Adjmgr                                |
| control       | Clear control logs of Adjmgr                                |
| errors        | Clear error logs of Adjmgr                                  |
| ipc           | Clear ipc debug message logs of Adjmgr                      |
| stats         | Clear stats debug message logs of Adjmgr                    |
| ha            | Clear ha debug message logs of Adjmgr                       |
| cli           | Clear cli related events of Adjmgr                          |
| sdb           | Clear sdb debug message logs of Adjmgr                      |
| snmp          | Clear snmp debug message logs of Adjmgr                     |
| ksink         | Clear ksink debug message logs of Adjmgr                    |
| nb            | Clear netbroker debug message logs of Adjmgr                |
| dme-event     | Clear dme event logs of Adjmgr                              |
| event         | Clear event logs of Adjmgr                                  |
| all           | Clear all event-history logs of Adjmgr                      |
| dump-to-file  | (Optional) Dump the AdjMgr event history logs into the file |

### Command Mode

- /exec

# clear system internal forwarding pd-history

clear system internal forwarding pd-history

## Syntax Description

| Syntax Description |  |                              |
|--------------------|--|------------------------------|
| clear              |  | Clear bintrace entries       |
| system             |  | System-related show commands |
| internal           |  | Commands for internal use    |
| forwarding         |  | forwarding                   |
| pd-history         |  | MFDM DI history              |

## Command Mode

- /exec

# clear system internal forwarding pd-history bitmask

clear system internal forwarding pd-history bitmask

## Syntax Description

| Syntax Description |  |                              |
|--------------------|--|------------------------------|
| clear              |  | Clear bintrace entries       |
| system             |  | System-related show commands |
| internal           |  | Commands for internal use    |
| forwarding         |  | forwarding                   |
| pd-history         |  | MFDM DI history              |
| bitmask            |  | Bitmask                      |

## Command Mode

- /exec

# clear system internal forwarding unicast counters

clear system internal forwarding unicast counters

## Syntax Description

| Syntax Description |            |                                 |
|--------------------|------------|---------------------------------|
|                    | clear      | Show running system information |
|                    | system     | System-related show commands    |
|                    | internal   | Commands for internal use       |
|                    | forwarding | Show fib information            |
|                    | unicast    | show unicast information        |
|                    | counters   | Show mpls pd counters           |

## Command Mode

- /exec

# clear system internal nbm counters

clear system internal nbm counters

## Syntax Description

---

### Syntax Description

---

clear    Reset functions

---

system   System-related show commands

---

internal   Commands for internal use

---

nbm    Non Blocking Multicast

---

counters   Counters

---

## Command Mode

- /exec



# clear system internal nbm receiver-bt-history

clear system internal nbm receiver-bt-history

## Syntax Description

| Syntax Description |                     |                              |
|--------------------|---------------------|------------------------------|
|                    | clear               | Reset functions              |
|                    | system              | System-related show commands |
|                    | internal            | Commands for internal use    |
|                    | nbm                 | Non Blocking Multicast       |
|                    | receiver-bt-history | rc bt history                |

## Command Mode

- /exec

## clear system internal nbm receiver-list

```
clear system internal nbm receiver-list { <grp> <src> <rep> <oif-name> | all }
```

### Syntax Description

| Syntax Description |                              |  |
|--------------------|------------------------------|--|
| clear              | Reset functions              |  |
| system             | System-related show commands |  |
| internal           | Commands for internal use    |  |
| nbm                | Non Blocking Multicast       |  |
| receiver-list      | Receiver list                |  |
| <i>grp</i>         | Multicast group address      |  |
| <i>src</i>         | Source address               |  |
| <i>rep</i>         | Reporter address             |  |
| <i>oif-name</i>    | Outgoing interface name      |  |
| all                | Entire list                  |  |

### Command Mode

- /exec

# clear system internal nbm sender-bt-history

clear system internal nbm sender-bt-history

## Syntax Description

| Syntax Description |                   |                              |
|--------------------|-------------------|------------------------------|
|                    | clear             | Reset functions              |
|                    | system            | System-related show commands |
|                    | internal          | Commands for internal use    |
|                    | nbm               | Non Blocking Multicast       |
|                    | sender-bt-history | send bt history              |

## Command Mode

- /exec

## clear system internal nbm sender-list

clear system internal nbm sender-list { <grp> <src> | all }

### Syntax Description

| Syntax Description |                              |  |
|--------------------|------------------------------|--|
| clear              | Reset functions              |  |
| system             | System-related show commands |  |
| internal           | Commands for internal use    |  |
| nbm                | Non Blocking Multicast       |  |
| sender-list        | Sender list                  |  |
| <i>grp</i>         | Multicast group address      |  |
| <i>src</i>         | Source address               |  |
| all                | Entire list                  |  |

### Command Mode

- /exec

# clear system internal nbm shm table

clear system internal nbm shm table [ <i0> ]

## Syntax Description

| Syntax Description |                                |
|--------------------|--------------------------------|
| clear              | Reset functions                |
| system             | System-related show commands   |
| internal           | Commands for internal use      |
| nbm                | Non Blocking Multicast         |
| shm                | Shared Memory related commands |
| table              | SHM table                      |
| <i>i0</i>          | (Optional) If Index            |

## Command Mode

- /exec

## clear system internal npacl event-history

clear system internal npacl event-history { acl | ppf | cli | internal | all } [ dump-to-file ]

### Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| clear              | Reset functions  |  |
| system             | system   |  |
| internal           | Commands for internal use                                  |  |
| npacl              | Configure NPACL feature                                    |  |
| event-history      | event history  |  |
| acl                | Clear acl policy history                                   |  |
| ppf                | Clear ppf interaction history                              |  |
| cli                | Clear cli history  |  |
| internal           | Clear internal   |  |
| all                | Clear all history buffers                                  |  |
| dump-to-file       | (Optional) Dump the npacl event history logs into the file |  |

### Command Mode

- /exec

## clear system internal orib event-history

clear system internal orib event-history [ <orib-event-hist-buf-name> ] [ verbose ]

### Syntax Description

| Syntax Description              |            |                                       |
|---------------------------------|------------|---------------------------------------|
| clear                           |            | Reset functions                       |
| system                          |            | Clear logs in system                  |
| internal                        |            | Commands for internal use             |
| orib                            |            | Clear ORIB commands                   |
| event-history                   |            | ORIB event logs                       |
| <i>orib-event-hist-buf-name</i> | (Optional) | Event history buffer                  |
| verbose                         | (Optional) | Do not add per route info into buffer |

### Command Mode

- /exec

# clear system internal pktmgr internal event-history

clear system internal pktmgr internal event-history { errors | control | log | ha | pkt-errors | pkt-buffer | all } [ dump-to-file ]

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| clear              | Reset functions   |  |
| system             | System-related show commands                                |  |
| internal           | Commands for internal use                                   |  |
| pktmgr             | Clear Packet Manager information                            |  |
| internal           | Commands for internal use                                   |  |
| event-history      | Clear various event logs of Pktmgr                          |  |
| errors             | Clear error logs of Pktmgr                                  |  |
| control            | Clear control message of Pktmgr                             |  |
| log                | Clear syslog message of Pktmgr                              |  |
| ha                 | Clear ha debug message of Pktmgr                            |  |
| pkt-errors         | Clear pkt error message of Pktmgr                           |  |
| pkt-buffer         | Clear pkt buffers message of Pktmgr                         |  |
| all                | All event history buffers                                   |  |
| dump-to-file       | (Optional) Dump the PktMgr event history logs into the file |  |

## Command Mode

- /exec



# clear system internal plbm packet-stats service all

```
clear system internal plbm packet-stats service { all | name <service-name> }
```

## Syntax Description

| Syntax Description |                     |                              |
|--------------------|---------------------|------------------------------|
|                    | clear               | Reset functions              |
|                    | system              | System-related show commands |
|                    | internal            | Clear plbm internal          |
|                    | plbm                | Clear plbm feature           |
|                    | packet-stats        | PLB packet statistics        |
|                    | service             | PLB service                  |
|                    | all                 | Clear all PLB services       |
|                    | name                | Specify PLB service name     |
|                    | <i>service-name</i> | Service name                 |

## Command Mode

- /exec

# clear system internal virtual-service utilization statistics CPU

clear system internal virtual-service utilization statistics CPU

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| clear              |  | Reset functions                               |
| system             |  | Enable debugging of system components         |
| internal           |  | Commands for internal use                     |
| virtual-service    |  | Clear statistics of virtual service           |
| utilization        |  | Utilization information about virtual service |
| statistics         |  | Clear statistics of virtual service           |
| CPU                |  | Clear CPU statistics of virtual service       |

## Command Mode

- /exec

# clear system login failures

clear system login failures

## Syntax Description

|                           |          |  |
|---------------------------|----------|--|
| <b>Syntax Description</b> | clear    | Reset functions                                  |
|                           | system   | System management commands                       |
|                           | login    | Secure Login                                     |
|                           | failures | Clear login failures in the current watch period |

## Command Mode

- /exec

# clear system reset-reason

clear system reset-reason

## Syntax Description

| Syntax Description |              |                                       |
|--------------------|--------------|---------------------------------------|
|                    | clear        | Reset functions                       |
|                    | system       | Clear logs in system                  |
|                    | reset-reason | Clear reset-reason logs in the system |

## Command Mode

- /exec

# clear system reset-reason history

clear system reset-reason history

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| clear              |  | Reset functions                               |
| system             |  | Clear logs in system                          |
| reset-reason       |  | Clear reset-reason logs in the system         |
| history            |  | Clear reset-reason history logs in the system |

## Command Mode

- /exec

## clear tacacs-server statistics

```
clear tacacs-server statistics <host0> [ __readonly__ { <server_state> [ <clock_time> { monitoring_statistics
<time_in_pstate> <ndead> <tt_in_dstate> } ] } } { auth_statistics <auth_failed_transactions>
<auth_succ_transactions> <auth_req_sent> <auth_req_timedout> <auth_resp_no_match>
<auth_resp_not_processed> <auth_resp_error> } { autho_statistics <autho_failed_transactions>
<autho_succ_transactions> <autho_req_sent> <autho_req_timedout> <autho_resp_no_match>
<autho_resp_not_processed> <autho_resp_error> } { acct_statistics <acct_failed_transactions>
<acct_succ_transactions> <acct_req_sent> <acct_req_timedout> <acct_resp_no_match>
<acct_resp_not_processed> <acct_resp_error> } ]
```

### Syntax Description

| Syntax Description              |  |   |
|---------------------------------|--|---|
| clear                           |  | Reset functions   |
| tacacs-server                   |  | Clear TACACS related parameters                                   |
| statistics                      |  | Clear TACACS statistics   |
| <i>host0</i>                    |  | DNS name or IP address  |
| <i>__readonly__</i>             |  | (Optional)  |
| <i>server_state</i>             |  | (Optional) Show state of server                                   |
| <i>clock_time</i>               |  | (Optional) Show clock time in terms of hours, minutes and seconds |
| monitoring_statistics           |  | (Optional) Monitoring Statistics                                  |
| <i>time_in_pstate</i>           |  | (Optional) Time in previous state                                 |
| <i>ndead</i>                    |  | (Optional) Number of times dead                                   |
| <i>tt_in_dstate</i>             |  | (Optional) Total time in dead state                               |
| auth_statistics                 |  | (Optional) Authentication Statistics                              |
| autho_statistics                |  | (Optional) Authorization Statistics                               |
| acct_statistics                 |  | (Optional) Accounting Statistics                                  |
| <i>auth_failed_transactions</i> |  | (Optional) Authentication: Failed transactions                    |
| <i>auth_succ_transactions</i>   |  | (Optional) Authentication: Successful transactions                |
| <i>auth_req_sent</i>            |  | (Optional) Authentication: Requests sent                          |
| <i>auth_req_timedout</i>        |  | (Optional) Authentication: Requests timedout                      |
| <i>auth_resp_no_match</i>       |  | (Optional) Authentication: Responses with no matching requests    |
| <i>auth_resp_not_processed</i>  |  | (Optional) Authentication: Responses not processed                |
| <i>auth_resp_error</i>          |  | (Optional) Authentication: Responses containing errors            |

|                                  |   |
|----------------------------------|---|
| <i>autho_failed_transactions</i> | (Optional) Authorization: Failed transactions                 |
| <i>autho_succ_transactions</i>   | (Optional) Authorization: Successful transactions             |
| <i>autho_req_sent</i>            | (Optional) Authorization: Requests sent                       |
| <i>autho_req_timedout</i>        | (Optional) Authorization: Requests timedout                   |
| <i>autho_resp_no_match</i>       | (Optional) Authorization: Responses with no matching requests |
| <i>autho_resp_not_processed</i>  | (Optional) Authorization: Responses not processed             |
| <i>autho_resp_error</i>          | (Optional) Authorization: Responses containing errors         |
| <i>acct_failed_transactions</i>  | (Optional) Accounting: Failed transactions                    |
| <i>acct_succ_transactions</i>    | (Optional) Accounting: Successful transactions                |
| <i>acct_req_sent</i>             | (Optional) Accounting: Requests sent                          |
| <i>acct_req_timedout</i>         | (Optional) Accounting: Requests timedout                      |
| <i>acct_resp_no_match</i>        | (Optional) Accounting: Responses with no matching requests    |
| <i>acct_resp_not_processed</i>   | (Optional) Accounting: Responses not processed                |
| <i>acct_resp_error</i>           | (Optional) Accounting: Responses containing errors            |

**Command Mode**

- /exec

# clear tech-support lock

clear tech-support lock

## Syntax Description

---

### Syntax Description

---

|       |                 |
|-------|-----------------|
| clear | Reset functions |
|-------|-----------------|

---

|              |  |
|--------------|--|
| tech-support | Gather information for troubleshooting |
|--------------|--|

---

|      |   |
|------|---|
| lock | Clear the lock which prohibits multiple show techs to run in parallel |
|------|---|

---

## Command Mode

- /exec



# clear tech-support lock

clear tech-support lock

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| clear              | Reset functions   |
| tech-support       | Gather information for troubleshooting                                |
| lock               | Clear the lock which prohibits multiple show techs to run in parallel |

## Command Mode

- /exec

# clear track internal info counters

clear track internal info counters

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| clear              | Reset functions                           |
| track              | Clear track information                   |
| internal           | Clear internal track information          |
| info               | Clear internal data structure information |
| counters           | Clear track counters information          |

## Command Mode

- /exec

# clear user

clear user <*s0*>

## Syntax Description

---

### Syntax Description

---

*clear* Reset functions

---

*user* Logout a particular user

---

*s0* Enter the username

---

## Command Mode

- /exec

# clear veobc counters

clear veobc counters

## Syntax Description

---

### Syntax Description

---

clear    Reset function

---

veobc    Reset the veobc counters

---

counters    Reset the veobc statistic counters to zero

---

## Command Mode

- /exec

# clear vlan access-list counters

clear vlan access-list counters [ <name> ]

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| clear              | Reset functions                           |
| vlan               | Vlan commands                             |
| access-list        | Clear access list statistical information |
| counters           | Clear access list counters                |
| <i>name</i>        | (Optional) List name                      |

## Command Mode

- /exec

# clear vlan counters

```
clear vlan [ id <vlan-id> ] counters
```

## Syntax Description

---

**Syntax Description**

---

clear    Reset functions

---

vlan    Vlan commands

---

id      (Optional) clear VLAN counters by VLAN id

---

*vlan-id* (Optional) VLAN ID 1-4094 or range(s): 1-5, 10 or 2-5,7-19

---

counters display counters

---

## Command Mode

- /exec

# clear vmtracker counters

clear vmtracker counters

## Syntax Description

| Syntax Description |                              |
|--------------------|------------------------------|
| clear              | Clear                        |
| vmtracker          | Clear vmtracker info         |
| counters           | Clear vmtracker counter info |

## Command Mode

- /exec

# clear vpc statistics all

clear vpc statistics all

## Syntax Description

---

### Syntax Description

---

|            |                                    |
|------------|------------------------------------|
| clear      | Reset functions                    |
| vpc        | Virtual Port Channel configuration |
| statistics | Statistics                         |
| all        | All vPC statistics                 |

---

## Command Mode

- /exec



# clear vpc statistics peer-keepalive

clear vpc statistics peer-keepalive

## Syntax Description

| Syntax Description |  |                                    |
|--------------------|--|------------------------------------|
| clear              |  | Reset functions                    |
| vpc                |  | Virtual Port Channel configuration |
| statistics         |  | Statistics                         |
| peer-keepalive     | peer keepalive module related statistics |                                    |

## Command Mode

- /exec

## clear vpc statistics vpc

```
clear vpc statistics { vpc <vpc_num> | peer-link }
```

### Syntax Description

| Syntax Description |                               |  |
|--------------------|-------------------------------|--|
| clear              | Reset functions               |  |
| vpc                | Statistics for a specific vPC |  |
| statistics         | Statistics                    |  |
| <i>vpc_num</i>     | Virtual Port Channel number   |  |
| peer-link          | stats for peer-link           |  |

### Command Mode

- /exec

# clear vpc transport statistics

clear vpc transport statistics [ *\_\_readonly\_\_* <last-clear-time> ]

## Syntax Description

| Syntax Description     |            |                                      |
|------------------------|------------|--------------------------------------|
| clear                  |            | Reset functions                      |
| vpc                    |            | Virtual Port Channel configuration   |
| transport              |            | cfs transport                        |
| statistics             |            | Statistics                           |
| <i>__readonly__</i>    | (Optional) | Read Only                            |
| <i>last-clear-time</i> | (Optional) | time difference from last clear time |

## Command Mode

- /exec/

## clear vrrp statistics

```
clear vrrp statistics [ interface <intf_num> ] [ vr <vr_id> ]
```

### Syntax Description

| Syntax Description |  |
|--------------------|--|
| clear              | Reset functions                                    |
| vrrp               | Clear virtual router                               |
| statistics         | Clear global virtual router statistics             |
| interface          | (Optional) Select interface                        |
| <i>intf_num</i>    | (Optional)   |
| vr                 | (Optional) [1-255] clear virtual router statistics |
| <i>vr_id</i>       | (Optional)   |

### Command Mode

- /exec

# clear vrrpv3 event-history

clear vrrpv3 event-history { debugs | errors | msgs | all }

## Syntax Description

| Syntax Description |  |                                       |
|--------------------|--|---------------------------------------|
| clear              |  | Reset functions                       |
| vrrpv3             |  | VRRPv3 Clear commands                 |
| event-history      |  | Clear event history buffers of vrrpv3 |
| debugs             |  | Clear debug event buffer of vrrpv3    |
| errors             |  | Clear errors event buffer of vrrpv3   |
| msgs               |  | Clear MTS event buffer of vrrpv3      |
| all                |  | Clear all event buffers of vrrpv3     |

## Command Mode

- /exec

## clear vrrpv3 statistics

```
clear vrrpv3 statistics [ <interface_num> [ <group_num> ] ] [ <opt_v4_or_v6> ]
```

### Syntax Description

| Syntax Description   |            |                       |
|----------------------|------------|-----------------------|
| clear                |            | Reset functions       |
| vrrpv3               |            | VRRPv3 Clear commands |
| statistics           |            | VRRPV3 statistics     |
| <i>interface_num</i> | (Optional) | Interface             |
| <i>group_num</i>     | (Optional) | Group number          |
| <i>opt_v4_or_v6</i>  | (Optional) | Enter ipv4 or ipv6    |

### Command Mode

- /exec

# clear xl

clear xl

## Syntax Description

---

### Syntax Description

---

**clear** Reset  
functions

---

**xl**

---

## Command Mode

- /exec

## cli alias name

{ cli alias name <s0> <line> | no cli alias name <s0> [ <line> ] }

### Syntax Description

| Syntax Description |                                      |
|--------------------|--------------------------------------|
| no                 | Negate a command or set its defaults |
| cli                | Configure CLI commands               |
| alias              | Define an alias                      |
| name               | Specify the alias                    |
| s0                 | Alias command                        |
| line               | Alias definition                     |

### Command Mode

- /exec/configure



# cli reload parsetree

cli reload parsetree

## Syntax Description

---

### Syntax Description

---

cli

---

reload

---

parsetree

---

## Command Mode

- /exec

# cli show running-config local

cli show running-config local

## Syntax Description

| Syntax Description |                |
|--------------------|----------------|
|                    | cli            |
|                    | show           |
|                    | running-config |
|                    | local          |

## Command Mode

- /exec

# cli var name

```
{ cli var name <s0> <line> | no cli var name <s0> [ <line> ] }
```

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | <b>no</b> Negate a command or set its defaults |
|                           | <b>cli</b> Configure CLI commands              |
|                           | <b>var</b> Define a variable                   |
|                           | <b>name</b> Specify a variable name            |
|                           | <b>s0</b> Variable name                        |
|                           | <b>line</b> Variable value                     |

## Command Mode

- /exec/configure

# cli var name

cli no var name <s0>

## Syntax Description

---

**Syntax Description**

---

cli CLI commands

---

no Negate a command or set its defaults

---

var Unset a variable

---

name Specify a variable name

---

s0 Variable name

---

## Command Mode

- /exec

# cli var name

[no] cli var name <s0>

## Syntax Description

| Syntax Description |                                      |
|--------------------|--------------------------------------|
| no                 | Negate a command or set its defaults |
| cli                | CLI commands                         |
| var                | Unset a variable                     |
| name               | Specify a variable name              |
| s0                 | Variable name                        |

## Command Mode

- /exec

# cli var name

cli var name <s0> <line>

## Syntax Description

---

**Syntax Description**

---

*cli* CLI commands

---

*var* Define a variable

---

*name* Specify a variable name

---

*s0* Variable name

---

*line* Variable value

---

## Command Mode

- /exec

# cli verifynrun

[no] cli verifynrun

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| cli                | CLI commands                                    |
| verifynrun         | Verify and run                                  |

## Command Mode

- /exec

# client-to-client reflection

[no] client-to-client reflection

## Syntax Description

| Syntax Description          |   |
|-----------------------------|---|
| no                          | (Optional) Negate a command or set its defaults                 |
| client-to-client reflection | Configure client-to-client route reflection of routes permitted |

## Command Mode

- /exec/configure/router-bgp/router-bgp-af



# clis all

clis { no debug | undebug } all

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| clis               | dcos cli command                             |
| no                 | Negate a command or set its defaults         |
| undebug            | Disable Debugging functions (See also debug) |
| debug              | Debugging functions                          |
| all                | Disable                                      |

## Command Mode

- /exec

## clock-tolerance ntp oneway absolute

```
{ { no | default } clock-tolerance | clock-tolerance ntp oneway { absolute <abs-value> | percent <percentage> } }
```

### Syntax Description

#### Syntax Description

|                        |  |
|------------------------|--|
| no                     |  |
| <i>clock-tolerance</i> | ntp  |
| default                | Set a command to its defaults                                |
| clock-tolerance        | Set acceptable clock synchronization error                   |
| ntp                    | Acceptable clock synchronization error due to NTP            |
| oneway                 | Acceptable clock synchronization error in oneway measurement |
| absolute               | Acceptable error in microseconds                             |
| percent                | Acceptable error as percent of value measured                |
| <i>abs-value</i>       | Number in microseconds                                       |
| <i>percentage</i>      | Percentage of one-way delay                                  |

### Command Mode

- /exec/configure/ip-sla/jitter

# clock format 12

[no] clock format { 12-hours | 24-hours }

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| clock              | Clock   |
| format             | Display format of clock                         |
| 12-hours           | 12 hours display                                |
| 24-hours           | 24 hours display                                |

## Command Mode

- /exec/configure

# clock format show-timezone debug

[no] clock format show-timezone debug

## Syntax Description

| Syntax Description |               |   |
|--------------------|---------------|---|
|                    | no            | (Optional) Negate a command or set its defaults |
|                    | clock         | Clock   |
|                    | format        | Display format of clock                         |
|                    | show-timezone | Display the configured timezone                 |
|                    | debug         | Display the configured timezone in debugs       |

## Command Mode

- /exec/configure

# clock format show-timezone syslog

[no] clock format show-timezone syslog

## Syntax Description

| Syntax Description |               |   |
|--------------------|---------------|---|
|                    | no            | (Optional) Negate a command or set its defaults |
|                    | clock         | Clock   |
|                    | format        | Display format of clock                         |
|                    | show-timezone | Display the configured timezone                 |
|                    | syslog        | Display the configured timezone in syslogs      |

## Command Mode

- /exec/configure

# clock protocol

[no] clock protocol { ntp | ptp | none } vdc <vdc-id>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| clock              | Clock   |
| protocol           | protocol  |
| ntp                | ntp   |
| ptp                | ptp   |
| none               | none (clock can be set manually)                |
| vdc                | vdc   |
| <i>vdc-id</i>      | vdc-id  |

## Command Mode

- /exec/configure

# clock set

clock set <s0> <i0> { April <i1> | August <i2> | December <i3> | February <i4> | January <i5> | July <i6> | June <i7> | March <i8> | May <i9> | November <i10> | October <i11> | September <i12> }

## Syntax Description

| Syntax Description |  |                                  |
|--------------------|--|----------------------------------|
| clock              |  | Clock                            |
| set                |  | HH:MM:SS Current Time            |
| s0                 |  | HH:MM:SS Current Time            |
| i0                 |  | Day of the month                 |
| April              |  | Month of the year                |
| i1                 |  | Enter the year (no abbreviation) |
| August             |  | Month of the year                |
| i2                 |  | Enter the year (no abbreviation) |
| December           |  | Month of the year                |
| i3                 |  | Enter the year (no abbreviation) |
| February           |  | Month of the year                |
| i4                 |  | Enter the year (no abbreviation) |
| January            |  | Month of the year                |
| i5                 |  | enter the year (no abbreviation) |
| July               |  | Month of the year                |
| i6                 |  | Enter the year (no abbreviation) |
| June               |  | Month of the year                |
| i7                 |  | Enter the year (no abbreviation) |
| March              |  | Month of the year                |
| i8                 |  | Enter the year (no abbreviation) |
| May                |  | Month of the year                |
| i9                 |  | Enter the year (no abbreviation) |
| November           |  | Month of the year                |
| i10                |  | Enter the year (no abbreviation) |

---

October Month of the year

---

*i11* Enter the year (no abbreviation)

---

September Month of the year

---

*i12* Enter the year (no abbreviation)

---

**Command Mode**

- /exec



# clock summer

```
{ clock { summer-time <s0> [ <i0> <s1> <s2> <s3> <i1> <s4> <s5> <s6> [ <i2> ] ] | timezone <s7> <i3>
<i4> } | no clock { summer-time [ <s0> <i0> <s1> <s2> <s3> <i1> <s4> <s5> <s6> <i2> ] | timezone [ <s7>
<i3> <i4> ] } }
```

## Syntax Description

### Syntax Description

|             |   |
|-------------|---|
| no          | Negate a command or set its defaults                        |
| clock       | Clock   |
| summer-time | Configure summer (daylight savings) time                    |
| <i>s0</i>   | Name of time zone in summer, such as PDT, CDT, EDT, etc..   |
| <i>i0</i>   | (Optional) Week number to start (first week=1, last week=5) |
| <i>s1</i>   | (Optional) Weekday to start                                 |
| <i>s2</i>   | (Optional) Month to start                                   |
| <i>s3</i>   | (Optional) HH:MM Time to start                              |
| <i>i1</i>   | (Optional) Week number to end (first week=1, last week=5)   |
| <i>s4</i>   | (Optional) Weekday to end                                   |
| <i>s5</i>   | (Optional) Month to end                                     |
| <i>s6</i>   | (Optional) HH:MM Time to end                                |
| <i>i2</i>   | (Optional) Offset to add in minutes                         |
| timezone    | Configure time zone   |
| <i>s7</i>   | Name of time zone, such as PST, MST, CST, EST, etc..        |
| <i>i3</i>   | Hours offset from UTC                                       |
| <i>i4</i>   | Minutes offset from UTC                                     |

## Command Mode

- /exec/configure

# clock sync-interval

[no] clock sync-interval <intv>

## Syntax Description

| Syntax Description |               |                                      |
|--------------------|---------------|--------------------------------------|
| no                 | (Optional)    | Negate a command or set its defaults |
| clock              |               | Clock                                |
| sync-interval      | sync-interval | in seconds                           |
| <i>intv</i>        | interval      |                                      |

## Command Mode

- /exec/configure

# cluster-id

[no] cluster-id { <ip-cluster-id> | <int-cluster-id> }

## Syntax Description

|                           |                       |   |
|---------------------------|-----------------------|---|
| <b>Syntax Description</b> | no                    | (Optional) Negate a command or set its defaults |
|                           | cluster-id            | Configure Route Reflector Cluster-ID            |
|                           | <i>ip-cluster-id</i>  | Cluster-id as an IP address                     |
|                           | <i>int-cluster-id</i> | Cluster-id as a 32 bit quantity                 |

## Command Mode

- /exec/configure/router-bgp/vrf-cmds

# collect counter bytes

[no] collect counter { bytes | packets } [ long ]

## Syntax Description

---

**Syntax Description**

---

collect Specify a non-key field

---

counter Counters to collect

---

bytes Total number of bytes

---

packets Total number of packets

---

long (Optional) Long counter (64 bits)

---

## Command Mode

- /exec/configure/nfm-record

# collect flow sampler id

[no] collect flow sampler id

## Syntax Description

---

### Syntax Description

---

collect Specify a non-key field

---

flow Flow identifying fields

---

sampler Sampler

---

id Identifier for sampler used for the flow

---

## Command Mode

- /exec/configure/nfm-record

# collect ip version

[no] collect ip version

## Syntax Description

---

### Syntax Description

---

collect Specify a non-key field

---

ip IP attributes

---

version IPv4 or IPv6

---

## Command Mode

- /exec/configure/nfm-record

# collect routing destination as

[no] collect routing destination as [ peer ]

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| collect            | Specify a non-key field                              |
| routing            | Routing attributes                                   |
| destination        | AS destination                                       |
| as                 | Destination AS number of origin network              |
| peer               | (Optional) Destination AS number of the peer network |

## Command Mode

- /exec/configure/nfm-record

# collect routing forwarding-status

[no] collect routing forwarding-status

## Syntax Description

| Syntax Description |                   |                                 |
|--------------------|-------------------|---------------------------------|
|                    | collect           | Specify a non-key field         |
|                    | routing           | Routing attributes              |
|                    | forwarding-status | Forwarding status of the packet |

## Command Mode

- /exec/configure/nfm-record



# collect routing next-hop address ipv4

[no] collect routing next-hop address ipv4 [ bgp ]

## Syntax Description

| Syntax Description |                                      |
|--------------------|--------------------------------------|
| collect            | Specify a non-key field              |
| routing            | Routing attributes                   |
| next-hop           | Next hop address                     |
| address            | Address                              |
| ipv4               | IPv4 next hop address                |
| bgp                | (Optional) BGP next hop IPv4 address |

## Command Mode

- /exec/configure/nfm-record

# collect routing next-hop address ipv6

[no] collect routing next-hop address ipv6 [ bgp ]

## Syntax Description

| Syntax Description |                                      |
|--------------------|--------------------------------------|
| collect            | Specify a non-key field              |
| routing            | Routing attributes                   |
| next-hop           | Next hop address                     |
| address            | Address                              |
| ipv6               | IPv6 next hop address                |
| bgp                | (Optional) BGP next hop IPv6 address |

## Command Mode

- /exec/configure/nfm-record

# collect routing source as

[no] collect routing source as [ peer ]

## Syntax Description

### Syntax Description

---

collect Specify a non-key field

---

routing Routing attributes

---

source AS source

---

as AS source

---

peer (Optional) Source AS number of the peer network

---

## Command Mode

- /exec/configure/nfm-record

# collect timestamp sys-uptime first

[no] collect timestamp sys-uptime { first | last }

## Syntax Description

| Syntax Description |                                      |
|--------------------|--------------------------------------|
| collect            | Specify a non-key field              |
| timestamp          | Timestamp fields                     |
| sys-uptime         | System uptime                        |
| first              | Time the first packet was seen       |
| last               | Time the most recent packet was seen |

## Command Mode

- /exec/configure/nfm-record

# collect transport tcp flags

[no] collect transport tcp flags

## Syntax Description

| Syntax Description |                         |
|--------------------|-------------------------|
| collect            | Specify a non-key field |
| transport          | Transport layer fields  |
| tcp                | TCP layer fields        |
| flags              | TCP flags               |

## Command Mode

- /exec/configure/nfm-record

# commit

commit

## Syntax Description

---

### Syntax Description

---

commit commit itd  
session

---

## Command Mode

- /exec/configure/itd-session-device-group

# commit

commit

## Syntax Description

---

### Syntax Description

---

commit Commit the current configuration session

---

## Command Mode

- /exec/configure

# commit

commit

## Syntax Description

---

### Syntax Description

---

commit commit plb  
session

---

## Command Mode

- /exec/configure/plb-session-device-group



# commit verbose

commit verbose

## Syntax Description

---

### Syntax Description

---

commit Commit the current configuration session

---

verbose Commit the current configuration session with more details

---

## Command Mode

- /exec/configure

# compress-bitfields ipv6 multicast

[no] compress-bitfields ipv6 multicast

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults    |
| compress-bitfields | Compress bitfields for improved memory utilization |
| ipv6               | Use for IPv6 multicast                             |
| multicast          | Use compressed bitfields for M6RIB and PIM6        |

## Command Mode

- /exec/configure

# conf-offset

[no] conf-offset <offset>

## Syntax Description

| Syntax Description       |                                  |
|--------------------------|----------------------------------|
| <code>conf-offset</code> | Configure Confidentiality offset |
| <code>offset</code>      | Confidentiality offset options   |

## Command Mode

- /exec/configure/macsec-policy

# confederation identifier

[no] confederation identifier <confed-id>

## Syntax Description

|                           |                  |   |
|---------------------------|------------------|---|
| <b>Syntax Description</b> | no               | (Optional) Negate a command or set its defaults |
|                           | confederation    | AS confederation parameters                     |
|                           | identifier       | Set routing domain confederation AS             |
|                           | <i>confed-id</i> | AS number                                       |

## Command Mode

- /exec/configure/router-bgp/vrf-cmds

# confederation peers

[no] confederation peers <confed-id>

## Syntax Description

|                           |                  |   |
|---------------------------|------------------|---|
| <b>Syntax Description</b> | no               | (Optional) Negate a command or set its defaults |
|                           | confederation    | AS confederation parameters                     |
|                           | peers            | Peer ASs in BGP confederation                   |
|                           | <i>confed-id</i> | AS number                                       |

## Command Mode

- /exec/configure/router-bgp/vrf-cmds

# config-source controller

[no] config-source controller

## Syntax Description

---

### Syntax Description

---

|    |   |
|----|---|
| no | (Optional) Negate a command or set its defaults |
|----|---|

---

|               |  |
|---------------|--|
| config-source | Configuration source for this NVE interface. Defaults to CLI |
|---------------|--|

---

|            |            |
|------------|------------|
| controller | Controller |
|------------|------------|

---

## Command Mode

- /exec/configure/if-nve

# configure

configure [ terminal ]

## Syntax Description

---

### Syntax Description

---

configure Enter configuration mode

---

terminal (Optional) Configure the system from terminal input

---

## Command Mode

- /exec

# configure maintenance profile normal

[no] configure maintenance profile { normal-mode | maintenance-mode }

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| configure          |            | Enter configuration mode             |
| maintenance        |            | maintenance profile mode             |
| profile            |            | maintenance profile                  |
| normal-mode        |            | Normal mode profile                  |
| maintenance-mode   |            | Maintenance mode profile             |

## Command Mode

- /exec



# configure private

configure private [ sandbox ]

## Syntax Description

---

### Syntax Description

---

configure Enter configuration mode

---

private Prototype place holder for config session phase two

---

sandbox (Optional) Used by the CLI sandbox

---

## Command Mode

- /exec

# configure profile

[no] configure profile <all\_conf\_profile\_name> [ type admin ]

## Syntax Description

| Syntax Description           |            |   |
|------------------------------|------------|---|
| no                           | (Optional) | Negate a command or set its defaults    |
| configure                    |            | Enter configuration mode                |
| profile                      |            | Configure profile                       |
| <i>all_conf_profile_name</i> |            | Enter the name of the configure profile |
| type                         | (Optional) | config profile type                     |
| admin                        | (Optional) | config profile admin type               |

## Command Mode

- /exec

# configure replace

```
configure replace { <uri_local> | <uri_remote> [ source-interface <intf> | vrf <vrf-known-name> ] } [ verbose ] [ show-patch ] [ debug ]
```

## Syntax Description

### Syntax Description

|                       |  |
|-----------------------|--|
| configure             | Configure the box                                |
| replace               | Perform a replace of the running-config          |
| <i>uri_local</i>      | Configuration file to use                        |
| <i>uri_remote</i>     | Configuration file to use                        |
| source-interface      | (Optional) Select source interface               |
| <i>intf</i>           | (Optional)                                       |
| vrf                   | (Optional) Display per-VRF information           |
| verbose               | (Optional) Show the logs of operation            |
| show-patch            | (Optional) Show the patch to be applied          |
| debug                 | (Optional) Skip errors and proceed with rollback |
| <i>vrf-known-name</i> | (Optional) Known VRF name                        |

## Command Mode

- /exec

# configure session

configure session <s0>

## Syntax Description

---

### Syntax Description

---

configure Enter configuration mode

---

session Configure the system in a session

---

s0 Enter the name of the session

---

## Command Mode

- /exec

# configure sync

configure sync

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| configure          | Enter configuration mode                 |
| sync               | Configure the system in config-sync mode |

## Command Mode

- /exec

# congestion-control ecn

[no] congestion-control ecn

## Syntax Description

|                           |                    |   |
|---------------------------|--------------------|---|
| <b>Syntax Description</b> | no                 | (Optional) Negate a command or set its defaults |
|                           | congestion-control | Congestion Control Protocol                     |
|                           | ecn                | Enable ECN protocol                             |

## Command Mode

- /exec/configure/policy-map/type/uf/class

## congestion-control random-detect

```
[no] congestion-control random-detect { [ threshold { burst-optimized | mesh-optimized } ] | {
minimum-threshold <min-thresh> [ packets | bytes | kbytes | mbytes ] maximum-threshold <max-thresh> [
packets1 | bytes1 | kbytes1 | mbytes1 ] drop-probability <drop-prob> } } { [ ecn ] }
```

### Syntax Description

#### Syntax Description

|                    |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults   |
| congestion-control | Congestion Control Protocol                       |
| random-detect      | Enable WRED protocol                              |
| threshold          | (Optional) Threshold                              |
| minimum-threshold  | Minimum Threshold                                 |
| maximum-threshold  | Maximum Threshold                                 |
| burst-optimized    | (Optional) Threshold optimized for bursty traffic |
| mesh-optimized     | (Optional) Threshold optimized for mesh traffic   |
| drop-probability   | Drop Probability at Maximum Threshold             |
| <i>drop-prob</i>   | Drop Probability Value                            |
| packets            | (Optional) Packets                                |
| bytes              | (Optional) Bytes                                  |
| kbytes             | (Optional) Kilo Bytes                             |
| mbytes             | (Optional) Mega Bytes                             |
| packets1           | (Optional) Packets                                |
| bytes1             | (Optional) Bytes                                  |
| kbytes1            | (Optional) Kilo Bytes                             |
| mbytes1            | (Optional) Mega Bytes                             |
| ecn                | (Optional) Explicit Congestion Notification       |

### Command Mode

- /exec/configure/policy-map/type/uf/class

# congestion-control random-detect forward-nonecn

[no] congestion-control random-detect forward-nonecn

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate the command                         |
| congestion-control | Congestion control protocol                           |
| random-detect      | Enable WRED protocol                                  |
| forward-nonecn     | Forward non ECN capable traffic without WRED dropping |

## Command Mode

- /exec/configure



# congestion-control random-detect global-buffer minimum-threshold maximum-threshold

[no] congestion-control random-detect global-buffer minimum-threshold { <min-thresh> [ packets | bytes | kbytes | mbytes ] } maximum-threshold { <max-thresh> [ packets1 | bytes1 | kbytes1 | mbytes1 ] }

## Syntax Description

| Syntax Description |            |                                    |
|--------------------|------------|------------------------------------|
| no                 | (Optional) | Negate the command                 |
| congestion-control |            | Congestion control protocol        |
| random-detect      |            | Enable WRED protocol               |
| global-buffer      |            | global buffer threshold            |
| minimum-threshold  |            | Specify minimum threshold for WRED |
| <i>min-thresh</i>  |            | Minimum threshold value            |
| maximum-threshold  |            | Specify maximum threshold for WRED |
| <i>max-thresh</i>  |            | Maximum threshold value            |
| packets            | (Optional) | Packets                            |
| bytes              | (Optional) | Bytes                              |
| kbytes             | (Optional) | Kilo bytes                         |
| mbytes             | (Optional) | Mega bytes                         |
| packets1           | (Optional) | Packets                            |
| bytes1             | (Optional) | Bytes                              |
| kbytes1            | (Optional) | Kilo Bytes                         |
| mbytes1            | (Optional) | Mega Bytes                         |

## Command Mode

- /exec/configure

# congestion-control tail-drop

[no] congestion-control tail-drop [ threshold { burst-optimized | mesh-optimized } ]

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults   |
| congestion-control |            | Congestion Control Protocol            |
| tail-drop          |            | Enable Tail-Drop                       |
| threshold          | (Optional) | Threshold                              |
| burst-optimized    | (Optional) | Threshold optimized for bursty traffic |
| mesh-optimized     | (Optional) | Threshold optimized for mesh traffic   |

## Command Mode

- /exec/configure/policy-map/type/uf/class

# connect

[no] connect

## Syntax Description

---

**Syntax Description**

---

no (Optional) Negate a command or set its defaults

---

connect Connect to remote host

---

## Command Mode

- /exec/configure/vmt-conn

# continue

{ continue <value> } | { no continue [ <value> ] }

## Syntax Description

---

### Syntax Description

---

**no**      Negate a command or set its defaults

---

**continue**    Continue on a different entry within the route-map

---

*value*      Route-map entry sequence number

---

## Command Mode

- /exec/configure/route-map

# contract-id

{ contract-id <s0> | no contract-id }

## Syntax Description

|                           |             |   |
|---------------------------|-------------|---|
| <b>Syntax Description</b> | no          | Negate a command or set its defaults                            |
|                           | contract-id | Service contract id of the customer                             |
|                           | s0          | Provide contract number (as specified in the service agreement) |

## Command Mode

- /exec/configure/callhome

# control-plane

control-plane

## Syntax Description

---

### Syntax Description

---

control-plane Enter to control-plane sub-mode

---

## Command Mode

- /exec/configure

# control vlan

[no] control vlan <vlan-id>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| control            | ITD control vlan                                |
| vlan               | control vlan                                    |
| <i>vlan-id</i>     | Control vlan id                                 |

## Command Mode

- /exec/configure/itd-inout

# control vlan

[no] control vlan <vlan-id>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| control            | ITD control vlan                                |
| vlan               | control vlan                                    |
| <i>vlan-id</i>     | Control vlan id                                 |

## Command Mode

- /exec/configure/itd-inout



# control vlan

[no] control vlan <vlan-id>

## Syntax Description

|                           |                |   |
|---------------------------|----------------|---|
| <b>Syntax Description</b> | no             | (Optional) Negate a command or set its defaults |
|                           | control        | PLB control vlan                                |
|                           | vlan           | control vlan                                    |
|                           | <i>vlan-id</i> | Control vlan id                                 |

## Command Mode

- /exec/configure/plb-inout

# controller-credentials username password 0

[no] controller-credentials username <user> password { 0 <clear> | 7 <encrypted> }

## Syntax Description

| Syntax Description     |                        |                                      |
|------------------------|------------------------|--------------------------------------|
| no                     | (Optional)             | Negate a command or set its defaults |
| controller-credentials | NBM Controller         | login credentials                    |
| username               | User ID                |                                      |
| <i>user</i>            | Enter user ID          |                                      |
| password               | Password               |                                      |
| 0                      | Password that follows  | should be in clear text              |
| <i>clear</i>           | Password in clear text |                                      |
| 7                      | Password that follows  | should be encrypted text             |
| <i>encrypted</i>       | Encrypted password     |                                      |

## Command Mode

- /exec/configure/nbm-controller

# controller ip vrf

[no] controller ip <cntrl-ip> vrf { <vrf-name> | <vrf-known-name> }

## Syntax Description

| Syntax Description    |            |                                      |
|-----------------------|------------|--------------------------------------|
| no                    | (Optional) | Negate a command or set its defaults |
| controller            |            | Controller                           |
| ip                    |            | IP Address                           |
| <i>cntrl-ip</i>       |            | IP Address of Controller             |
| vrf                   |            | vrf context                          |
| <i>vrf-name</i>       |            | VRF name                             |
| <i>vrf-known-name</i> |            | Known VRF name                       |

## Command Mode

- /exec/configure/nbm-controller

# controller ipv4

```
[no] controller ipv4 <ipv4> [ port <tcpport> ] [ vrf { <vrf-name> | <vrf-known-name> } ] [ security { none |
tls } ]
```

## Syntax Description

| Syntax Description    |            |  |
|-----------------------|------------|--|
| no                    | (Optional) | Negate a command or set its defaults   |
| controller            |            | OpenFlow controller to use             |
| ipv4                  |            | Controller ipv4 address (A.B.C.D)      |
| <i>ipv4</i>           |            | IP address (A.B.C.D)                   |
| port                  | (Optional) | Controller TCP port (default is 6653)  |
| <i>tcpport</i>        | (Optional) | TCP port number (default port is 6653) |
| vrf                   | (Optional) | Controller VRF                         |
| <i>vrf-name</i>       | (Optional) | VRF name                               |
| <i>vrf-known-name</i> | (Optional) | Known VRF name                         |
| security              | (Optional) | Set security protocol                  |
| none                  | (Optional) | Disable security protocol              |
| tls                   | (Optional) | Enable security protocol               |

## Command Mode

- /exec/configure/openflow/switch

# controller ipv4

```
[no] controller ipv4 <ipv4> [ port <tcpport> ] [ vrf { <vrf-name> | <vrf-known-name> } ] [ security { none |
tls } ]
```

## Syntax Description

| Syntax Description    |            |  |
|-----------------------|------------|--|
| no                    | (Optional) | Negate a command or set its defaults   |
| controller            |            | OpenFlow controller to use             |
| ipv4                  |            | Controller ipv4 address (A.B.C.D)      |
| <i>ipv4</i>           |            | IP address (A.B.C.D)                   |
| port                  | (Optional) | Controller TCP port (default is 6653)  |
| <i>tcpport</i>        | (Optional) | TCP port number (default port is 6653) |
| vrf                   | (Optional) | Controller VRF                         |
| <i>vrf-name</i>       | (Optional) | VRF name                               |
| <i>vrf-known-name</i> | (Optional) | Known VRF name                         |
| security              | (Optional) | Set security protocol                  |
| none                  | (Optional) | Disable security protocol              |
| tls                   | (Optional) | Enable security protocol               |

## Command Mode

- /exec/configure/openflow/switch/sub-switch

# controller type l2 identifier

[no] controller type { l2-vxlan | vxlan } identifier <controller-id>

## Syntax Description

| Syntax Description   |            |                                      |
|----------------------|------------|--------------------------------------|
| no                   | (Optional) | Negate a command or set its defaults |
| controller           |            | Controller command                   |
| type                 |            | Controller type                      |
| l2-vxlan             |            | l2-vxlan                             |
| vxlan                |            | vxlan                                |
| identifier           |            | Controller identifier                |
| <i>controller-id</i> |            | Controller id value                  |

## Command Mode

- /exec/configure

# copp clear policy pps

copp clear policy pps

## Syntax Description

| Syntax Description |               |
|--------------------|---------------|
|                    | copp copp     |
|                    | clear clear   |
|                    | policy policy |
|                    | pps pps       |

## Command Mode

- /exec/configure

# copp copy profile prefix

```
copp copy profile <profile_type> { prefix | suffix } <user_string>
```

## Syntax Description

| Syntax Description  |  |   |
|---------------------|--|---|
| copp                |  | Control-Plane Policing                    |
| copy                |  | Make a copy of the CoPP Profile           |
| profile             |  | CoPP Profile                              |
| <i>profile_type</i> |  | CoPP Profile Types                        |
| prefix              |  | prefix for the copied policy              |
| suffix              |  | suffix for the copied policy              |
| <i>user_string</i>  |  | Enter prefix/suffix for the copied policy |

## Command Mode

- /exec



# copp distributed-policing enable

[no] copp distributed-policing enable

## Syntax Description

| Syntax Description   |             |                                      |
|----------------------|-------------|--------------------------------------|
| no                   | (Optional)  | Negate a command or set its defaults |
| copp                 |             | Control-Plane Policing               |
| distributed-policing | distributed | policer                              |
| enable               | enable      | distributed policing                 |

## Command Mode

- /exec/configure

# copp profile

[no] copp profile [ <profile\_type> ]

## Syntax Description

| Syntax Description  |            |                                      |
|---------------------|------------|--------------------------------------|
| no                  |            | Negate a command or set its defaults |
| copp                |            | Control-Plane Policing               |
| profile             |            | CoPP Profile                         |
| <i>profile_type</i> | (Optional) | CoPP Profile Types                   |

## Command Mode

- /exec/configure

# copp profile

copp profile <profile\_type>

## Syntax Description

| Syntax Description  |                        |  |
|---------------------|------------------------|--|
| copp                | Control-Plane Policing |  |
| profile             | CoPP Profile           |  |
| <i>profile_type</i> | CoPP Profile Types     |  |

## Command Mode

- /exec/configure

# copp rate-limit disable

[no] copp rate-limit disable

## Syntax Description

|                           |            |   |
|---------------------------|------------|---|
| <b>Syntax Description</b> | no         | (Optional) Negate a command or set its defaults |
|                           | copp       | copp  |
|                           | rate-limit | rate-limit                                      |
|                           | disable    | Disable rate-limit on CoPP queues               |

## Command Mode

- /exec/configure

# copy

```
copy { { <src_local> { <dest_remote> [ source-interface <intf> | vrf <vrf-known-name> ] } } | { <src_remote>
{ <dest_local> [ compact ] | running-config [ echo-commands ] [ stop-at-first-failure ] | startup-config } } [
source-interface <intf> | vrf <vrf-known-name> ] | { <src_core> { <dest_remote> [ source-interface <intf> |
vrf <vrf-known-name> ] } } | { running-config-src { <dest_remote> [ source-interface <intf> | vrf
<vrf-known-name> ] } } | { startup-config-src { <dest_remote> [ source-interface <intf> | vrf
<vrf-known-name> ] } } }
```

## Syntax Description

### Syntax Description

|                       |   |
|-----------------------|---|
| copy                  | Copy from one file to another   |
| <i>src_local</i>      | Select source filesystem  |
| <i>src_core</i>       | Select source filesystem  |
| <i>dest_local</i>     | Select destination filesystem   |
| <i>dest_remote</i>    | Select destination filesystem   |
| <i>src_remote</i>     | Select source filesystem  |
| vrf                   | (Optional) Display per-VRF information                                  |
| source-interface      | (Optional) Select source interface                                      |
| <i>intf</i>           | (Optional)  |
| <i>vrf-known-name</i> | (Optional) Known VRF name   |
| compact               | (Optional) Compacting NXOS NBI image using scp                          |
| running-config        | Copy from source to running configuration                               |
| running-config-src    | Copy running configuration to destination                               |
| startup-config        | Copy from source to startup configuration                               |
| startup-config-src    | Copy startup configuration to destination                               |
| echo-commands         | (Optional) Echo the commands before applying them (to correlate errors) |
| stop-at-first-failure | (Optional) Stop at first error  |

## Command Mode

- /exec

## Usage Guidelines



---

**Note** When a source or destination URI contains a reserved character such as '!' or '#', the reserved character must be entered as its percent-encoded ascii value, as described in RFC 3986. For example, the URI `!pa##word@example.com` must be entered as `%21pa%23%23word@example.com`. In this example, the reserved characters '!' (ascii 0x21) and '#' (ascii 0x23) are represented as '%21' and '%23'.

---

# copy

```
copy { { <src_local> { <dest_local> | running-config [ echo-commands ] [ stop-at-first-failure ] | startup-config
| scheduled-config } } | { <src_core> <dest_local_core> } | { running-config-src { startup-config [ fabric ] |
<dest_local_config> } } | { startup-config-src { running-config [ echo-commands ] [ stop-at-first-failure ] |
<dest_local_config> } } | { switch-profile-cfg <dest_local_config> } }
```

## Syntax Description

### Syntax Description

|                          |  |
|--------------------------|--|
| copy                     | Copy from one file to another  |
| <i>src_local</i>         | Select source filesystem   |
| <i>src_core</i>          | Select source filesystem   |
| <i>dest_local</i>        | Select destination filesystem  |
| <i>dest_local_core</i>   | Select destination filesystem  |
| <i>dest_local_config</i> | Select destination filesystem  |
| running-config           | Copy from source to running configuration  |
| running-config-src       | Copy running configuration to destination  |
| startup-config           | Copy from source to startup configuration  |
| startup-config-src       | Copy startup configuration to destination  |
| scheduled-config         | Schedule configuration at the specified source to be applied at next switch reload |
| switch-profile-cfg       | Copy switch profile running configuration to destination                           |
| echo-commands            | (Optional) Echo the commands before applying them (to correlate errors)            |
| stop-at-first-failure    | (Optional) Stop at first error   |
| fabric                   | (Optional) Copy from source to fabric startup configuration                        |

## Command Mode

- /exec

## Usage Guidelines



**Note** When a source or destination URI contains a reserved character such as '!' or '#', the reserved character must be entered as its percent-encoded ascii value, as described in RFC 3986. For example, the URI `!pa##word@example.com` must be entered as `%21pa%23%23word@example.com`. In this example, the reserved characters '!' (ascii 0x21) and '#' (ascii 0x23) are represented as '%21' and '%23'.

# copy licenses

copy licenses <uri0>

## Syntax Description

---

### Syntax Description

---

copy Copy from one file to another

---

licenses Backup license files

---

*uri0* Specify URL (with .tar extension) for backing up license files

---

## Command Mode

- /exec



# copy recursive

```
copy <source> <destination> recursive [ vrf <vrf-known-name> ]
```

## Syntax Description

| Syntax Description | copy                  | Copy from one file to another          |
|--------------------|-----------------------|--|
|                    | recursive             | Recursively copy files and folders     |
|                    | <i>source</i>         | Select source filesystem               |
|                    | <i>destination</i>    | Select destination filesystem          |
|                    | vrf                   | (Optional) Display per-VRF information |
|                    | <i>vrf-known-name</i> | (Optional) Known VRF name              |

## Command Mode

- /exec

## Usage Guidelines



**Note** When a source or destination URI contains a reserved character such as '!' or '#', the reserved character must be entered as its percent-encoded ascii value, as described in RFC 3986. For example, the URI `!pa##word@example.com` must be entered as `%21pa%23%23word@example.com`. In this example, the reserved characters '!' (ascii 0x21) and '#' (ascii 0x23) are represented as '%21' and '%23'.

## copy running vdc-all

```
copy { running-config-src { <dest_remote> [ source-interface <intf> | vrf <vrf-known-name> ] } |
startup-config-src { <dest_remote> [ source-interface <intf> | vrf <vrf-known-name> ] } } vdc-all
```

### Syntax Description

| Syntax Description    |            |   |
|-----------------------|------------|---|
| copy                  |            | Copy from one file to another             |
| <i>dest_remote</i>    |            | Select destination filesystem             |
| vrf                   | (Optional) | Display per-VRF information               |
| <i>vrf-known-name</i> | (Optional) | Known VRF name                            |
| source-interface      | (Optional) | Select source interface                   |
| <i>intf</i>           | (Optional) |   |
| running-config-src    |            | Copy running configuration to destination |
| startup-config-src    |            | Copy startup configuration to destination |
| vdc-all               |            | Perform copy for all vdc's                |

### Command Mode

- /exec

### Usage Guidelines



**Note** When a source or destination URI contains a reserved character such as '!' or '#', the reserved character must be entered as its percent-encoded ascii value, as described in RFC 3986. For example, the URI `!pa##word@example.com` must be entered as `%21pa%23%23word@example.com`. In this example, the reserved characters '!' (ascii 0x21) and '#' (ascii 0x23) are represented as '%21' and '%23'.

# copy vdc-all

```
copy { running-config-src { startup-config | <dest_local_config> } | startup-config-src { running-config | <dest_local_config> } } vdc-all
```

## Syntax Description

### Syntax Description

|                          |   |
|--------------------------|---|
| copy                     | Copy from one file to another             |
| <i>dest_local_config</i> | Select destination filesystem             |
| running-config-src       | Copy running configuration to destination |
| startup-config           | Copy from source to startup configuration |
| running-config           | Copy from source to running configuration |
| startup-config-src       | Copy startup configuration to destination |
| vdc-all                  | Perform copy for all vdes                 |

## Command Mode

- /exec

## Usage Guidelines



**Note** When a source or destination URI contains a reserved character such as '!' or '#', the reserved character must be entered as its percent-encoded ascii value, as described in RFC 3986. For example, the URI `!pa##word@example.com` must be entered as `%21pa%23%23word@example.com`. In this example, the reserved characters '!' (ascii 0x21) and '#' (ascii 0x23) are represented as '%21' and '%23'.

## core-on-no-memory

[no] core-on-no-memory

### Syntax Description

---

**Syntax Description**

no (Optional) Negate a command or set its defaults

---

core-on-no-memory Generate core dump on memory allocation failure

---

### Command Mode

- /exec/configure/router-ospf

## core-on-no-memory

[no] core-on-no-memory

### Syntax Description

|                           |                   |   |
|---------------------------|-------------------|---|
| <b>Syntax Description</b> | no                | (Optional) Negate a command or set its defaults |
|                           | core-on-no-memory | Generate core dump on memory allocation failure |

### Command Mode

- /exec/configure/router-ospf3 /exec/configure/router-ospf3/vrf

# cost

{ cost <cost> } | { no cost [ <cost> ] }

## Syntax Description

---

|                           |    |                                      |
|---------------------------|----|--------------------------------------|
| <b>Syntax Description</b> | no | Negate a command or set its defaults |
|---------------------------|----|--------------------------------------|

---

|  |      |                                |
|--|------|--------------------------------|
|  | cost | Cost associated with interface |
|--|------|--------------------------------|

---

|  |      |            |
|--|------|------------|
|  | cost | Cost value |
|--|------|------------|

---

## Command Mode

- /exec/configure/router-ospf/vrf/router-ospf-slink

# count

| count

## Syntax Description

---

### Syntax Description

| Pipe command output to filter

---

**count** Count number of lines

---

## Command Mode

- /output

# counter name value op

counter name <counter-name> value <counter-value> op <op-val>

## Syntax Description

### Syntax Description

|                      |  |
|----------------------|--|
| counter              | Specify the name of the counter                |
| name                 | Specify the name of the counter                |
| <i>counter-name</i>  | Name of the counter                            |
| value                | Specify the value to be applied to the counter |
| <i>counter-value</i> | Enter the value                                |
| op                   | Specify the operator to be applied             |
| <i>op-val</i>        | Enter the value of the operator                |

## Command Mode

- /exec



# cpu threshold

[no] cpu threshold [ rising <risingth> falling <fallingth> interval <seconds> ]

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 |            | Negate a command or set its defaults |
| cpu                |            | CPU resource                         |
| threshold          |            | Threshold settings                   |
| rising             | (Optional) | Rising threshold setting             |
| <i>risingth</i>    | (Optional) | Rising threshold in percentage       |
| falling            | (Optional) | Falling threshold setting            |
| <i>fallingth</i>   | (Optional) | Falling threshold in percentage      |
| interval           | (Optional) | Observation interval setting         |
| <i>seconds</i>     | (Optional) | Observation interval in seconds      |

## Command Mode

- /exec/configure/onep

# cpu threshold rising falling interval

cpu threshold rising <risingth> falling <fallingth> interval <seconds>

## Syntax Description

| Syntax Description |                                 |  |
|--------------------|---------------------------------|--|
| cpu                | CPU resource                    |  |
| threshold          | Threshold settings              |  |
| rising             | Rising threshold setting        |  |
| <i>risingth</i>    | Rising threshold in percentage  |  |
| falling            | Falling threshold setting       |  |
| <i>fallingth</i>   | Falling threshold in percentage |  |
| interval           | Observation interval setting    |  |
| <i>seconds</i>     | Observation interval in seconds |  |

## Command Mode

- /exec/configure/onep

# crypto ca authenticate

[no] crypto ca authenticate <s0> [ accept ]

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults     |
| crypto             | Set crypto settings                                 |
| ca                 | Configure certificate authority related information |
| authenticate       | Authenticate the certificate authority certificate  |
| s0                 | trustpoint label                                    |
| accept             | (Optional) accept the certificate automatically     |

## Command Mode

- /exec/configure

# crypto ca crl request

[no] crypto ca crl request <s0> <uri0>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults     |
| crypto             | Set crypto settings                                 |
| ca                 | Configure certificate authority related information |
| crl                | import certificate revocation list                  |
| request            | import certificate revocation list                  |
| s0                 | trustpoint label                                    |
| uri0               | Specify source file name                            |

## Command Mode

- /exec/configure

# crypto ca enroll

[no] crypto ca enroll <s0>

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | no (Optional) Negate a command or set its defaults     |
|                           | crypto Set crypto settings                             |
|                           | ca Configure certificate authority related information |
|                           | enroll Create certificate request                      |
|                           | s0 trustpoint label                                    |

## Command Mode

- /exec/configure

# crypto ca export pkcs12

[no] crypto ca export <s0> pkcs12 <uri0> <s1>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults     |
| crypto             | Set crypto settings                                 |
| ca                 | Configure certificate authority related information |
| export             | export rsa private key and certificates in pkcs#12  |
| s0                 | trustpoint label                                    |
| pkcs12             | destination file url                                |
| uri0               | Specify destination file name                       |
| s1                 | passphrase to encrypt the private key               |

## Command Mode

- /exec/configure

# crypto ca import certificate

[no] crypto ca import <s0> certificate

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults     |
| crypto             | Set crypto settings                                 |
| ca                 | Configure certificate authority related information |
| import             | import the certificate or key                       |
| s0                 | trustpoint label                                    |
| certificate        | import the certificate                              |

## Command Mode

- /exec/configure

# crypto ca import pkcs12

```
crypto ca import <s0> pkcs12 <uri0> <s1>
```

## Syntax Description

---

**Syntax Description**

---

crypto Set crypto settings

---

ca Configure certificate authority related information

---

import import the certificate or key

---

*s0* trustpoint label

---

pkcs12 source file url

---

*uri0* source file url

---

*s1* passphrase to decrypt the private key

---

## Command Mode

- /exec/configure



# crypto ca lookup

[no] crypto ca lookup { remote | local | both }

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults     |
| crypto             | Set crypto settings                                 |
| ca                 | Configure certificate authority related information |
| lookup             | Choose the certstore for authentication             |
| remote             | Use remote certstore                                |
| local              | Use local certstore                                 |
| both               | Use both local and remote certstore                 |

## Command Mode

- /exec/configure

## crypto ca remote ldap

```
[no] crypto ca remote ldap { server-group <s0> | [ [ crl-refresh-time <i0> ] ] }
```

### Syntax Description

#### Syntax Description

|                  |   |
|------------------|---|
| no               | (Optional) Negate a command or set its defaults   |
| crypto           | Set crypto settings   |
| ca               | Configure certificate authority related information   |
| remote           | Use ca from remote certstore  |
| ldap             | Ldap certstore  |
| crl-refresh-time | (Optional) Configure refresh-time to fetch crl from remote certstore                        |
| i0               | (Optional) Refresh time value in hours. A value of 0 will now run the refresh routine once. |
| server-group     | Ldap server group   |
| s0               | Ldap server group name  |

### Command Mode

- /exec/configure

# crypto ca test verify

[no] crypto ca test verify <uri0>

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <b>no</b> (Optional) Negate a command or set its defaults     |
|                           | <b>crypto</b> Set crypto settings                             |
|                           | <b>ca</b> Configure certificate authority related information |
|                           | <b>test</b> certificate tests                                 |
|                           | <b>verify</b> verify the certificate                          |
|                           | <i>uri0</i> Specify certificate file name                     |

## Command Mode

- /exec/configure

# crypto ca trustpoint

[no] crypto ca trustpoint <s0>

## Syntax Description

---

### Syntax Description

---

|            |   |
|------------|---|
| no         | (Optional) Negate a command or set its defaults     |
| crypto     | Set crypto settings                                 |
| ca         | Configure certificate authority related information |
| trustpoint | Configure trustpoint certificate authority          |
| s0         | trustpoint label                                    |

---

## Command Mode

- /exec/configure

# crypto cert ssh-authorize

[no] crypto cert ssh-authorize [ <s0> map <s1> [ <s2> ] | default map <s3> ]

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults                           |
| crypto             |            | Configure crypto settings                                      |
| cert               |            | Configure certificate mapping filter settings                  |
| ssh-authorize      |            | Configure mapping filter for ssh                               |
| s0                 | (Optional) | Issuer name of the certificate                                 |
| map                | (Optional) | Mapping filter to be applied                                   |
| s1                 | (Optional) | Name of the mapping filter which is already configured         |
| s2                 | (Optional) | Name of the mapping filter which is already configured         |
| default            | (Optional) | Default map for ssh authorization                              |
| s3                 | (Optional) | Name of the default mapping filter which is already configured |

## Command Mode

- /exec/configure

# crypto certificatemap mapname

[no] crypto certificatemap mapname <s0>

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| crypto             | Set crypto settings                             |  |
| certificatemap     | Configure certificatemap filters                |  |
| mapname            | Create a new filter map                         |  |
| s0                 | Name of the filter map                          |  |

## Command Mode

- /exec/configure

## crypto key generate rsa

```
[no] crypto key generate rsa [ { [ exportable ] [ modulus <i0> ] | [ label <s0> ] [ [ exportable ] [ modulus1 <i1> ] ] | modulus2 <i2> } ]
```

### Syntax Description

#### Syntax Description

|            |   |
|------------|---|
| no         | (Optional) Negate a command or set its defaults       |
| crypto     | Set crypto settings                                   |
| key        | Configure key pair related information                |
| generate   | Configure key pair generation related information     |
| rsa        | Configure rsa key pair generation related information |
| exportable | (Optional) key-pair is exportable                     |
| modulus    | (Optional) key-pair size                              |
| <i>i0</i>  | (Optional) key-pair size                              |
| label      | (Optional) key-pair label                             |
| <i>s0</i>  | (Optional) key-pair label                             |
| exportable | (Optional) key-pair is exportable                     |
| modulus1   | (Optional) key-pair size                              |
| <i>i1</i>  | (Optional) key-pair size                              |
| modulus2   | (Optional) key-pair size                              |
| <i>i2</i>  | (Optional) key-pair size                              |

### Command Mode

- /exec/configure

# crypto key param rsa label modulus

[no] crypto key param rsa label <s0> modulus <i0> [ exportable ]

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| crypto             | Set crypto settings                             |  |
| key                | Configure key pair related information          |  |
| param              | Configure key pair related information          |  |
| rsa                | Configure rsa key pair related information      |  |
| label              | key-pair label                                  |  |
| s0                 | key-pair label                                  |  |
| modulus            | key-pair size                                   |  |
| i0                 | key-pair size                                   |  |
| exportable         | (Optional) key-pair is exportable               |  |

## Command Mode

- /exec/configure



# crypto key zeroize rsa

[no] crypto key zeroize rsa <s0>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| crypto             | Set crypto settings                             |
| key                | Configure key pair related information          |
| zeroize            | Delete key-pair                                 |
| rsa                | Delete rsa key-pair                             |
| s0                 | key-pair label                                  |

## Command Mode

- /exec/configure

# cryptographic-algorithm

[no] cryptographic-algorithm <algo>

## Syntax Description

|                           |                         |   |
|---------------------------|-------------------------|---|
| <b>Syntax Description</b> | no                      | (Optional) Negate a command or set its defaults |
|                           | cryptographic-algorithm | Set cryptographic-algorithm to be used          |
|                           | <i>algo</i>             | Cryptographic-algorithm                         |

## Command Mode

- /exec/configure/keychain-key

# customer-id

{ customer-id <s0> | no customer-id }

## Syntax Description

|                           |             |   |
|---------------------------|-------------|---|
| <b>Syntax Description</b> | no          | Negate a command or set its defaults                        |
|                           | customer-id | customer id   |
|                           | s0          | Provide customer id (as specified in the service agreement) |

## Command Mode

- /exec/configure/callhome

# cut

| cut { -b <bytes> | -c <chars> | -f <fields> | -d <delim> | -s | --help } +

## Syntax Description

### Syntax Description

|               |  |
|---------------|--|
|               | Pipe command output to filter  |
| cut           | Print selected parts of lines.   |
| -b            | output only these bytes  |
| -c            | output only these characters   |
| -d            | specify other field delimiter (default is TAB).  |
| -f            | output only these fields also print any line that contains no delimiter character, unless the -s option is specified |
| -s            | do not print lines not containing delimiters   |
| <i>bytes</i>  | {n n-n m -m} N-th byte, N to end of line, N to M, start of line to N   |
| <i>chars</i>  | {n n-n m -m} N-th char, N to end of line, N to M, start of line to N   |
| <i>fields</i> | {n n-n m -m} N-th field, N to end of line, N to M, start of line to N  |
| <i>delim</i>  | field separator char, TAB is default, use ' ' for space  |
| --help        | print help of underlying unix command  |

## Command Mode

- /output



## D Commands

---

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# dampen-igp-metric

dampen-igp-metric <sec> | no dampen-igp-metric

## Syntax Description

| Syntax Description |                                      |
|--------------------|--------------------------------------|
| no                 | Negate a command or set its defaults |
| dampen-igp-metric  | Dampen IGP metric-related changes    |
| sec                | Time interval in seconds             |

## Command Mode

- /exec/configure/router-bgp/router-bgp-af

# dampening

```
[no] dampening [ { <half-life> <reuse-limit> <suppress-limit> <max-suppress-time> } | { route-map <rmap-name> } ]
```

## Syntax Description

| Syntax Description             |            |   |
|--------------------------------|------------|---|
| <code>no</code>                | (Optional) | Negate a command or set its defaults          |
| <code>dampening</code>         |            | Configure route flap dampening                |
| <code>half-life</code>         | (Optional) | Decay half life                               |
| <code>reuse-limit</code>       | (Optional) | Value to start reusing a route                |
| <code>suppress-limit</code>    | (Optional) | Value to start suppressing a route            |
| <code>max-suppress-time</code> | (Optional) | Maximum suppress time for stable route        |
| <code>route-map</code>         | (Optional) | Apply route-map to specify dampening criteria |
| <code>rmap-name</code>         | (Optional) | Route-map name                                |

## Command Mode

- /exec/configure/router-bgp/router-bgp-af /exec/configure/router-bgp/router-bgp-af-ipv4  
/exec/configure/router-bgp/router-bgp-af-ipv6 /exec/configure/router-bgp/router-bgp-af-link-state  
/exec/configure/router-bgp/router-bgp-af-l2vpn-evpn

# dampening

```
[no] dampening [ { <half-life> <reuse-limit> <suppress-limit> <max-suppress-time> } | { route-map
<rmap-name> } ]
```

## Syntax Description

| Syntax Description             |            |   |
|--------------------------------|------------|---|
| <code>no</code>                | (Optional) | Negate a command or set its defaults          |
| <code>dampening</code>         |            | Configure route flap dampening                |
| <code>half-life</code>         | (Optional) | Decay half life                               |
| <code>reuse-limit</code>       | (Optional) | Value to start reusing a route                |
| <code>suppress-limit</code>    | (Optional) | Value to start suppressing a route            |
| <code>max-suppress-time</code> | (Optional) | Maximum suppress time for stable route        |
| <code>route-map</code>         | (Optional) | Apply route-map to specify dampening criteria |
| <code>rmap-name</code>         | (Optional) | Route-map name                                |

## Command Mode

- /exec/configure/router-bgp/router-bgp-af-ipv4-mdt /exec/configure/router-bgp/router-bgp-af-l2vpn-vpls

# data-pattern

{ { no | default } data-pattern | data-pattern <hex-pattern> }

## Syntax Description

---

### Syntax Description

---

no

---

default      Set a command to its  
              defaults

---

data-pattern   Data Pattern

---

*hex-pattern*   Data Pattern in Hex

---

## Command Mode

- /exec/configure/ip-sla/udp

# data-source

```
{ data-source <type> } | { no data-source [ <type> ] }
```

## Syntax Description

---

|                           |    |                                      |
|---------------------------|----|--------------------------------------|
| <b>Syntax Description</b> | no | Negate a command or set its defaults |
|---------------------------|----|--------------------------------------|

---

|  |             |                         |
|--|-------------|-------------------------|
|  | data-source | Specify the data source |
|--|-------------|-------------------------|

---

|  |             |  |
|--|-------------|--|
|  | <i>type</i> |  |
|--|-------------|--|

---

## Command Mode

- /exec/configure/telemetry/sensor-group

# database-mapping

```
{ [ no ] database-mapping { <eid-prefix> | <eid-prefix6> } { redistribute | { { <locator> | <locator6> } priority
<priority> weight <weight> } } }
```

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults      |
| database-mapping   | Configure EID-prefix and locator-set for dynamic-EID |
| <i>eid-prefix</i>  | IP EID-prefix for RLOC static mapping                |
| <i>locator</i>     | IP address of LISP-VM routers                        |
| priority           | Configures which Locators from a set are preferred   |
| <i>priority</i>    | Lower priority Locator takes preference              |
| weight             | Traffic load-spreading among Locators                |
| <i>weight</i>      | Specified in a percentage from 0 to 100              |
| redistribute       | Used for redistributing into routing protocols       |

## Command Mode

- /exec/configure/lisp-dynamic-eid /exec/configure/vrf/lisp-dynamic-eid

# databits

[no] databits <i0>

## Syntax Description

|                           |          |   |
|---------------------------|----------|---|
| <b>Syntax Description</b> | no       | (Optional) Negate a command or set its defaults |
|                           | databits | Set number of databits per character            |
|                           | i0       | Number of data bits                             |

## Command Mode

- /exec/configure/com1



# databits

[no] databits <*i0*>

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

databits Set number of databits per character

---

*i0* Number of data bits

---

## Command Mode

- /exec/configure/console

# datapath-id

datapath-id <datapathid-val> | no datapath-id

## Syntax Description

| Syntax Description    |  |                                       |
|-----------------------|--|---------------------------------------|
| no                    |  | Negate a command or set its defaults  |
| datapath-id           |  | Datapath ID                           |
| <i>datapathid-val</i> |  | 64-bit hex value [0x1-0xffffffffffff] |

## Command Mode

- /exec/configure/openflow/switch

# datapath-id

datapath-id <datapathid-val> | no datapath-id

## Syntax Description

|                           |                       |                                       |
|---------------------------|-----------------------|---------------------------------------|
| <b>Syntax Description</b> | no                    | Negate a command or set its defaults  |
|                           | datapath-id           | Datapath ID                           |
|                           | <i>datapathid-val</i> | 64-bit hex value [0x1-0xffffffffffff] |

## Command Mode

- /exec/configure/openflow/switch/sub-switch

# datapath transport mts

[no] datapath transport mts

## Syntax Description

|                           |           |   |
|---------------------------|-----------|---|
| <b>Syntax Description</b> | no        | (Optional) Negate a command or set its defaults |
|                           | datapath  | One Platform datapath                           |
|                           | transport | transport for datapath                          |
|                           | mts       | mts   |

## Command Mode

- /exec/configure/onep

# db-jid

[no] db-jid <jid> [ key-type <key-type> ]

## Syntax Description

|                           |                 |   |
|---------------------------|-----------------|---|
| <b>Syntax Description</b> | <i>no</i>       | (Optional) Negate a command or set its defaults |
|                           | <i>db-jid</i>   | Jabber ID of database                           |
|                           | <i>jid</i>      | Enter Jabber ID of database                     |
|                           | <i>key-type</i> | (Optional) Query key type for this database     |
|                           | <i>key-type</i> | (Optional)                                      |

## Command Mode

- /exec/configure/fabric-db/server-xmpp

## db-security user password

```
[no] db-security user <user> password { 0 <clear> | 7 <encrypted> | <password> } [ shared-secret { 10 <clear> | 7 <encrypted> | <secret> } ]
```

### Syntax Description

#### Syntax Description

|                  |   |
|------------------|---|
| no               | (Optional) Negate a command or set its defaults                         |
| db-security      | Database Security   |
| user             | User ID   |
| <i>user</i>      | Enter user ID   |
| password         | Password  |
| 0                | Password that follows should be in clear text                           |
| <i>clear</i>     | Password in clear text  |
| 7                | Password that follows should be in encrypted text                       |
| <i>encrypted</i> | Encrypted password  |
| <i>password</i>  | Enter password in clear text  |
| shared-secret    | (Optional) Shared-secret  |
| 10               | (Optional) Indicates that password that follows should be in clear text |
| <i>clear</i>     | (Optional) Password in clear text                                       |
| 7                | (Optional) Password that follows should be in encrypted text            |
| <i>encrypted</i> | (Optional) Encrypted password   |
| <i>secret</i>    | (Optional) Enter shared-secret in clear text                            |

### Command Mode

- /exec/configure/fabric-db/server-ldap

# db-table

[no] db-table <tablename> [ key-type <key-type> ]

## Syntax Description

|                           |                  |   |
|---------------------------|------------------|---|
| <b>Syntax Description</b> | no               | (Optional) Negate a command or set its defaults |
|                           | db-table         | Table name to search                            |
|                           | <i>tablename</i> | Enter table name to search                      |
|                           | key-type         | (Optional) Query key type for this table        |
|                           | <i>key-type</i>  | (Optional)                                      |

## Command Mode

- /exec/configure/fabric-db/server-ldap

# dead-interval

```
{ { dead-interval <interval> } | { no dead-interval [ <interval> ] } }
```

## Syntax Description

|                           |                 |                                      |
|---------------------------|-----------------|--------------------------------------|
| <b>Syntax Description</b> | no              | Negate a command or set its defaults |
|                           | dead-interval   | Dead interval                        |
|                           | <i>interval</i> | (seconds)                            |

## Command Mode

- /exec/configure/router-ospf/router-ospf-vlink /exec/configure/router-ospf/vrf/router-ospf-vlink



# dead-interval

```
{ { dead-interval <interval> } | { no dead-interval [ <interval> ] } }
```

## Syntax Description

|                           |                 |                                      |
|---------------------------|-----------------|--------------------------------------|
| <b>Syntax Description</b> | no              | Negate a command or set its defaults |
|                           | dead-interval   | Dead interval                        |
|                           | <i>interval</i> | (seconds)                            |

## Command Mode

- /exec/configure/router-ospf/vrf/router-ospf-slink

# dead-interval

```
{ { dead-interval <interval> } | { no dead-interval [ <interval> ] } }
```

## Syntax Description

| Syntax Description |               |                                      |
|--------------------|---------------|--------------------------------------|
| no                 |               | Negate a command or set its defaults |
| dead-interval      | Dead interval |                                      |
| <i>interval</i>    | (seconds)     |                                      |

## Command Mode

- /exec/configure/router-ospf3/router-ospf3-vlink /exec/configure/router-ospf3/vrf/router-ospf3-vlink

# deadtime

[no] deadtime <*i0*>

## Syntax Description

---

### Syntax Description

---

**no** (Optional) Negate a command or set its defaults

---

**deadtime** duration for which non-reachable server is skipped

---

*i0* Length of time, in minutes

---

## Command Mode

- /exec/configure/tacacs+

# deadtime

[no] deadtime <i0>

## Syntax Description

---

### Syntax Description

---

no        (Optional) Negate a command or set its defaults

---

deadtime duration for which non-reachable server is skipped

---

*i0*       Length of time, in minutes

---

## Command Mode

- /exec/configure/ldap

# deadtime

[no] deadtime <*i0*>

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults    |
| deadtime           | duration for which non-reachable server is skipped |
| <i>i0</i>          | Length of time, in minutes                         |

## Command Mode

- /exec/configure/radius

# dec

dec <expr>

## Syntax Description

---

### Syntax Description

---

dec calculator with results in decimal format

---

*expr* the expression to compute (integer arithmetics)

---

## Command Mode

- /exec

# default-information originate

[no] default-information originate [ always ] [ route-map <map-name> ]

## Syntax Description

| Syntax Description  |            |                                       |
|---------------------|------------|---------------------------------------|
| no                  | (Optional) | Negate a command or set its defaults  |
| default-information | RIP        | control distribution of default route |
| originate           | RIP        | distribute a default route            |
| always              | (Optional) | RIP always advertise default route    |
| route-map           | (Optional) | Policy to constrain redistribution    |
| <i>map-name</i>     | (Optional) | Route-map name                        |

## Command Mode

- /exec/configure/router-rip/router-rip-af-common /exec/configure/router-rip/router-rip-vrf-af-common

# default-information originate

[no] default-information originate

## Syntax Description

| Syntax Description  |   |
|---------------------|---|
| no                  | (Optional) Negate a command or set its defaults |
| default-information | Control distribution of default information     |
| originate           | Distribute a default route                      |

## Command Mode

- /exec/configure/router-bgp/router-bgp-af /exec/configure/router-bgp/router-bgp-af-ipv6-label /exec/configure/router-bgp/router-bgp-af-ipv4-label



# default-information originate

[no] default-information originate [ always ] [ route-map <policy-name> ]

## Syntax Description

| Syntax Description  |            |   |
|---------------------|------------|---|
| no                  | (Optional) | Negate a command or set its defaults            |
| default-information |            | Control distribution of default route           |
| originate           |            | Distribute a default route                      |
| always              | (Optional) | Always advertise default route                  |
| route-map           | (Optional) | Policy to control distribution of default route |
| <i>policy-name</i>  | (Optional) | Route-map name                                  |

## Command Mode

- /exec/configure/router-ospf /exec/configure/router-ospf/vrf

# default-information originate

[no] default-information originate [ always ] [ route-map <map-name> ]

## Syntax Description

| Syntax Description  |            |  |
|---------------------|------------|--|
| no                  | (Optional) | Negate a command or set its defaults   |
| default-information |            | Control origination of a default route |
| originate           |            | Originate a default route              |
| always              | (Optional) | Always advertise default route         |
| route-map           | (Optional) | Route-map to announce default routes   |
| <i>map-name</i>     | (Optional) | A 'routing-rules' route-map name       |

## Command Mode

- /exec/configure/router-isis/router-isis-vrf-common /exec/configure/router-isis/router-isis-af-common

# default-information originate

[no] default-information originate [ always ] [ route-map <policy-name> ]

## Syntax Description

| Syntax Description  |            |   |
|---------------------|------------|---|
| no                  | (Optional) | Negate a command or set its defaults            |
| default-information |            | Control distribution of default route           |
| originate           |            | Distribute a default route                      |
| always              | (Optional) | Always advertise default route                  |
| route-map           | (Optional) | Policy to control distribution of default route |
| <i>policy-name</i>  | (Optional) | Route-map name                                  |

## Command Mode

- /exec/configure/router-ospf3/router-ospf3-af-ipv6 /exec/configure/router-ospf3/vrf/router-ospf3-af-ipv6

# default-information originate

[no] default-information originate [ always ] [ route-map <map> ]

## Syntax Description

| Syntax Description  |            |   |
|---------------------|------------|---|
| no                  | (Optional) | Negate a command or set its defaults      |
| default-information |            | Control origination of a default route    |
| originate           |            | Originate a default route                 |
| always              | (Optional) | Always advertise default route            |
| route-map           | (Optional) | Use a route-map for default route metrics |
| <i>map</i>          | (Optional) | Route-map name                            |

## Command Mode

- /exec/configure/router-eigrp/router-eigrp-vrf-common /exec/configure/router-eigrp/router-eigrp-af-common

## default-information originate always rd route-target

```
{ default-information originate always rd { <ext-comm-rd-aa2nn4> | <ext-comm-rd-aa4nn2> } route-target
{ <ext-comm-rt-aa2nn4> | <ext-comm-rt-aa4nn2> } } | { no default-information originate always }
```

### Syntax Description

| Syntax Description        |  |   |
|---------------------------|--|---|
| no                        |  | Negate a command or set its defaults              |
| default-information       |  | Control distribution of default information       |
| originate                 |  | Distribute a default route                        |
| always                    |  | Always advertise default route                    |
| rd                        |  | VPN Route Distinguisher                           |
| <i>ext-comm-rd-aa4nn2</i> |  | VPN route distinguisher in aa4:nn or ip:nn format |
| <i>ext-comm-rd-aa2nn4</i> |  | VPN route distinguisher in aa:nn format           |
| route-target              |  | Specify Target VPN Extended Communities           |
| <i>ext-comm-rt-aa4nn2</i> |  | RT extcommunity in aa4:nn or ip:nn format         |
| <i>ext-comm-rt-aa2nn4</i> |  | RT extcommunity in aa:nn format                   |

### Command Mode

- /exec/configure/router-bgp/router-bgp-af-vpnv4 /exec/configure/router-bgp/router-bgp-af-vpnv6

# default-metric

default-metric <metric> | no default-metric [ <metric> ]

## Syntax Description

|                           |                |                                      |
|---------------------------|----------------|--------------------------------------|
| <b>Syntax Description</b> | no             | Negate a command or set its defaults |
|                           | default-metric | RIP default metric                   |
|                           | <i>metric</i>  | RIP metric value                     |

## Command Mode

- /exec/configure/router-rip/router-rip-af-common /exec/configure/router-rip/router-rip-vrf-af-common

# default-metric

[no] default-metric <metric>

## Syntax Description

| Syntax         | Description                                     |
|----------------|---|
| no             | (Optional) Negate a command or set its defaults |
| default-metric | Set metric of redistributed routes              |
| metric         | Default Metric                                  |

## Command Mode

- /exec/configure/router-bgp/router-bgp-af

# default-metric

```
{ default-metric <cost> } | { no default-metric [ <cost> ] }
```

## Syntax Description

|                           |                             |   |
|---------------------------|-----------------------------|---|
| <b>Syntax Description</b> | <code>no</code>             | Negate a command or set its defaults            |
|                           | <code>default-metric</code> | Specify default metric for redistributed routes |
|                           | <code>cost</code>           | Metric value                                    |

## Command Mode

- /exec/configure/router-ospf /exec/configure/router-ospf/vrf



# default-metric

```
{ default-metric <cost> } | { no default-metric [ <cost> ] }
```

## Syntax Description

| Syntax Description          |   |
|-----------------------------|---|
| <code>no</code>             | Negate a command or set its defaults            |
| <code>default-metric</code> | Specify default metric for redistributed routes |
| <code>cost</code>           | Metric value                                    |

## Command Mode

- /exec/configure/router-ospf3/router-ospf3-af-ipv6 /exec/configure/router-ospf3/vrf/router-ospf3-af-ipv6

# default-metric

```
{ { default-metric <bw> <delay> <rel> <load> <mtu> } | { no default-metric [ <bw> <delay> <rel> <load> <mtu> ] } }
```

## Syntax Description

| Syntax Description          |  |   |
|-----------------------------|--|---|
| <code>no</code>             |  | Negate a command or set its defaults                          |
| <code>default-metric</code> |  | Set metric of redistributed routes                            |
| <code>bw</code>             |  | Bandwidth in Kbits per second                                 |
| <code>delay</code>          |  | Delay metric  |
| <code>rel</code>            |  | Reliability metric where 255 is 100% reliable                 |
| <code>load</code>           |  | Effective bandwidth metric (Loading) where 255 is 100% loaded |
| <code>mtu</code>            |  | Maximum Transmission Unit metric of the path                  |

## Command Mode

- `/exec/configure/router-eigrp/router-eigrp-vrf-common /exec/configure/router-eigrp/router-eigrp-af-common`

# default-miss

default-miss { continue-drop | continue-normal | continue-controller | drop | normal | controller } | no default-miss

## Syntax Description

| Syntax Description  |     |  |
|---------------------|-----|--|
| no                  |     | Negate a command or set its defaults   |
| default-miss        | Set | continue-drop/continue-normal/continue-controller/drop/normal/controller flow action |
| continue-drop       |     | cascade drop to next table   |
| continue-normal     |     | cascade normal to next table   |
| continue-controller |     | cascade punt to next table   |
| drop                |     | drop packet  |
| normal              |     | forward to normal dataplane  |
| controller          |     | punt to controller   |

## Command Mode

- /exec/configure/openflow/switch

# default-originate

[ no | default ] default-originate [ route-map <rmap-name> ]

## Syntax Description

| Syntax Description |            |   |
|--------------------|------------|---|
| no                 | (Optional) | Negate a command or set its defaults                  |
| default            | (Optional) | Inherit values from a peer template                   |
| default-originate  |            | Originate a default toward this peer                  |
| route-map          | (Optional) | Route-map to specify criteria for originating default |
| <i>rmap-name</i>   | (Optional) | Route-map name  |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af

# default echo revision

```
default echo { revision | vendor-extension }
```

## Syntax Description

| Syntax Description |                  |   |
|--------------------|------------------|---|
|                    | default          | Set a command to its defaults           |
|                    | echo             | Echo Request attributes                 |
|                    | revision         | Echo packet default revision            |
|                    | vendor-extension | Send Vendor Extension TLV with echo Req |

## Command Mode

- /exec/configure/mpls-oam

# define

[no] define <paramname> [ <paramtype> ] [ <paramdesc> ]

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| define             | Define a parameter                              |
| <i>paramname</i>   | Enter the name of the parameter                 |
| <i>paramtype</i>   | (Optional) param type                           |
| <i>paramdesc</i>   | (Optional) Enter the parameter description      |

## Command Mode

- /exec/configure/param-list

# delay

delay <delay\_val> | no delay [ <delay\_val> ]

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | Negate a command or set its defaults    |
| delay              | Specify interface throughput delay      |
| <i>delay_val</i>   | Throughput delay (tens of microseconds) |

## Command Mode

- /exec/configure/if-ether-sub /exec/configure/if-ether-sub-p2p /exec/configure/if-port-channel-sub

# delay

delay <delay\_val> | no delay [ <delay\_val> ]

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults    |
| delay              |  | Specify interface throughput delay      |
| <i>delay_val</i>   |  | Throughput delay (tens of microseconds) |

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-eth-non-member /exec/configure/if-port-channel /exec/configure/if-ethernet-all /exec/configure/if-ethernet-p2p /exec/configure/if-remote-ethernet-sub /exec/configure/if-port-channel-range



# delay

delay <microseconds> | no delay

## Syntax Description

| Syntax Description  |   |
|---------------------|---|
| no                  | Negate a command or set its defaults    |
| delay               | Specify interface throughput delay      |
| <i>microseconds</i> | Throughput delay (tens of microseconds) |

## Command Mode

- /exec/configure/if-vlan-common

# delay peer-link

delay peer-link <time> | no delay peer-link

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults            |
| delay              |  | Peer-link bringup delay                         |
| peer-link          |  | Delay peer-link bringup                         |
| <i>time</i>        |  | Delay in bringing up the peer-link (in seconds) |

## Command Mode

- /exec/configure/vpc-domain

# delay restore

delay restore <time-out> | no delay restore

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | Negate a command or set its defaults            |
| delay              | Initialization delay                            |
| restore            | Delay after restoring peer-link                 |
| <i>time-out</i>    | Delay in bringing up the vPC links (in seconds) |

## Command Mode

- /exec/configure/vpc-domain

# delay restore interface-vlan

delay restore interface-vlan <time-out> | no delay restore interface-vlan

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults                 |
| delay              |  | Initialization delay                                 |
| restore            |  | Delay after restoring peer-link                      |
| interface-vlan     |  | Delay in bringing-up interface-vlan                  |
| <i>time-out</i>    |  | Delay in bringing up the interface-vlan (in seconds) |

## Command Mode

- /exec/configure/vpc-domain

# delay restore orphan-port

delay restore orphan-port <delay\_time> | no delay restore orphan-port

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults           |
| delay              |  | Initialization delay                           |
| restore            |  | Delay after restoring peer-link                |
| orphan-port        |  | Configure vPC orphan-port delay bring-up timer |
| <i>delay_time</i>  |  | Specify delay time in seconds                  |

## Command Mode

- /exec/configure/vpc-domain

# delay up

delay { { up <up\_delay> [ down <down\_delay> ] } | { down <down\_delay> [ up <up\_delay> ] } } | no delay

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults      |
| delay              |  | Tracking delay                            |
| up                 |  | Delay up change notification              |
| <i>up_delay</i>    |  | Seconds to delay                          |
| down               |  | (Optional) Delay down change notification |
| <i>down_delay</i>  |  | (Optional) Seconds to delay               |

## Command Mode

- /exec/configure/track /exec/configure/tr-list-bool /exec/configure/tr-list-thrp /exec/configure/tr-list-thrw

# delete

delete { <uri0> | <uri1> | <uri2> } [ no-prompt ]

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| delete             | delete a file or directory                              |
| <i>uri0</i>        | Delete a file or directory                              |
| <i>uri1</i>        | Delete a file or directory on expansion flash           |
| <i>uri2</i>        | Directory or filename on logflash                       |
| no-prompt          | (Optional) Do not prompt for multiple deletion of files |

## Command Mode

- /exec

# delete ca-certificate

delete ca-certificate

## Syntax Description

| Syntax Description |                |                            |
|--------------------|----------------|----------------------------|
|                    | delete         | Delete the certificates    |
|                    | ca-certificate | Delete the ca certificates |

## Command Mode

- /exec/configure/trustpoint



# delete certificate

delete certificate [ force ]

## Syntax Description

---

### Syntax Description

---

delete Delete the certificates

---

certificate Delete the identity certificate

---

force (Optional) Force delete the identity certificate

---

## Command Mode

- /exec/configure/trustpoint

# delete crl

delete crl

## Syntax Description

---

### Syntax Description

---

~~delete~~ Delete the certificates

---

crl Delete the CRL

---

## Command Mode

- /exec/configure/trustpoint

# demand-circuit

[no] demand-circuit

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| demand-circuit     | OSPF Demand circuit                             |

## Command Mode

- /exec/configure/router-ospf/vrf/router-ospf-slink

# description

description <describe> | no description

## Syntax Description

|                           |                 |   |
|---------------------------|-----------------|---|
| <b>Syntax Description</b> | no              | Negate a command or set its defaults      |
|                           | description     | Description for the BMP server            |
|                           | <i>describe</i> | Upto 80 characters describing this server |

## Command Mode

- /exec/configure/router-bgp/router-bgp-bmp-server

# description

description <describe> | { no | default } description [ <describe> ]

## Syntax Description

---

### Syntax Description

---

no           Negate a command or set its defaults

---

default     Inherit values from a peer template

---

description Neighbor specific description

---

*describe*   Upto 80 characters describing this neighbor

---

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor-sess

# description

{ description <descr> } | { no description }

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <code>description</code> Configure description of the profile |
|                           | <code>descr</code> Description of maximum 64 characters       |

## Command Mode

- /exec/configure/configngoamprofile

# description

description <line> | no description

## Syntax Description

| Syntax      | Description                                      |
|-------------|--|
| no          | Negate a command or set its defaults             |
| description | Add a description for the role                   |
| <i>line</i> | Enter the description string(can include spaces) |

## Command Mode

- /exec/configure/role

# description

{ description <line> | no description }

## Syntax Description

|                           |                    |                                      |
|---------------------------|--------------------|--------------------------------------|
| <b>Syntax Description</b> | <i>no</i>          | Negate a command or set its defaults |
|                           | <i>description</i> | Description of the route-map         |
|                           | <i>line</i>        | Route-map description string         |

## Command Mode

- /exec/configure/route-map



# description

description <desc\_line> | no description [ <desc\_line> ]

## Syntax Description

### Syntax Description

no Negate a command or set its defaults

description Enter description of maximum 254 characters

*desc\_line* Description of maximum 254 characters

## Command Mode

- /exec/configure/if-eth-base /exec/configure/if-port-channel /exec/configure/if-eth-port-channel /exec/configure/if-ether-sub /exec/configure/if-ether-sub-p2p /exec/configure/if-port-channel-sub /exec/configure/if-loopback /exec/configure/if-ethernet-all /exec/configure/if-ethernet-p2p /exec/configure/if-remote-ethernet-sub /exec/configure/if-port-channel-range

# description

description <desc\_line> | no description [ <desc\_line> ]

## Syntax Description

|                           |                  |   |
|---------------------------|------------------|---|
| <b>Syntax Description</b> | no               | Negate a command or set its defaults        |
|                           | description      | Enter description of maximum 254 characters |
|                           | <i>desc_line</i> | Description of maximum 254 characters       |

## Command Mode

- /exec/configure/if-mgmt-ether

# description

description <desc\_line> | no description [ <desc\_line> ]

## Syntax Description

---

### Syntax Description

---

no Negate a command or set its defaults

---

description Enter description of maximum 254 characters

---

*desc\_line* Description of maximum 254 characters

---

## Command Mode

- /exec/configure/if-nve

# description

description <desc\_line> | no description [ <desc\_line> ]

## Syntax Description

---

### Syntax Description

---

no Negate a command or set its defaults

---

description Enter description of maximum 80 characters

---

*desc\_line* Description of maximum 80 characters

---

## Command Mode

- /exec/configure/if-overlay /exec/configure/if-te /exec/configure/if-nve

# description

description <desc\_line> | no description [ <desc\_line> ]

## Syntax Description

---

### Syntax Description

---

no Negate a command or set its defaults

---

description Enter description of maximum 254 characters

---

*desc\_line* Description of maximum 254 characters

---

## Command Mode

- /exec/configure/if-any-tunnel

# description

[no] description <description>

## Syntax Description

---

|                           |    |   |
|---------------------------|----|---|
| <b>Syntax Description</b> | no | (Optional) Negate a command or set its defaults |
|---------------------------|----|---|

---

|  |             |                                      |
|--|-------------|--------------------------------------|
|  | description | Configure description for the policy |
|--|-------------|--------------------------------------|

---

|  |                    |                            |
|--|--------------------|----------------------------|
|  | <i>description</i> | Description for the policy |
|--|--------------------|----------------------------|

---

## Command Mode

- /exec/configure/event-manager-applet

# description

[no] description

## Syntax Description

| Syntax      | Description                          |
|-------------|--------------------------------------|
| no          | Negate a command or set its defaults |
| description | Configure description for the policy |

## Command Mode

- /exec/configure/event-manager-applet

# description

```
{ description <desc-str> | no description [ <desc-str> ] }
```

## Syntax Description

|                           |                 |  |
|---------------------------|-----------------|--|
| <b>Syntax Description</b> | no              | Negate a command or set its defaults                 |
|                           | description     | Class-Map description                                |
|                           | <i>desc-str</i> | Description of this class-map (up to 200 characters) |

## Command Mode

- /exec/configure/class-map



# description

[no] description <desc-str>

## Syntax Description

|                           |                 |  |
|---------------------------|-----------------|--|
| <b>Syntax Description</b> | no              | (Optional) Negate a command or set its defaults      |
|                           | description     | Class-Map description                                |
|                           | <i>desc-str</i> | Description of this class-map (up to 200 characters) |

## Command Mode

- /exec/configure/class-map/type/queuing

# description

{ description <desc-str> | no description [ <desc-str> ] }

## Syntax Description

|                           |                 |  |
|---------------------------|-----------------|--|
| <b>Syntax Description</b> | no              | Negate a command or set its defaults                 |
|                           | description     | Table-Map description                                |
|                           | <i>desc-str</i> | Description of this table-map (up to 200 characters) |

## Command Mode

- /exec/configure/table-map

# description

```
{ description <desc-str> | no description [ <desc-str> ] }
```

## Syntax Description

|                           |                          |   |
|---------------------------|--------------------------|---|
| <b>Syntax Description</b> | <code>no</code>          | Negate a command or set its defaults                  |
|                           | <code>description</code> | Policy-Map description                                |
|                           | <i>desc-str</i>          | Description of this policy-map (up to 200 characters) |

## Command Mode

- /exec/configure/policy-map

# description

```
{ description <desc-str> | no description [ <desc-str> ] }
```

## Syntax Description

|                           |                 |   |
|---------------------------|-----------------|---|
| <b>Syntax Description</b> | no              | Negate a command or set its defaults                  |
|                           | description     | Policy-Map description                                |
|                           | <i>desc-str</i> | Description of this policy-map (up to 200 characters) |

## Command Mode

- /exec/configure/policy-map/type/queuing

# description

[no] description [ <desc> ] | description <desc>

## Syntax Description

|                           |                    |  |
|---------------------------|--------------------|--|
| <b>Syntax Description</b> | <i>no</i>          | Negate a command or set its defaults                 |
|                           | <i>description</i> | Group description                                    |
|                           | <i>desc</i>        | (Optional) Up to 80 characters describing this group |

## Command Mode

- /exec/configure/if-eth-any/vrrpv3

# description

{ [ no ] description <line> | no description }

## Syntax Description

---

### Syntax Description

`description` Provide a description for this Flow Record

---

*line* Record description string (63 characters maximum)

---

## Command Mode

- /exec/configure/nfm-record

# description

{ [ no ] description <line> | no description }

## Syntax Description

---

**Syntax Description**

*description* Provide a description for this Flow Monitor

---

*line* Monitor description string (63 characters maximum)

---

## Command Mode

- /exec/configure/nfm-monitor

# description

{ [ no ] description <line> | no description }

## Syntax Description

---

### Syntax Description

`description` Provide a description for this Flow Exporter

---

*line* Monitor description string (63 characters maximum)

---

## Command Mode

- /exec/configure/nfm-exporter



# description

{ [ no ] description <line> | no description }

## Syntax Description

---

### Syntax Description

`description` Provide a description for this Flow Sampler

---

*line* Sampler description string (63 characters maximum)

---

## Command Mode

- /exec/configure/nfm-sampler

# description

description [ port-profile ] <desc\_line> | no description [ port-profile ] [ <desc\_line> ]

## Syntax Description

### Syntax Description

no Negate a command or set its defaults

description Enter port-profile description of maximum 80 characters

port-profile (Optional) Hack for conf-sync

*desc\_line* Enter port-profile description of maximum 80 characters

## Command Mode

- /exec/configure/port-profile

# description

```
{ description <desc-str> | no description [ <desc-str> ] }
```

## Syntax Description

|                           |                 |  |
|---------------------------|-----------------|--|
| <b>Syntax Description</b> | no              | Negate a command or set its defaults                 |
|                           | description     | Class-Map description                                |
|                           | <i>desc-str</i> | Description of this class-map (up to 200 characters) |

## Command Mode

- /exec/configure/class-map/type/uf

# description

```
{ description <desc-str> | no description [ <desc-str> ] }
```

## Syntax Description

|                           |                 |   |
|---------------------------|-----------------|---|
| <b>Syntax Description</b> | no              | Negate a command or set its defaults                  |
|                           | description     | Policy-Map description                                |
|                           | <i>desc-str</i> | Description of this policy-map (up to 200 characters) |

## Command Mode

- /exec/configure/policy-map/type/uf

# description

{ description <description\_text> | no description [ <description\_text> ] }

## Syntax Description

| Syntax                  | Description                          |
|-------------------------|--------------------------------------|
| no                      | Negate a command or set its defaults |
| description             | Virtual service description          |
| <i>description_text</i> | Description of this virtual service  |

## Command Mode

- /exec/configure/virt-serv

# description

```
{ [ no ] description <text> }
```

## Syntax Description

---

**Syntax Description**

---

|             |                              |
|-------------|------------------------------|
| description | description for this profile |
|-------------|------------------------------|

---

|             |             |
|-------------|-------------|
| <i>text</i> | description |
|-------------|-------------|

---

## Command Mode

- /exec/configure/dot1x-cred

# description

{ description <line> } | { no description }

## Syntax Description

|                           |                    |                                      |
|---------------------------|--------------------|--------------------------------------|
| <b>Syntax Description</b> | <i>no</i>          | Negate a command or set its defaults |
|                           | <i>description</i> | Description of the VRF               |
|                           | <i>line</i>        | VRF description string               |

## Command Mode

- /exec/configure/vrf

# description

description <desc\_line> | no description

## Syntax Description

|                           |                  |  |
|---------------------------|------------------|--|
| <b>Syntax Description</b> | no               | Negate a command or set its defaults           |
|                           | description      | Interface specific description                 |
|                           | <i>desc_line</i> | Up to 255 characters describing this interface |

## Command Mode

- /exec/configure/if-vlan-common



# description

```
{ [ no ] description <descrip-string> }
```

## Syntax Description

| Syntax                | Description                                     |
|-----------------------|---|
| no                    | (Optional) Negate a command or set its defaults |
| description           | Provide a description string for the LISP site  |
| <i>descrip-string</i> | Description string                              |

## Command Mode

- /exec/configure/lisp-site /exec/configure/vrf/lisp-site

# description description

[no] description | description <desc>

## Syntax Description

|                           |             |   |
|---------------------------|-------------|---|
| <b>Syntax Description</b> | no          | (Optional) Negate a command or set its defaults |
|                           | description | Pathway description                             |
|                           | <i>desc</i> | Up to 80 characters describing this pathway     |

## Command Mode

- /exec/configure/if-eth-any/vrrs

# dest-ipaddr

```
{ { no | default } dest-ipaddr | dest-ipaddr { <ip-address> | <hostname> } }
```

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| default            |  | Set a command to its defaults        |
| dest-ipaddr        |  | Destination ip address               |
| <i>ip-address</i>  |  | IP address, broadcast disallowed     |
| <i>hostname</i>    |  | IP Hostname, broadcast disallowed    |

## Command Mode

- /exec/configure/ip-sla/udp /exec/configure/ip-sla/jitter /exec/configure/ip-sla/tcp

# dest-port

{ { no | default } dest-port | dest-port <port> }

## Syntax Description

---

### Syntax Description

---

no

---

default Set a command to its defaults

---

dest-port Destination port

---

*port* udp port number

---

## Command Mode

- /exec/configure/ip-sla/udp /exec/configure/ip-sla/jitter /exec/configure/ip-sla/tcp

# destination-group

[no] destination-group <dgrp-id>

## Syntax Description

|                           |                   |   |
|---------------------------|-------------------|---|
| <b>Syntax Description</b> | no                | (Optional) Negate a command or set its defaults |
|                           | destination-group | Create destination group                        |

## Command Mode

- /exec/configure/telemetry

# destination-profile

[no] destination-profile <s0>

## Syntax Description

|                           |                     |   |
|---------------------------|---------------------|---|
| <b>Syntax Description</b> | no                  | (Optional) Negate a command or set its defaults |
|                           | destination-profile | Configure destination profiles                  |
|                           | s0                  | User defined destination profile name           |

## Command Mode

- /exec/configure/callhome

## destination-profile CiscoTAC-1 alert-group

[no] destination-profile CiscoTAC-1 alert-group { All | Configuration | Diagnostic | EEM | Cisco-TAC | Environmental | Inventory | License | Linecard-Hardware | Supervisor-Hardware | Syslog-group-port | System | Test }

### Syntax Description

| Syntax Description  |            |   |
|---------------------|------------|---|
| no                  | (Optional) | Negate a command or set its defaults                      |
| destination-profile |            | Configure destination profiles                            |
| CiscoTAC-1          |            | Configure destination profile for XML message             |
| alert-group         |            | Add alert group   |
| All                 |            | This alert group consists of all of the callhome messages |
| Cisco-TAC           |            | Events which are meant for Cisco TAC only                 |
| Environmental       |            | Power,fan,temperature related events                      |
| Inventory           |            | Inventory status events                                   |
| License             |            | Events related to licensing                               |
| Linecard-Hardware   |            | Linecard related events                                   |
| Supervisor-Hardware |            | Supervisor related events                                 |
| Syslog-group-port   |            | Events related to syslog messages filed by port manager   |
| System              |            | Software related events                                   |
| Test                |            | User generated test events                                |
| Configuration       |            | Events related to Configuration                           |
| Diagnostic          |            | Events related to Diagnostic                              |
| EEM                 |            | EEM events  |

### Command Mode

- /exec/configure/callhome

# destination-profile CiscoTAC-1 email-addr

[no] destination-profile CiscoTAC-1 email-addr <s0>

## Syntax Description

|                           |                     |   |
|---------------------------|---------------------|---|
| <b>Syntax Description</b> | no                  | (Optional) Negate a command or set its defaults |
|                           | destination-profile | Configure destination profiles                  |
|                           | CiscoTAC-1          | Configure destination profile for XML message   |
|                           | email-addr          | Add email addr                                  |
|                           | s0                  | Provide email address, example: jdow@xyz.com    |

## Command Mode

- /exec/configure/callhome



## destination-profile CiscoTAC-1 http

[no] destination-profile CiscoTAC-1 http <s0>

### Syntax Description

---

**Syntax Description**

|                     |  |
|---------------------|--|
| no                  | (Optional) Negate a command or set its defaults  |
| destination-profile | Configure destination profiles   |
| CiscoTAC-1          | Configure destination profile for XML message  |
| http                | Add http or https url  |
| s0                  | Provide http or https url, example1: http://site.com/services/callserv example2: https://site2.com/serv/CALL |

---

### Command Mode

- /exec/configure/callhome

# destination-profile CiscoTAC-1 message-level

destination-profile CiscoTAC-1 message-level <i0>

## Syntax Description

---

### Syntax Description

---

destination-profile Configure destination profiles

---

CiscoTAC-1 Configure destination profile for XML message

---

message-level Callhome message level(0-lowest urgency, 9-highest urgency)

---

*i0*

---

## Command Mode

- /exec/configure/callhome

# destination-profile CiscoTAC-1 message-size

destination-profile CiscoTAC-1 message-size <i0>

## Syntax Description

### Syntax Description

|                     |  |
|---------------------|--|
| destination-profile | Configure destination profiles                   |
| CiscoTAC-1          | Configure destination profile for XML message    |
| message-size        | Configure maximum message size (default 5000000) |
| <i>i0</i>           | Provide maximum possible message size            |

## Command Mode

- /exec/configure/callhome

# destination-profile CiscoTAC-1 transport-method email

[no] destination-profile CiscoTAC-1 transport-method email

## Syntax Description

| Syntax Description  |   |
|---------------------|---|
| no                  | (Optional) Negate a command or set its defaults |
| destination-profile | Configure destination profiles                  |
| CiscoTAC-1          | Configure destination profile for XML message   |
| transport-method    | Callhome message sending transport-method       |
| email               | email transport-method                          |

## Command Mode

- /exec/configure/callhome

# destination-profile CiscoTAC-1 transport-method http

[no] destination-profile CiscoTAC-1 transport-method http

## Syntax Description

|                           |                     |   |
|---------------------------|---------------------|---|
| <b>Syntax Description</b> | no                  | (Optional) Negate a command or set its defaults |
|                           | destination-profile | Configure destination profiles                  |
|                           | CiscoTAC-1          | Configure destination profile for XML message   |
|                           | transport-method    | Callhome message sending transport-method       |
|                           | http                | http transport-method                           |

## Command Mode

- /exec/configure/callhome

# destination-profile alert-group

[no] destination-profile <s0> alert-group { All | Configuration | Diagnostic | EEM | Cisco-TAC | Environmental | Inventory | License | Linecard-Hardware | Supervisor-Hardware | Syslog-group-port | System | Test }

## Syntax Description

| Syntax Description  |            |   |
|---------------------|------------|---|
| no                  | (Optional) | Negate a command or set its defaults                      |
| destination-profile |            | Configure destination profiles                            |
| s0                  |            | User defined destination profile name                     |
| alert-group         |            | Add alert group   |
| All                 |            | This alert group consists of all of the callhome messages |
| Cisco-TAC           |            | Events which are meant for Cisco TAC only                 |
| Environmental       |            | Power,fan,temperature related events                      |
| Inventory           |            | Inventory status events                                   |
| License             |            | Events related to licensing                               |
| Linecard-Hardware   |            | Linecard related events                                   |
| Supervisor-Hardware |            | Supervisor related events                                 |
| Syslog-group-port   |            | Events related to syslog messages filed by port manager   |
| System              |            | Software related events                                   |
| Test                |            | User generated test events                                |
| Configuration       |            | Events related to Configuration                           |
| Diagnostic          |            | Events related to Diagnostic                              |
| EEM                 |            | EEM events  |

## Command Mode

- /exec/configure/callhome

# destination-profile email-addr

[no] destination-profile <s0> email-addr <s1>

## Syntax Description

| Syntax Description  |   |
|---------------------|---|
| no                  | (Optional) Negate a command or set its defaults |
| destination-profile | Configure destination profiles                  |
| s0                  | User defined destination profile name           |
| email-addr          | Add email addr                                  |
| s1                  | Provide email address, example: jdow@xyz.com    |

## Command Mode

- /exec/configure/callhome

# destination-profile format

```
destination-profile <s0> format { full-txt | short-txt | XML }
```

## Syntax Description

### Syntax Description

|                     |                                       |
|---------------------|---------------------------------------|
| destination-profile | Configure destination profiles        |
| <i>s0</i>           | User defined destination profile name |
| format              | Callhome message format (default XML) |
| full-txt            | Plain text message format             |
| short-txt           | Short text message format             |
| XML                 | XML message format                    |

## Command Mode

- /exec/configure/callhome



# destination-profile full-txt-destination alert-group

[no] destination-profile full-txt-destination alert-group { All | Configuration | Diagnostic | EEM | Cisco-TAC | Environmental | Inventory | License | Linecard-Hardware | Supervisor-Hardware | Syslog-group-port | System | Test }

## Syntax Description

| Syntax Description   |   |
|----------------------|---|
| no                   | (Optional) Negate a command or set its defaults           |
| destination-profile  | Configure destination profiles                            |
| full-txt-destination | Configure destination profile for plain txt message       |
| alert-group          | Add alert group   |
| All                  | This alert group consists of all of the callhome messages |
| Cisco-TAC            | Events which are meant for Cisco TAC only                 |
| Environmental        | Power,fan,temperature related events                      |
| Inventory            | Inventory status events                                   |
| License              | Events related to licensing                               |
| Linecard-Hardware    | Linecard related events                                   |
| Supervisor-Hardware  | Supervisor related events                                 |
| Syslog-group-port    | Events related to syslog messages filed by port manager   |
| System               | Software related events                                   |
| Test                 | User generated test events                                |
| Configuration        | Events related to Configuration                           |
| Diagnostic           | Events related to Diagnostic                              |
| EEM                  | EEM events  |

## Command Mode

- /exec/configure/callhome

# destination-profile full-txt-destination email-addr

[no] destination-profile full-txt-destination email-addr <s0>

## Syntax Description

|                           |                      |   |
|---------------------------|----------------------|---|
| <b>Syntax Description</b> | no                   | (Optional) Negate a command or set its defaults     |
|                           | destination-profile  | Configure destination profiles                      |
|                           | full-txt-destination | Configure destination profile for plain txt message |
|                           | email-addr           | Add email addr                                      |
|                           | s0                   | Provide email address, example: jdow@xyz.com        |

## Command Mode

- /exec/configure/callhome

# destination-profile full-txt-destination http

[no] destination-profile full-txt-destination http <s0>

## Syntax Description

### Syntax Description

|                      |  |
|----------------------|--|
| no                   | (Optional) Negate a command or set its defaults  |
| destination-profile  | Configure destination profiles   |
| full-txt-destination | Configure destination profile for plain txt message  |
| http                 | Add http or https url  |
| s0                   | Provide http or https url, example1: http://site.com/services/callserv example2: https://site2.com/serv/CALL |

## Command Mode

- /exec/configure/callhome

# destination-profile full-txt-destination message-level

destination-profile full-txt-destination message-level <i0>

## Syntax Description

---

### Syntax Description

---

destination-profile Configure destination profiles

---

full-txt-destination Configure destination profile for plain txt message

---

message-level Callhome message level(0-lowest urgency, 9-highest urgency)

---

*i0*

---

## Command Mode

- /exec/configure/callhome

# destination-profile full-txt-destination message-size

destination-profile full-txt-destination message-size <i0>

## Syntax Description

### Syntax Description

|                      |   |
|----------------------|---|
| destination-profile  | Configure destination profiles                      |
| full-txt-destination | Configure destination profile for plain txt message |
| message-size         | Configure maximum message size (default 2500000)    |
| <i>i0</i>            | Provide maximum possible message size               |

## Command Mode

- /exec/configure/callhome

# destination-profile full-txt-destination transport-method email

[no] destination-profile full-txt-destination transport-method email

## Syntax Description

| Syntax Description   |   |
|----------------------|---|
| no                   | (Optional) Negate a command or set its defaults     |
| destination-profile  | Configure destination profiles                      |
| full-txt-destination | Configure destination profile for plain txt message |
| transport-method     | Callhome message sending transport-method           |
| email                | email transport-method                              |

## Command Mode

- /exec/configure/callhome

# destination-profile full-txt-destination transport-method http

[no] destination-profile full-txt-destination transport-method http

## Syntax Description

|                           |                      |   |
|---------------------------|----------------------|---|
| <b>Syntax Description</b> | no                   | (Optional) Negate a command or set its defaults     |
|                           | destination-profile  | Configure destination profiles                      |
|                           | full-txt-destination | Configure destination profile for plain txt message |
|                           | transport-method     | Callhome message sending transport-method           |
|                           | http                 | http transport-method                               |

## Command Mode

- /exec/configure/callhome

# destination-profile http

[no] destination-profile <s4> { http <s2> }

## Syntax Description

### Syntax Description

|                     |  |
|---------------------|--|
| no                  | (Optional) Negate a command or set its defaults  |
| destination-profile | Configure destination profiles   |
| s4                  | User defined destination profile name  |
| http                | Add http or https url  |
| s2                  | Provide http or https url, example1: http://site.com/services/callserv example2: https://site2.com/serv/CALL |

## Command Mode

- /exec/configure/callhome



# destination-profile message-level

destination-profile <s0> message-level <i0>

## Syntax Description

---

### Syntax Description

---

destination-profile Configure destination profiles

---

*s0* User defined destination profile name

---

message-level Callhome message level(0-lowest urgency, 9-highest urgency)

---

*i0*

---

## Command Mode

- /exec/configure/callhome

# destination-profile message-size

destination-profile <s0> message-size <i0>

## Syntax Description

---

### Syntax Description

---

|                     |  |
|---------------------|--|
| destination-profile | Configure destination profiles                   |
| <i>s0</i>           | User defined destination profile name            |
| message-size        | Configure maximum message size (default 2500000) |
| <i>i0</i>           | Provide maximum possible message size            |

---

## Command Mode

- /exec/configure/callhome

# destination-profile short-txt-destination alert-group

[no] destination-profile short-txt-destination alert-group { All | Configuration | Diagnostic | EEM | Cisco-TAC | Environmental | Inventory | License | Linecard-Hardware | Supervisor-Hardware | Syslog-group-port | System | Test }

## Syntax Description

| Syntax Description    |   |
|-----------------------|---|
| no                    | (Optional) Negate a command or set its defaults           |
| destination-profile   | Configure destination profiles                            |
| short-txt-destination | Configure destination profile for short txt message       |
| alert-group           | Add alert group   |
| All                   | This alert group consists of all of the callhome messages |
| Cisco-TAC             | Events which are meant for Cisco TAC only                 |
| Environmental         | Power,fan,temperature related events                      |
| Inventory             | Inventory status events                                   |
| License               | Events related to licensing                               |
| Linecard-Hardware     | Linecard related events                                   |
| Supervisor-Hardware   | Supervisor related events                                 |
| Syslog-group-port     | Events related to syslog messages filed by port manager   |
| System                | Software related events                                   |
| Test                  | User generated test events                                |
| Configuration         | Events related to Configuration                           |
| Diagnostic            | Events related to Diagnostic                              |
| EEM                   | EEM events  |

## Command Mode

- /exec/configure/callhome

# destination-profile short-txt-destination email-addr

[no] destination-profile short-txt-destination email-addr <s0>

## Syntax Description

| Syntax Description    |            |   |
|-----------------------|------------|---|
| no                    | (Optional) | Negate a command or set its defaults                |
| destination-profile   |            | Configure destination profiles                      |
| short-txt-destination |            | Configure destination profile for short txt message |
| email-addr            |            | Add email addr                                      |
| s0                    |            | Provide email address, example: jdow@xyz.com        |

## Command Mode

- /exec/configure/callhome

# destination-profile short-txt-destination http

[no] destination-profile short-txt-destination http <s0>

## Syntax Description

### Syntax Description

|                       |  |
|-----------------------|--|
| no                    | (Optional) Negate a command or set its defaults  |
| destination-profile   | Configure destination profiles   |
| short-txt-destination | Configure destination profile for short txt message  |
| http                  | Add http or https url  |
| s0                    | Provide http or https url, example1: http://site.com/services/callserv example2: https://site2.com/serv/CALL |

## Command Mode

- /exec/configure/callhome

# destination-profile short-txt-destination message-level

destination-profile short-txt-destination message-level <i0>

## Syntax Description

---

### Syntax Description

---

destination-profile Configure destination profiles

---

short-txt-destination Configure destination profile for short txt message

---

message-level Callhome message level(0-lowest urgency, 9-highest urgency)

---

*i0*

---

## Command Mode

- /exec/configure/callhome

# destination-profile short-txt-destination message-size

destination-profile short-txt-destination message-size <i0>

## Syntax Description

---

### Syntax Description

---

destination-profile Configure destination profiles

---

short-txt-destination Configure destination profile for short txt message

---

message-size Configure maximum message size (default 4000)

---

*i0*

---

## Command Mode

- /exec/configure/callhome

# destination-profile short-txt-destination transport-method email

[no] destination-profile short-txt-destination transport-method email

## Syntax Description

| Syntax Description    |   |
|-----------------------|---|
| no                    | (Optional) Negate a command or set its defaults     |
| destination-profile   | Configure destination profiles                      |
| short-txt-destination | Configure destination profile for short txt message |
| transport-method      | Callhome message sending transport-method           |
| email                 | email transport-method                              |

## Command Mode

- /exec/configure/callhome



# destination-profile short-txt-destination transport-method http

[no] destination-profile short-txt-destination transport-method http

## Syntax Description

|                           |                       |   |
|---------------------------|-----------------------|---|
| <b>Syntax Description</b> | no                    | (Optional) Negate a command or set its defaults     |
|                           | destination-profile   | Configure destination profiles                      |
|                           | short-txt-destination | Configure destination profile for short txt message |
|                           | transport-method      | Callhome message sending transport-method           |
|                           | http                  | http transport-method                               |

## Command Mode

- /exec/configure/callhome

# destination-profile transport-method email

[no] destination-profile <s5> transport-method email

## Syntax Description

| Syntax Description  |   |
|---------------------|---|
| no                  | (Optional) Negate a command or set its defaults |
| destination-profile | Configure destination profiles                  |
| s5                  | User defined destination profile name           |
| transport-method    | Callhome message sending transport-method       |
| email               | email transport-method                          |

## Command Mode

- /exec/configure/callhome

# destination-profile transport-method http

[no] destination-profile <s6> transport-method http

## Syntax Description

|                           |                     |   |
|---------------------------|---------------------|---|
| <b>Syntax Description</b> | no                  | (Optional) Negate a command or set its defaults |
|                           | destination-profile | Configure destination profiles                  |
|                           | s6                  | User defined destination profile name           |
|                           | transport-method    | Callhome message sending transport-method       |
|                           | http                | http transport-method                           |

## Command Mode

- /exec/configure/callhome

# destination

```
{ [ no ] destination { <ipaddr> | <ipv6addr> } [ use-vrf { <vrf_name> | <vrf-known-name> } ] | no destination }
```

## Syntax Description

| Syntax Description | destination           | Specify the destination address      |
|--------------------|-----------------------|--------------------------------------|
|                    | <i>ipaddr</i>         | Destination IP address for collector |
|                    | <i>use-vrf</i>        | (Optional) Optional VRF label        |
|                    | <i>vrf_name</i>       | (Optional) VRF name                  |
|                    | <i>vrf-known-name</i> | (Optional) Known VRF name            |

## Command Mode

- /exec/configure/nfm-exporter

# destination

[no] destination | destination <ipaddr>

## Syntax Description

| Syntax Description |                                      |
|--------------------|--------------------------------------|
| no                 | Negate a command or set its defaults |
| destination        | destination of tunnel                |
| <i>ipaddr</i>      | ip address (A.B.C.D)                 |

## Command Mode

- /exec/configure/if-te

## destination filter ip

```
[no] destination filter ip { <ip-addr> <ip-mask> } [ ip | { { udp | tcp } { <port_num> | any } } ] [ { arp | advertise } { enable | disable } ]
```

### Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| destination        | destination ip configuration                    |
| filter             | list of ips to filter                           |
| ip                 | destination ip                                  |
| <i>ip-addr</i>     | IP address in format i.i.i.i                    |
| <i>ip-mask</i>     | IP network mask in format m.m.m.m               |
| ip                 | (Optional) IP Protocol                          |
| udp                | (Optional) UDP Protocol                         |
| tcp                | (Optional) TCP Protocol                         |
| <i>port_num</i>    | (Optional) Port Number                          |
| any                | (Optional) Any Port Number                      |
| arp                | (Optional) ARP                                  |
| advertise          | (Optional) advertise                            |
| enable             | (Optional) Enable                               |
| disable            | (Optional) Disable                              |

### Command Mode

- /exec/configure/smarte

# destination filter ip any any

[no] destination filter ip any any

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| destination        | destination ip configuration                    |
| filter             | list of ips to filter                           |
| ip                 | destination ip                                  |
| any                | Any IP  |

## Command Mode

- /exec/configure/smartc

# device-group

{ device-group <name> } | { no device-group <name> }

## Syntax Description

|                           |              |                                      |
|---------------------------|--------------|--------------------------------------|
| <b>Syntax Description</b> | no           | Negate a command or set its defaults |
|                           | device-group | ITD device group                     |
|                           | <i>name</i>  | ITD device group name                |

## Command Mode

- /exec/configure/itd



# device-group

{ device-group <name> } | { no device-group <name> }

## Syntax Description

|                           |                           |                                      |
|---------------------------|---------------------------|--------------------------------------|
| <b>Syntax Description</b> | <code>no</code>           | Negate a command or set its defaults |
|                           | <code>device-group</code> | ITD device group                     |
|                           | <i>name</i>               | ITD device group name                |

## Command Mode

- /exec/configure/itd

# devtest sap

```
devtest sap <sap> [ exec <func> ]
```

## Syntax Description

---

### Syntax Description

---

*devtest* Remote API invocation (helps testing and debugging)

---

*sap* Specify the SAP address of the destination queue

---

*sap* SAP address of the destination queue (0 == Registry)

---

*exec* (Optional) Specify the API name to be invoked on the remote feature

---

*func* (Optional) Examples:

---

## Command Mode

- /exec

# diagnostic bootup level

[no] diagnostic bootup level

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| diagnostic         |  | Diagnostic commands                  |
| bootup             |  | Configure Diagnostic for bootup      |
| level              |  | Select diagnostic level              |

## Command Mode

- /exec/configure

# diagnostic bootup level bypass

diagnostic bootup level { bypass | complete }

## Syntax Description

| Syntax Description |                                 |
|--------------------|---------------------------------|
| diagnostic         | Diagnostic commands             |
| bootup             | Configure Diagnostic for bootup |
| level              | Select diagnostic level         |
| bypass             | Skip all bootup test            |
| complete           | Complete level                  |

## Command Mode

- /exec/configure

# diagnostic clear result module all diagnostic clear result module test

diagnostic clear result module all | diagnostic clear result module <module> test { <test-id> | all }

## Syntax Description

| Syntax Description |                                     |
|--------------------|-------------------------------------|
| diagnostic         | Diagnostic commands                 |
| clear              | Erase Diagnostic Test Results/Stats |
| result             | Diagnostic test result              |
| module             | Module keyword                      |
| <i>module</i>      | Module number                       |
| all                | Select all                          |
| test               | Diagnostic test selection           |
| <i>test-id</i>     |                                     |

## Command Mode

- /exec

# diagnostic eem action aggressive

[no] diagnostic eem action aggressive

## Syntax Description

|                           |            |   |
|---------------------------|------------|---|
| <b>Syntax Description</b> | no         | (Optional) Negate a command or set its defaults |
|                           | diagnostic | Diagnostic commands                             |
|                           | eem        | Configure Diagnostic for eem                    |
|                           | action     | Select diagnostic action                        |
|                           | aggressive | Take aggressive default actions                 |

## Command Mode

- /exec/configure

# diagnostic monitor interval module test all hour min second

diagnostic monitor interval module <module> test { all | <name> | <test-id> } hour <hour-cntr> min <min-cntr> second <sec-cntr> | no diagnostic monitor interval module <module> test { all | <name> | <test-id> }

## Syntax Description

### Syntax Description

|                  |  |
|------------------|--|
| no               | Negate a command or set its defaults           |
| diagnostic       | Diagnostic commands                            |
| monitor          | Configure diagnostic monitoring test           |
| interval         | Configure diagnostic monitoring tests interval |
| module           | Module Keyword                                 |
| <i>module</i>    | Module number                                  |
| test             | Diagnostic test selection                      |
| all              | Select all test ID                             |
| <i>test-id</i>   |  |
| <i>name</i>      | Test name                                      |
| hour             | Hour of the day                                |
| <i>hour-cntr</i> | Interval in hours                              |
| min              | Minute of an hour                              |
| <i>min-cntr</i>  | Interval in minutes                            |
| second           | Second of a minute                             |
| <i>sec-cntr</i>  | Interval in seconds                            |

## Command Mode

- /exec/configure

# diagnostic monitor module all

[no] diagnostic monitor module all [ test <name> ]

## Syntax Description

| Syntax Description | Description                                     |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| diagnostic         | Diagnostic commands                             |
| monitor            | Configure diagnostic monitoring test            |
| module             | Module Keyword                                  |
| all                | Select all module ID                            |
| test               | (Optional) Diagnostic test selection            |
| <i>name</i>        | (Optional) Test name                            |

## Command Mode

- /exec/configure



# diagnostic monitor module test all

diagnostic monitor module <module> test { all | <name> | <test-id> } | no diagnostic monitor module <module>  
test { all | <name> | <test-id> }

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| diagnostic         |  | Diagnostic commands                  |
| monitor            |  | Configure diagnostic monitoring test |
| module             |  | Module Keyword                       |
| <i>module</i>      |  | Module number                        |
| test               |  | Diagnostic test selection            |
| all                |  | Select all test ID                   |
| <i>test-id</i>     |  |                                      |
| <i>name</i>        |  | Test name                            |

## Command Mode

- /exec/configure

# diagnostic ondemand action-on-failure continue failure-count diagnostic ondemand action-on-failure stop

diagnostic ondemand action-on-failure continue failure-count <failure-cnt> | diagnostic ondemand action-on-failure stop

## Syntax Description

### Syntax Description

|                    |  |
|--------------------|--|
| diagnostic         | Diagnostic commands  |
| ondemand           | On demand diagnostic setting                               |
| action-on-failure  | Set action to take if test fails                           |
| continue           | Continue ondemand test until test failure limit is reached |
| failure-count      | Continue failing tests this many times                     |
| stop               | Stop ondemand tests immediately if a test fails            |
| <i>failure-cnt</i> | Maximum number of test failures allowed                    |

## Command Mode

- /exec

# diagnostic ondemand iteration

diagnostic ondemand iteration <iteration-count>

## Syntax Description

| Syntax Description |                        |  |
|--------------------|------------------------|--|
|                    | diagnostic             | Diagnostic commands                              |
|                    | ondemand               | On demand diagnostic setting                     |
|                    | iteration              | Set number of times to repeat ondemand test list |
|                    | <i>iteration-count</i> | Number of times to repeat ondemand test list     |

## Command Mode

- /exec

# diagnostic ondemand test-parameter module test port\_lb packet-length

diagnostic ondemand test-parameter module <module> test port\_lb packet-length <size>

## Syntax Description

| Syntax Description |  |                                     |
|--------------------|--|-------------------------------------|
| diagnostic         |  | Diagnostic commands                 |
| ondemand           |  | Ondemand command                    |
| test-parameter     |  | Set test parameter                  |
| module             |  | Module keyword                      |
| <i>module</i>      |  | Module number                       |
| test               |  | Diagnostic test selection           |
| port_lb            |  | Port loop back test                 |
| packet-length      |  | Size of the packet                  |
| <i>size</i>        |  | Packet size for the selected module |

## Command Mode

- /exec

# diagnostic pss shrink

diagnostic pss shrink

## Syntax Description

| Syntax Description |                                 |
|--------------------|---------------------------------|
| diagnostic         | Diagnostic commands             |
| pss                | PSS command                     |
| shrink             | compact the diag_port_lb<br>PSS |

## Command Mode

- /exec

# diagnostic start module test

```
diagnostic start module <module> test { all | <name> | <test-id> | non-disruptive | per-port } [ port { iall | <port-id> } ]
```

## Syntax Description

### Syntax Description

|                |  |
|----------------|--|
| diagnostic     | Diagnostic commands                                  |
| start          | Starting on demand diagnostic                        |
| module         | Module keyword                                       |
| <i>module</i>  | Module Number  |
| test           | Diagnostic test selection                            |
| all            | Select all test ID                                   |
| <i>name</i>    | Test name  |
| <i>test-id</i> |  |
| non-disruptive | Select the Non-Disruptive test suite [Attribute = N] |
| per-port       | Select the Per-Port test suite [Attribute = P]       |
| port           | (Optional) Interface port selection                  |
| iall           | (Optional) Select all ports                          |
| <i>port-id</i> | (Optional)   |

## Command Mode

- /exec

# diagnostic stop module test all

```
diagnostic stop module <module> test { all | <name> | <test-id> }
```

## Syntax Description

| Syntax Description |                           |
|--------------------|---------------------------|
| diagnostic         | Diagnostic commands       |
| stop               | Stopping diagnostic       |
| module             | Module keyword            |
| <i>module</i>      | Module Number             |
| test               | Diagnostic test selection |
| all                | Select all test ID        |
| <i>test-id</i>     |                           |
| <i>name</i>        | Test name                 |

## Command Mode

- /exec

# diagnostictestsimulationmoduletestdiagnostictestsimulation module test clear

```
diagnostic test simulation module <module> test <test-id> [ port { <port-id> | all } ] { success | fail | random-fail } | diagnostic test simulation module <module> test <test-id> clear
```

## Syntax Description

| Syntax Description |                                     |
|--------------------|-------------------------------------|
| diagnostic         | Diagnostic commands                 |
| test               | Diagnostic test selection           |
| simulation         | Simulating Diagnostic result        |
| module             | Module keyword                      |
| <i>module</i>      | Module Number                       |
| test               | Diagnostic test selection           |
| <i>test-id</i>     |                                     |
| port               | (Optional) Interface port selection |
| all                | (Optional) Select all ports         |
| <i>port-id</i>     | (Optional)                          |
| success            | pass test result                    |
| fail               | fail test result                    |
| random-fail        | fail test result randomly           |
| clear              | Stop simulation                     |

## Command Mode

- /exec



# diff-clean

diff-clean [ all-sessions ]

## Syntax Description

---

### Syntax Description

diff-clean remove temp files created by '| diff' filters

all-sessions (Optional) remove '| diff' temp files from all sessions (past and present!) of current user

---

## Command Mode

- /exec

# diff-clean all-users

diff-clean all-users

## Syntax Description

---

### Syntax Description

diff-clean remove temp files created by '| diff' filters

all-users remove '| diff' temp files from all sessions (past and present!) of all users

---

## Command Mode

- /exec

# diff

| diff [ again | echo | -c [ <lines> ] | -b | -B | -i | -I <regexp> | -y | --left-column | -W <columns> | -q | -s ] +

## Syntax Description

### Syntax Description

|                |   |
|----------------|---|
|                | Pipe command output to filter   |
| diff           | show difference between current and previous invocation (creates temp files: remove them with 'diff-clean' command and dont use it on commands with big outputs, like 'show tech!') |
| again          | (Optional) dont create new file: use old ones, just change display options or add more filters  |
| echo           | (Optional) echo the current file (only effective if no old file)  |
| -c             | (Optional) set number of lines of context (default 3)   |
| <i>lines</i>   | (Optional) number of lines of context   |
| -b             | (Optional) Ignore changes in amount of white space  |
| -B             | (Optional) Ignore changes that just insert or delete blank lines  |
| -i             | (Optional) Ignore changes in case   |
| -I             | (Optional) Ignore changes that just insert or delete lines that match regexp  |
| <i>regexp</i>  | (Optional) regexp of lines to ignore  |
| -y             | (Optional) Use the side by side output format   |
| --left-column  | (Optional) Print only the left column of two common lines in side by side format  |
| -W             | (Optional) Use an output width of <columns> in side by side format  |
| <i>columns</i> | (Optional) Use an output width of <columns> in side by side format  |
| -q             | (Optional) Report only whether the files differ, not the details of the differences   |
| -s             | (Optional) Report when two files are the same   |

### Command Mode

- /output

# dir

```
dir [ <uri0> | <uri1> | <uri2> ] [ __readonly__ { TABLE_dir <fsize> <timestring> <fname> } { <usage>
<bytesused> <bytesfree> <bytetotal> } ]
```

## Syntax Description

### Syntax Description

|                           |   |
|---------------------------|---|
| <code>dir</code>          | list files in a directory                           |
| <code>uri0</code>         | (Optional) Directory or filename                    |
| <code>uri1</code>         | (Optional) Directory or filename on expansion flash |
| <code>uri2</code>         | (Optional) Directory or filename on log flash       |
| <code>__readonly__</code> | (Optional) Read Only                                |
| <code>TABLE_dir</code>    | (Optional) show dir                                 |
| <code>fsize</code>        | (Optional) filesize                                 |
| <code>timestring</code>   | (Optional) time string                              |
| <code>fname</code>        | (Optional) filename                                 |
| <code>usage</code>        | (Optional) usage                                    |
| <code>bytesused</code>    | (Optional) bytes used                               |
| <code>bytesfree</code>    | (Optional) bytes free                               |
| <code>bytetotal</code>    | (Optional) bytes total                              |

## Command Mode

- /exec

# disable-connected-check

[ no | default ] disable-connected-check

## Syntax Description

| Syntax                  | Description                                     |
|-------------------------|---|
| no                      | (Optional) Negate a command or set its defaults |
| default                 | (Optional) Inherit values from a peer template  |
| disable-connected-check | Disable check for directly connected peer       |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor-sess

# disable-memory-alert-check

[no] disable-memory-alert-check

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

disable-memory-alert-check Disables the system memory alert handling in BGP

---

## Command Mode

- /exec/configure/router-bgp

# disable-peer-as-check

[ no | default ] disable-peer-as-check

## Syntax Description

| Syntax Description    |  |
|-----------------------|--|
| no                    | (Optional) Negate a command or set its defaults      |
| default               | (Optional) Inherit values from a peer template       |
| disable-peer-as-check | Disable checking of peer AS-number while advertising |

## Command Mode

- /exec/configure/router-bgp/router-bgp-vrf-neighbor/router-bgp-vrf-neighbor-af-ipv4
- /exec/configure/router-bgp/router-bgp-vrf-neighbor/router-bgp-vrf-neighbor-af-ipv6
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-l2vpn-evpn
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv4-label
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv6-label

# disable-policy-batching

```
[no] disable-policy-batching [ nexthop | { { ipv4 | ipv6 } prefix-list <prfxlist-name> } ]
```

## Syntax Description

### Syntax Description

|                         |   |
|-------------------------|---|
| no                      | (Optional) Negate a command or set its defaults           |
| disable-policy-batching | Disable batching evaluation of outbound policy for a peer |
| nexthop                 | (Optional) batching based on nexthop                      |
| ipv4                    | (Optional) IPv4 address-family                            |
| ipv6                    | (Optional) IPv6 address-family                            |
| prefix-list             | (Optional) Apply prefix-list                              |
| <i>prfxlist-name</i>    | (Optional) Name of prefix-list                            |

## Command Mode

- /exec/configure/router-bgp



# disable

disable

## Syntax Description

---

### Syntax Description

---

disable disable  
callhome

---

## Command Mode

- /exec/configure/callhome

# discard-route external

[no] discard-route { external | internal }

## Syntax Description

|                           |               |   |
|---------------------------|---------------|---|
| <b>Syntax Description</b> | no            | (Optional) Negate a command or set its defaults |
|                           | discard-route | Install discard route                           |
|                           | external      | External route                                  |
|                           | internal      | Internal route                                  |

## Command Mode

- /exec/configure/router-ospf /exec/configure/router-ospf/vrf

# discard-route external

[no] discard-route { external | internal }

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| discard-route      | Install discard route                           |
| external           | External route                                  |
| internal           | Internal route                                  |

## Command Mode

- /exec/configure/router-ospf3 /exec/configure/router-ospf3/vrf

# discovery

```
discovery { quick-start | hello { holdtime <link-hello-holdtime> | interval <link-hello-intvl> } | targeted-hello
{ accept [ from <pfx-list> ] | tgt-holdtime <tgt-hello-holdtime> | tgt-interval <tgt-hello-intvl> } |
ignore-transport-address | omit-transport-address | spoofing } | no discovery { quick-start | hello { holdtime |
interval } | targeted-hello { accept | tgt-holdtime | tgt-interval } | ignore-transport-address | omit-transport-address
| spoofing }
```

## Syntax Description

### Syntax Description

|                            |   |
|----------------------------|---|
| no                         | Negate a command or set its defaults                                |
| discovery                  | LDP discovery   |
| quick-start                | Enable quick LDP Hello transmissions on interface up                |
| hello                      | LDP discovery Hello   |
| interval                   | LDP discovery Hello interval  |
| holdtime                   | LDP discovery Hello holdtime  |
| <i>link-hello-holdtime</i> | Holdtime in seconds   |
| <i>link-hello-intvl</i>    | Hello interval in seconds   |
| targeted-hello             | LDP discovery Targeted Hello  |
| accept                     | Accept targeted hellos  |
| from                       | (Optional) Prefix list to specify acceptable targeted hello sources |
| <i>pfx-list</i>            | (Optional) Name of prefix list                                      |
| tgt-holdtime               | LDP discovery Targeted Hello holdtime                               |
| <i>tgt-hello-holdtime</i>  | Holdtime in seconds   |
| tgt-interval               | LDP discovery Targeted Hello interval                               |
| <i>tgt-hello-intvl</i>     | Hello interval in seconds   |
| ignore-transport-address   |   |
| omit-transport-address     |   |
| spoofing                   |   |

## Command Mode

- /exec/configure/ldp

# distance

distance <distance> | no distance [ <distance> ]

## Syntax Description

---

### Syntax Description

---

no        Negate a command or set its defaults

---

distance    RIP administrative distance

---

*distance*    RIP administrative distance

---

## Command Mode

- /exec/configure/router-rip/router-rip-af-common /exec/configure/router-rip/router-rip-vrf-af-common

# distance

distance <ebgp-dist> <ibgp-dist> <local-dist> | no distance [ <ebgp-dist> <ibgp-dist> <local-dist> ]

## Syntax Description

|                           |                   |                                      |
|---------------------------|-------------------|--------------------------------------|
| <b>Syntax Description</b> | no                | Negate a command or set its defaults |
|                           | distance          | Configure administrative distance    |
|                           | <i>ebgp-dist</i>  | Distance for EBGp routes             |
|                           | <i>ibgp-dist</i>  | Distance for IBGP routes             |
|                           | <i>local-dist</i> | Distance for local routes            |

## Command Mode

- /exec/configure/router-bgp/router-bgp-af

# distance

distance <admin-dist> | no distance [ <admin-dist> ]

## Syntax Description

| Syntax Description |                                      |
|--------------------|--------------------------------------|
| no                 | Negate a command or set its defaults |
| distance           | OSPF administrative distance         |
| <i>admin-dist</i>  | administrative distance value        |

## Command Mode

- /exec/configure/router-ospf /exec/configure/router-ospf/vrf

# distance

distance <admin-dist> | no distance [ <admin-dist> ]

## Syntax Description

| Syntax Description |                                      |
|--------------------|--------------------------------------|
| no                 | Negate a command or set its defaults |
| distance           | Administrative distance              |
| <i>admin-dist</i>  | Distance value                       |

## Command Mode

- /exec/configure/router-isis/router-isis-vrf-common /exec/configure/router-isis/router-isis-af-ipv6



# distance

distance <admin-dist> | no distance [ <admin-dist> ]

## Syntax Description

| Syntax Description |                                      |
|--------------------|--------------------------------------|
| no                 | Negate a command or set its defaults |
| distance           | OSPFv3 administrative distance       |
| <i>admin-dist</i>  | administrative distance value        |

## Command Mode

- /exec/configure/router-ospf3/router-ospf3-af-ipv6 /exec/configure/router-ospf3/vrf/router-ospf3-af-ipv6

# distance

```
{ { distance <int-distance> <ext-distance> } | { no distance [ <int-distance> <ext-distance> ] } }
```

## Syntax Description

| Syntax Description  |  |                                      |
|---------------------|--|--------------------------------------|
| no                  |  | Negate a command or set its defaults |
| distance            |  | Define an administrative distance    |
| <i>int-distance</i> |  | Distance for internal routes         |
| <i>ext-distance</i> |  | Distance for external routes         |

## Command Mode

- /exec/configure/router-eigrp/router-eigrp-vrf-common /exec/configure/router-eigrp/router-eigrp-af-common

## distribute-list route in

[no] distribute-list { { route-map <map> } | { prefix-list <list> } } { in | out } <interface>

### Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| distribute-list    | Filter networks in routing updates              |
| route-map          | Use a route-map for route filtering             |
| <i>map</i>         | Route-map name                                  |
| prefix-list        | Use a prefix-list for route filtering           |
| <i>list</i>        | Reference to prefix-list name                   |
| in                 | Filter incoming routing updates                 |
| out                | Filter outgoing routing updates                 |
| <i>interface</i>   | Interface name                                  |

### Command Mode

- /exec/configure/router-igrp/router-igrp-vrf-common /exec/configure/router-igrp/router-igrp-af-common

# distribute into route-map all

```
{ { distribute <src-level> into <dst-level> { { route-map { <map-name> | <rtr_pol_name> } } | all } } | { no
distribute <src-level> into <dst-level> [ { route-map { <map-name> | <rtr_pol_name> } } | all ] } }
```

## Syntax Description

| Syntax Description  |  |                                       |
|---------------------|--|---------------------------------------|
| no                  |  | Negate a command or set its defaults  |
| distribute          |  | Distribute routes between ISIS levels |
| <i>src-level</i>    |  | Route-distribution between levels     |
| <i>dst-level</i>    |  | Route-distribution between levels     |
| route-map           |  | Route Map to constrain distribution   |
| into                |  | from level-n into level-m             |
| <i>map-name</i>     |  | A 'routing-rules' route-map name      |
| <i>rtr_pol_name</i> |  | An existing routing-rules policy      |
| all                 |  | Distribute all level-n routes         |

## Command Mode

- /exec/configure/router-isis/router-isis-vrf-common /exec/configure/router-isis/router-isis-af-common

# dns

```
[no] dns { <WORD> } { name-server { <hostname> | <ip-address> } } { [ source-ip { <source-ip-hostname> | <source-ip-address> } ] [ source-port <src-port> ] } +
```

## Syntax Description

| Syntax Description |                           |   |
|--------------------|---------------------------|---|
|                    | no                        | (Optional)  |
|                    | <i>source-ip</i>          | (Optional) source-port                              |
|                    | <i>src-port</i>           | (Optional)  |
|                    | dns                       | DNS Operation                                       |
|                    | <i>WORD</i>               | Target IP Address or Hostname                       |
|                    | name-server               | Name Server   |
|                    | <i>hostname</i>           | Destination hostname, broadcast disallowed          |
|                    | <i>ip-address</i>         | Destination IP address, broadcast disallowed        |
|                    | <i>source-ip-hostname</i> | (Optional) source IP hostname, broadcast disallowed |
|                    | <i>source-ip-address</i>  | (Optional) source IP address, broadcast disallowed  |
|                    | source-port               | (Optional) Source Port                              |

## Command Mode

- /exec/configure/ip-sla

# domain-id

domain-id { <id> | { type <dtype> value <dvalue> } | Null } | no domain-id [ <id> | { type <dtype> value <dvalue> } | Null ]

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | Negate a command or set its defaults       |
| domain-id          | OSPF domain-ID                             |
| <i>id</i>          | OSPF domain ID in IP address format        |
| type               | OSPF domain ID type in Hex format          |
| <i>dtype</i>       | OSPF domain ID type in Hex format          |
| value              | OSPF domain ID ext. community value in Hex |
| <i>dvalue</i>      |  |
| Null               | Null Domain-ID                             |

## Command Mode

- /exec/configure/router-ospf/vrf

## domain-id secondary

domain-id { <id> | { type <dtype> value <dvalue> } | Null } secondary | no domain-id [ <id> | { type <dtype> value <dvalue> } | Null ] secondary

### Syntax Description

#### Syntax Description

|               |  |
|---------------|--|
| no            | Negate a command or set its defaults       |
| domain-id     | OSPF domain-ID                             |
| <i>id</i>     | OSPF domain ID in IP address format        |
| type          | OSPF domain ID type in Hex format          |
| <i>dtype</i>  | OSPF domain ID type in Hex format          |
| value         | OSPF domain ID ext. community value in Hex |
| <i>dvalue</i> |  |
| Null          | Null Domain-ID                             |
| secondary     | Secondary Domain-ID                        |

### Command Mode

- /exec/configure/router-ospf/vrf

# domain-tag

[no] domain-tag <as-number>

## Syntax Description

---

|                           |    |   |
|---------------------------|----|---|
| <b>Syntax Description</b> | no | (Optional) Negate a command or set its defaults |
|---------------------------|----|---|

---

|  |            |                             |
|--|------------|-----------------------------|
|  | domain-tag | Set OSPF process domain-tag |
|--|------------|-----------------------------|

---

|  |                  |           |
|--|------------------|-----------|
|  | <i>as-number</i> | AS number |
|--|------------------|-----------|

---

## Command Mode

- /exec/configure/router-ospf/vrf



# dont-capability-negotiate

[ no | default ] dont-capability-negotiate

## Syntax Description

| Syntax Description        |   |
|---------------------------|---|
| no                        | (Optional) Negate a command or set its defaults |
| default                   | (Optional) Inherit values from a peer template  |
| dont-capability-negotiate | Don't negotiate capability with this neighbor   |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor-sess

# dos2nxos

dos2nxos <uri0>

## Syntax Description

---

### Syntax Description

---

dos2nxos DOS to NXOS text file format converter

---

*uri0* Filename to be displayed

---

## Command Mode

- /exec

# dot1q

{ dot1q <dot1q-id> <intf-id> } | { no dot1q }

## Syntax Description

---

### Syntax Description

---

no        Negate a command or set its defaults

---

dot1q    Encapsulation dot1q/bd

---

*dot1q-id* Encapsulation dot1q/bd value

---

*intf-id*    Name of the interface for ngoam on which dot1q is configured

---

## Command Mode

- /exec/configure/configngoamprofile

# dot1q

```
{ dot1q <vlan-id> [ cos <cos-val> ] } | { no dot1q }
```

## Syntax Description

### Syntax Description

**no** Negate a command or set its defaults

**dot1q** specify flow profile to include dot1q tag

*vlan-id* specify flow profile vlan-id

**cos** (Optional) specify class of service

*cos-val* (Optional) class of service value

## Command Mode

- /exec/configure/configngoamprofileflow

# dot1q default dynamic

{ dot1q default dynamic } | { no dot1q default }

## Syntax Description

---

**Syntax Description**

no Negate a command or set its defaults

---

dynamic Dynamic Profile Map: Retrieve profile name from the external server

---

dot1q Dot1Q Encapsulation

---

default Default (wildcard). Match any dot1q when there is no specific dot1q mapping configured

---

## Command Mode

- /exec/configure/profile-map /exec/configure/profile-map-global

# dot1x default

dot1x default

## Syntax Description

---

### Syntax Description

---

dot1x dot1x configuration  
commands

---

## Command Mode

- /exec/configure

# dot1x default

dot1x default

## Syntax Description

| Syntax Description |                                    |
|--------------------|------------------------------------|
|                    | dot1x dot1x configuration commands |

## Command Mode

- /exec/configure/if-eth-base /exec/configure/if-ethernet-all

# dot1x host-mode

dot1x host-mode <host\_mode> | no dot1x host-mode

## Syntax Description

---

**Syntax Description**

---

dot1x      dot1x configuration commands

---

host-mode    role of 802.1x authenticating entity

---

*host\_mode*    Host Mode

---

## Command Mode

- /exec/configure/if-eth-base /exec/configure/if-ethernet-all



# dot1x mac-auth-bypass

dot1x mac-auth-bypass [ eap ] | no dot1x mac-auth-bypass

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| dot1x              |  | dot1x configuration commands         |
| mac-auth-bypass    |  | Configure Mac-Auth-Bypass            |
| eap                |  | (Optional) EAP Authentication        |

## Command Mode

- /exec/configure/if-eth-base /exec/configure/if-ethernet-all

# dot1x max-reauth-req

dot1x max-reauth-req <count> | no dot1x max-reauth-req

## Syntax Description

---

**Syntax Description**

|                |   |
|----------------|---|
| dot1x          | dot1x configuration commands                      |
| max-reauth-req | Maximum Re-authentication Attempts Before Failing |
| <i>count</i>   | number of retries                                 |

---

## Command Mode

- /exec/configure/if-eth-base /exec/configure/if-ethernet-all

# dot1x max-req

dot1x max-req <count> | no dot1x max-req

## Syntax Description

---

**Syntax Description**

---

dot1x dot1x configuration commands

---

max-req Maximum Retries to Initiate Authentication

---

count number of retries

---

## Command Mode

- /exec/configure

# dot1x max-req

dot1x max-req <count> | no dot1x max-req

## Syntax Description

---

### Syntax Description

---

dot1x dot1x configuration commands

---

max-req Maximum Retries to Initiate Authentication

---

*count* number of retries

---

## Command Mode

- /exec/configure/if-eth-base /exec/configure/if-ethernet-all

# dot1x pae

[no] dot1x pae <pae-value>

## Syntax Description

| Syntax Description |                                      |
|--------------------|--------------------------------------|
| dot1x              | dot1x configuration commands         |
| pae                | role of 802.1x authenticating entity |
| <i>pae-value</i>   | role                                 |

## Command Mode

- /exec/configure/if-eth-base /exec/configure/if-ethernet-all

# dot1x port-control

[no] dot1x port-control <port-control-value>

## Syntax Description

| Syntax Description |                           |                              |
|--------------------|---------------------------|------------------------------|
|                    | dot1x                     | dot1x configuration commands |
|                    | port-control              | port control                 |
|                    | <i>port-control-value</i> | set the port-control value   |

## Command Mode

- /exec/configure/if-eth-base /exec/configure/if-ethernet-all

# dot1x radius-accounting

[no] dot1x radius-accounting

## Syntax Description

| Syntax            | Description                   |
|-------------------|-------------------------------|
| dot1x             | dot1x configuration commands  |
| radius-accounting | accounting messages to RADIUS |

## Command Mode

- /exec/configure

# dot1x re-authenticate

```
{ dot1x re-authenticate } | { dot1x re-authenticate interface <if> }
```

## Syntax Description

| Syntax Description |                                       |
|--------------------|---------------------------------------|
| dot1x              | dot1x configuration commands          |
| re-authenticate    | Manually re-authenticate an Interface |
| <i>if</i>          | target interface                      |

## Command Mode

- /exec



# dot1x re-authentication

[no] dot1x re-authentication

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| dot1x              | dot1x configuration commands                     |
| re-authentication  | Enable or Disable Reauthentication for this port |

## Command Mode

- /exec/configure

# dot1x re-authentication

[no] dot1x re-authentication

## Syntax Description

---

### Syntax Description

---

dot1x                    dot1x configuration commands

---

re-authentication    Enable or Disable Reauthentication for this port

---

## Command Mode

- /exec/configure/if-eth-base /exec/configure/if-ethernet-all

# dot1x show credential

dot1x show credential <name>

## Syntax Description

| Syntax      | Description                   |
|-------------|-------------------------------|
| dot1x       | dot1x configuration commands  |
| credential  | supplicant credential profile |
| <i>name</i> | profile name                  |

## Command Mode

- /exec/configure/dot1x-cred

# dot1x start supplicant interface

```
{ dot1x start supplicant interface <if> } | { dot1x start supplicant interface <if> credential <name> }
```

## Syntax Description

| Syntax Description | dot1x       | dot1x configuration commands |
|--------------------|-------------|------------------------------|
|                    | start       | start 802.1x client          |
|                    | supplicant  | 802.1x supplicant            |
|                    | <i>if</i>   | target interface             |
|                    | credential  | credential profile name      |
|                    | <i>name</i> | name                         |

## Command Mode

- /exec

# dot1x stop supplicant interface

dot1x stop supplicant interface <if>

## Syntax Description

| Syntax Description |                              |  |
|--------------------|------------------------------|--|
| dot1x              | dot1x configuration commands |  |
| stop               | stop 802.1x client           |  |
| supplicant         | 802.1x supplicant            |  |
| <i>if</i>          | target interface             |  |

## Command Mode

- /exec

# dot1x supplicant credential

[no] dot1x supplicant credential <name>

## Syntax Description

| Syntax Description |                              |
|--------------------|------------------------------|
| dot1x              | dot1x configuration commands |
| supplicant         | 802.1x supplicant            |
| credential         | credential profile name      |
| <i>name</i>        | name                         |

## Command Mode

- /exec/configure/if-eth-base /exec/configure/if-ethernet-all

# dot1x supplicant credential

[no] dot1x supplicant credential <name>

## Syntax Description

| Syntax     | Description                   |
|------------|-------------------------------|
| dot1x      | dot1x configuration commands  |
| supplicant | 802.1x supplicant             |
| credential | supplicant credential profile |

## Command Mode

- /exec/configure

# dot1x supplicant default

dot1x supplicant default

## Syntax Description

| Syntax Description |                              |
|--------------------|------------------------------|
| dot1x              | dot1x configuration commands |
| supplicant         | 802.1x supplicant            |

## Command Mode

- /exec/configure/if-eth-base /exec/configure/if-ethernet-all



# dot1x supplicant max-start

[no] dot1x supplicant max-start <count>

## Syntax Description

| Syntax Description |                              |
|--------------------|------------------------------|
| dot1x              | dot1x configuration commands |
| supplicant         | 802.1x supplicant            |
| max-start          | Maximum Start Requests       |
| <i>count</i>       | number                       |

## Command Mode

- /exec/configure

# dot1x supplicant max-start

[no] dot1x supplicant max-start <count>

## Syntax Description

| Syntax Description |                              |  |
|--------------------|------------------------------|--|
| dot1x              | dot1x configuration commands |  |
| supplicant         | 802.1x supplicant            |  |
| max-start          | Maximum Start Requests       |  |
| <i>count</i>       | number                       |  |

## Command Mode

- /exec/configure/if-eth-base /exec/configure/if-ethernet-all

# dot1x supplicant timeout auth-period

[no] dot1x supplicant timeout auth-period <value>

## Syntax Description

|                           |              |   |
|---------------------------|--------------|---|
| <b>Syntax Description</b> | dot1x        | dot1x configuration commands                    |
|                           | supplicant   | 802.1x supplicant                               |
|                           | timeout      | Various Timeouts                                |
|                           | auth-period  | waiting period for responses from authenticator |
|                           | <i>value</i> | time interval in seconds                        |

## Command Mode

- /exec/configure

# dot1x supplicant timeout auth-period

[no] dot1x supplicant timeout auth-period <value>

## Syntax Description

| Syntax Description |        |   |
|--------------------|--------|---|
| dot1x              |        | dot1x configuration commands                    |
| supplicant         | 802.1x | supplicant                                      |
| timeout            |        | Various Timeouts                                |
| auth-period        |        | waiting period for responses from authenticator |
| <i>value</i>       |        | time interval in seconds                        |

## Command Mode

- /exec/configure/if-eth-base /exec/configure/if-ethernet-all

# dot1x supplicant timeout held-period

[no] dot1x supplicant timeout held-period <value>

## Syntax Description

|                           |              |  |
|---------------------------|--------------|--|
| <b>Syntax Description</b> | dot1x        | dot1x configuration commands                             |
|                           | supplicant   | 802.1x supplicant  |
|                           | timeout      | Various Timeouts   |
|                           | held-period  | waiting period for retrying, after failed authentication |
|                           | <i>value</i> | time interval in seconds                                 |

## Command Mode

- /exec/configure

## dot1x supplicant timeout held-period

[no] dot1x supplicant timeout held-period <value>

### Syntax Description

| Syntax Description |        |  |
|--------------------|--------|--|
| dot1x              |        | dot1x configuration commands                             |
| supplicant         | 802.1x | supplicant   |
| timeout            |        | Various Timeouts   |
| held-period        |        | waiting period for retrying, after failed authentication |
| <i>value</i>       |        | time interval in seconds                                 |

### Command Mode

- /exec/configure/if-eth-base /exec/configure/if-ethernet-all

# dot1x supplicant timeout start-period

[no] dot1x supplicant timeout start-period <value>

## Syntax Description

|                           |              |                                 |
|---------------------------|--------------|---------------------------------|
| <b>Syntax Description</b> | dot1x        | dot1x configuration commands    |
|                           | supplicant   | 802.1x supplicant               |
|                           | timeout      | Various Timeouts                |
|                           | start-period | Interval Between Start Requests |
|                           | <i>value</i> | time interval in seconds        |

## Command Mode

- /exec/configure

## dot1x supplicant timeout start-period

[no] dot1x supplicant timeout start-period <value>

### Syntax Description

| Syntax Description |        |                                 |
|--------------------|--------|---------------------------------|
| dot1x              |        | dot1x configuration commands    |
| supplicant         | 802.1x | supplicant                      |
| timeout            |        | Various Timeouts                |
| start-period       |        | Interval Between Start Requests |
| <i>value</i>       |        | time interval in seconds        |

### Command Mode

- /exec/configure/if-eth-base /exec/configure/if-ethernet-all



# dot1x system-auth-control

[no] dot1x system-auth-control

## Syntax Description

| Syntax              | Description                      |
|---------------------|----------------------------------|
| dot1x               | dot1x configuration commands     |
| system-auth-control | Enable or Disable SysAuthControl |

## Command Mode

- /exec/configure

# dot1x timeout quiet-period

dot1x timeout quiet-period <value> | no dot1x timeout quiet-period

## Syntax Description

---

### Syntax Description

---

|              |   |
|--------------|---|
| dot1x        | dot1x configuration commands                                    |
| timeout      | Various Timeouts  |
| quiet-period | Timeout For Retrying Authentication After Failed Authentication |
| <i>value</i> | time interval in seconds  |

---

## Command Mode

- /exec/configure

# dot1x timeout quiet-period

dot1x timeout quiet-period <value> | no dot1x timeout quiet-period

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| dot1x              |  | dot1x configuration commands                                    |
| timeout            |  | Various Timeouts  |
| quiet-period       |  | Timeout For Retrying Authentication After Failed Authentication |
| <i>value</i>       |  | time interval in seconds  |

## Command Mode

- /exec/configure/if-eth-base /exec/configure/if-ethernet-all

## dot1x timeout ratelimit-period

dot1x timeout ratelimit-period <value> | no dot1x timeout ratelimit-period

### Syntax Description

| Syntax Description | dot1x            | dot1x configuration commands      |
|--------------------|------------------|-----------------------------------|
|                    | timeout          | Various Timeouts                  |
|                    | ratelimit-period | Rate Limit period for EAPOL-Start |
|                    | <i>value</i>     | time interval in seconds          |

### Command Mode

- /exec/configure/if-eth-base /exec/configure/if-ethernet-all

# dot1x timeout re-authperiod

dot1x timeout re-authperiod <value> | no dot1x timeout re-authperiod

## Syntax Description

| Syntax Description |  |                               |
|--------------------|--|-------------------------------|
| dot1x              |  | dot1x configuration commands  |
| timeout            |  | Various Timeouts              |
| re-authperiod      |  | Timeout For Re-Authentication |
| <i>value</i>       |  | time interval in seconds      |

## Command Mode

- /exec/configure

# dot1x timeout re-authperiod

dot1x timeout re-authperiod <value> | no dot1x timeout re-authperiod

## Syntax Description

| Syntax Description |  |                               |
|--------------------|--|-------------------------------|
| dot1x              |  | dot1x configuration commands  |
| timeout            |  | Various Timeouts              |
| re-authperiod      |  | Timeout For Re-Authentication |
| <i>value</i>       |  | time interval in seconds      |

## Command Mode

- /exec/configure/if-eth-base /exec/configure/if-ethernet-all

# dot1x timeout server-timeout

dot1x timeout server-timeout <value> | no dot1x timeout server-timeout

## Syntax Description

| Syntax Description |                |                              |
|--------------------|----------------|------------------------------|
|                    | dot1x          | dot1x configuration commands |
|                    | timeout        | Various Timeouts             |
|                    | server-timeout | Timeout for Radius Retries   |
|                    | <i>value</i>   | time interval in seconds     |

## Command Mode

- /exec/configure/if-eth-base /exec/configure/if-ethernet-all

# dot1x timeout supp-timeout

dot1x timeout supp-timeout <value> | no dot1x timeout supp-timeout

## Syntax Description

| Syntax Description |  |                                |
|--------------------|--|--------------------------------|
| dot1x              |  | dot1x configuration commands   |
| timeout            |  | Various Timeouts               |
| supp-timeout       |  | Timeout for Supplicant retries |
| <i>value</i>       |  | time interval in seconds       |

## Command Mode

- /exec/configure/if-eth-base /exec/configure/if-ethernet-all



# dot1x timeout tx-period

dot1x timeout tx-period <value> | no dot1x timeout tx-period

## Syntax Description

|                           |              |  |
|---------------------------|--------------|--|
| <b>Syntax Description</b> | dot1x        | dot1x configuration commands                 |
|                           | timeout      | Various Timeouts                             |
|                           | tx-period    | Timeout For Resending Requests To Supplicant |
|                           | <i>value</i> | time interval in seconds                     |

## Command Mode

- /exec/configure

## dot1x timeout tx-period

dot1x timeout tx-period <value> | no dot1x timeout tx-period

### Syntax Description

| Syntax Description |  |
|--------------------|--|
| dot1x              | dot1x configuration commands                 |
| timeout            | Various Timeouts                             |
| tx-period          | Timeout For Resending Requests To Supplicant |
| <i>value</i>       | time interval in seconds                     |

### Command Mode

- /exec/configure/if-eth-base /exec/configure/if-ethernet-all

# down-bit-ignore

{ down-bit-ignore } | { no down-bit-ignore }

## Syntax Description

---

**Syntax Description**

no Negate a command or set its defaults

---

down-bit-ignore Configure a PE router to ignore the DN bit for network summary, external and NSSA external LSA

---

## Command Mode

- /exec/configure/router-ospf/vrf

# downlink delay

downlink delay <ena-dis-flg> [ timeout <time-out> ] | no downlink delay

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults              |
| downlink           |  | Change downlink linkup time                       |
| delay              |  | delay bringup of downlinks                        |
| <i>ena-dis-flg</i> |  | Enable/Disable downlink delay feature             |
| timeout            |  | (Optional) downlink ports enable delay in seconds |
| <i>time-out</i>    |  | (Optional) Time out                               |

## Command Mode

- /exec/configure

# dpp set-qos-group

[no] dpp set-qos-group <qos-group>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| dpp                | Dynamic Packet Prioritization                   |
| set-qos-group      | QoS group to be mapped                          |
| <i>qos-group</i>   | QoS Group Value                                 |

## Command Mode

- /exec/configure/policy-map/type/uf/class

# dscp

{ [ no ] dscp <dscp> | no dscp }

## Syntax Description

---

**Syntax Description**

*dscp* Optional DSCP

---

*dscp* Differentiated services codepoint value

---

## Command Mode

- /exec/configure/nfm-exporter

# dst-grp

[no] dst-grp <d-grp-id>

## Syntax Description

---

**Syntax Description**

no (Optional) Negate a command or set its defaults

---

dst-grp Associated destination group

---

## Command Mode

- /exec/configure/telemetry/subscription

## dual-active exclude interface-vlan

dual-active exclude interface-vlan <allow-vlans> | no dual-active exclude interface-vlan

### Syntax Description

#### Syntax Description

|                    |   |
|--------------------|---|
| no                 | Negate a command or set its defaults                        |
| dual-active        | Configuration when peer link is down but peer is alive      |
| interface-vlan     | Interface vlan configuration                                |
| exclude            | Interface vlans to exclude from suspension when dual-active |
| <i>allow-vlans</i> | Set allowed interface vlans                                 |

### Command Mode

- /exec/configure/vpc-domain



## dual-stage translate xml

```
dual-stage translate <dn> { xml | json } <in_file> <out_file> [ exec-python ] [ delete-files ]
```

### Syntax Description

#### Syntax Description

|                 |  |
|-----------------|--|
| dual-stage      | Related to 2 stage commit                                  |
| translate       | Convert from external restful format to internal JSON      |
| xml             | Input file has XML   |
| json            | Input file has JSON  |
| <i>dn</i>       | DN param   |
| <i>in_file</i>  | Input file name  |
| <i>out_file</i> | Output file name   |
| exec-python     | (Optional) Execute python script after translation         |
| delete-files    | (Optional) Delete input and output files after translation |

### Command Mode

- /exec

# duplex

duplex <duplex\_mode> | no duplex [ <duplex\_mode> ]

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| duplex             |  | Enter the port duplex mode           |
| <i>duplex_mode</i> |  | Interface duplex mode                |

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-eth-non-member /exec/configure/if-port-channel

# duplex

duplex <duplex\_mode> | no duplex [ <duplex\_mode> ]

## Syntax Description

| Syntax Description |                                      |
|--------------------|--------------------------------------|
| no                 | Negate a command or set its defaults |
| duplex             | Enter the port duplex mode           |
| <i>duplex_mode</i> | Interface duplex mode                |

## Command Mode

- /exec/configure/if-mgmt-ether

# duplicate-message throttle

[no] duplicate-message throttle

## Syntax Description

|                           |                   |   |
|---------------------------|-------------------|---|
| <b>Syntax Description</b> | no                | (Optional) Negate a command or set its defaults           |
|                           | duplicate-message | Configure throttling of duplicate callhome alert messages |
|                           | throttle          | Enable throttling of duplicate callhome alert messages    |

## Command Mode

- /exec/configure/callhome

# dynamic-capability

[ no | default ] dynamic-capability

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| default            | (Optional) Inherit values from a peer template  |
| dynamic-capability | Dynamic capability                              |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor-sess

# dynamic-med-interval

[no] dynamic-med-interval <sec>

## Syntax Description

|                           |                      |   |
|---------------------------|----------------------|---|
| <b>Syntax Description</b> | no                   | (Optional) Negate a command or set its defaults |
|                           | dynamic-med-interval | Sets the interval for dampening of med changes  |
|                           | sec                  | Time interval in seconds                        |

## Command Mode

- /exec/configure/router-bgp



## E Commands

---

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# ebgp-multihop

ebgp-multihop <ebgp-ttl> | { no | default } ebgp-multihop [ <ebgp-ttl> ]

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| default            |  | Inherit values from a peer template  |
| ebgp-multihop      |  | Specify multihop TTL for remote peer |
| <i>ebgp-ttl</i>    |  | EBGP TTL value                       |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor-sess

# echo

echo { { revision { 3 | 4 } } | { vendor-extension } } | no echo { { revision } | { vendor-extension } }

## Syntax Description

### Syntax Description

|                  |   |
|------------------|---|
| no               | Negate a command or set its defaults    |
| echo             | Echo Request attributes                 |
| revision         | Echo packet default revision            |
| 3                | draft-ietf-mpls-lsp-ping-03 (rev 2)     |
| 4                | RFC 4379 Compliant                      |
| vendor-extension | Send Vendor Extension TLV with echo Req |

## Command Mode

- /exec/configure/mpls-oam

# echo

```
echo [ -e ] [ <line> ]
```

## Syntax Description

---

### Syntax Description

---

**echo** echo argument back to screen (useful for scripts)

---

**-e** (Optional) enable interpretation of the backslash-escaped characters

---

**line** (Optional) the string to echo (use quotes if string contains spaces)

---

## Command Mode

- /exec

## ecp max-retries

ecp max-retries <cnt> | no ecp max-retries [ <cnt> ]

### Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| ecp                |  | ECP (Edge Control Protocol)          |
| max-retries        |  | Maximal number of retransmissions    |
| <i>cnt</i>         |  | Numer of retries. default 3          |

### Command Mode

- /exec/configure



# ecp mode lan

[no] ecp mode lan

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | no (Optional) Negate a command or set its defaults |
|                           | ecp ECP (Edge Control Protocol)                    |
|                           | <del>mode</del> ECP session mode                   |
|                           | lan Enable ECP LAN mode                            |

## Command Mode

- /exec/configure

## ecp retransmission-timer-exponent

ecp retransmission-timer-exponent <exp> | no ecp retransmission-timer-exponent [ <exp> ]

### Syntax Description

#### Syntax Description

|                               |  |
|-------------------------------|--|
| no                            | Negate a command or set its defaults             |
| ecp                           | ECP (Edge Control Protocol)                      |
| retransmission-timer-exponent | Retransmission timer exponent                    |
| exp                           | Timer exponent. default: 14 (ex. 10 exp ~ 10 ms) |

### Command Mode

- /exec/configure

# eem test

eem test <param>

## Syntax Description

| Syntax Description |                                     |
|--------------------|-------------------------------------|
| eem                | Event Manager command               |
| test               | Do test action                      |
| <i>param</i>       | Test action parameter (dummy value) |

## Command Mode

- /exec

## eemtest policy-add

eemtest policy-add <name> [ override <override-name> ]

### Syntax Description

#### Syntax Description

|                      |  |
|----------------------|--|
| eemtest              | EEM test commands  |
| policy-add           | Add a client policy  |
| <i>name</i>          | Name of policy (cannot have underscore in first two characters)                        |
| override             | (Optional) Override a system policy  |
| <i>override-name</i> | (Optional) Name of the system policy to override - should begin with double underscore |

### Command Mode

- /exec

# eemtest policy-remove

eemtest policy-remove <name> [ override <override-name> ]

## Syntax Description

### Syntax Description

|                      |  |
|----------------------|--|
| eemtest              | EEM test commands  |
| policy-remove        | Remove a client policy   |
| <i>name</i>          | Name of policy (cannot have underscore in first two characters)                        |
| override             | (Optional) Override a system policy  |
| <i>override-name</i> | (Optional) Name of the system policy to override - should begin with double underscore |

## Command Mode

- /exec

## egress-engineering

[ no | default ] egress-engineering [ peer-set <peer-set-name> ]

### Syntax Description

| Syntax Description   |            |  |
|----------------------|------------|--|
| no                   | (Optional) | Negate a command or set its defaults             |
| default              | (Optional) | Inherit values from a peer template              |
| egress-engineering   |            | Configure Egress Peer Engineering (EPE) for peer |
| peer-set             | (Optional) | Configure EPE Peer-Set                           |
| <i>peer-set-name</i> | (Optional) | EPE Peer-Set name                                |

### Command Mode

- /exec/configure/router-bgp/router-bgp-template-neighbor
- /exec/configure/router-bgp/router-bgp-neighbor-stmp
- /exec/configure/router-bgp/router-bgp-neighbor
- /exec/configure/router-bgp/router-bgp-prefixneighbor

# eid-notify authentication-key

[no] eid-notify authentication-key <key>

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 | (Optional) Negate a command or set its defaults    |  |
| eid-notify         | First hop xTR notification                         |  |
| authentication-key | Authentication key used by EID-Notify destinations |  |
| key                | SHA-1 password                                     |  |

## Command Mode

- /exec/configure/lisp-dynamic-eid /exec/configure/vrf/lisp-dynamic-eid

## eid-notify key

[no] eid-notify <addr> key <auth-key>

### Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults    |
| eid-notify         | First hop xTR notification                         |
| <i>addr</i>        | Address of the first-hop xTR to be notified        |
| key                | Authentication key used by EID-Notify destinations |
| <i>auth-key</i>    | SHA-1 password                                     |

### Command Mode

- /exec/configure/lisp-dynamic-eid /exec/configure/vrf/lisp-dynamic-eid



# eid-prefix

```
{ [ no ] eid-prefix { <eid-prefix> | <eid-prefix6> } [ instance-id <iid> ] [ route-tag <tag> ] [
accept-more-specifics ] }
```

## Syntax Description

| Syntax Description    |            |   |
|-----------------------|------------|---|
| no                    | (Optional) | Negate a command or set its defaults                |
| eid-prefix            |            | EID-prefix for LISP site                            |
| <i>eid-prefix</i>     |            | IP EID-prefix of the site                           |
| instance-id           | (Optional) | Configures instance-ID for site's EID-prefix        |
| <i>iid</i>            | (Optional) | 24-bit instance-ID value                            |
| route-tag             | (Optional) | Route tag for LISP EID-prefix routes                |
| <i>tag</i>            | (Optional) | 32-bit value for tag                                |
| accept-more-specifics | (Optional) | Allow more-specifics of site EID-prefix to register |

## Command Mode

- /exec/configure/lisp-site /exec/configure/vrf/lisp-site

## eigrp event-history cli size

```
[no] eigrp [ <eigrp-ptag> ] event-history { cli } size { <size_in_text> | <size_in_Kbytes> }
```

### Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| eigrp                 | EIGRP clear commands                            |  |
| <i>eigrp-ptag</i>     | (Optional) Process tag                          |  |
| event-history         | Event History of EIGRP                          |  |
| cli                   | EIGRP CLI related events                        |  |
| size                  | Configure the size of the event-hist buffer     |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_Kbytes</i> | Size of the file in kbytes                      |  |

### Command Mode

- /exec/configure

# eigrp file-debug

[no] eigrp file-debug

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| eigrp              | EIGRP   |
| file-debug         | Collect all debugs to a file                    |

## Command Mode

- /exec/configure

# eltm distribute

[no] eltm distribute

## Syntax Description

| Syntax Description |                                 |
|--------------------|---------------------------------|
| no                 | (Optional)                      |
| eltm               | ELTM Configuration              |
| distribute         | Distribute ELTM Info to clients |

## Command Mode

- /exec/configure

# email-addr

[no] email-addr <s0>

## Syntax Description

|                           |            |  |
|---------------------------|------------|--|
| <b>Syntax Description</b> | no         | (Optional) Negate a command or set its defaults                    |
|                           | email-addr | Add email addr to send output of jobs configured for this schedule |
|                           | s0         | Provide email address, example: jdow@xyz.com                       |

## Command Mode

- /exec/configure/schedule

# email-contact

{ email-contact <s0> | no email-contact }

## Syntax Description

|                           |               |  |
|---------------------------|---------------|--|
| <b>Syntax Description</b> | no            | Negate a command or set its defaults         |
|                           | email-contact | email address of the contact person          |
|                           | s0            | Provide email address, example: jdow@xyz.com |

## Command Mode

- /exec/configure/callhome

# email

[no] email

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| email              | Configure pipe email                            |

## Command Mode

- /exec/configure

# email

| email [ -f <fromemail> | -r <replytoemail> | -S <smtphost> | -P <smtpport> | -s <subject> | -c <vrf-known-name> ] + <toemail>

## Syntax Description

| Syntax Description    |  |
|-----------------------|--|
|                       | Pipe command output to filter            |
| email                 | Email command output                     |
| -f                    | (Optional) From address                  |
| <i>fromemail</i>      | (Optional) Email address                 |
| -r                    | (Optional) Reply to address              |
| <i>replytoemail</i>   | (Optional) Email address                 |
| -S                    | (Optional) SMTP host                     |
| <i>smtphost</i>       | (Optional) IPV4/IPV6 address or DNS name |
| -P                    | (Optional) SMTP port                     |
| <i>smtpport</i>       | (Optional) SMTP port number              |
| -s                    | (Optional) Subject                       |
| <i>subject</i>        | (Optional) Email subject                 |
| -c                    | (Optional) VRF                           |
| <i>vrf-known-name</i> | (Optional) VRF name                      |
| <i>toemail</i>        | Recipient email address                  |

## Command Mode

- /output



# enable

enable [ <enable-level> ]

## Syntax Description

---

### Syntax Description

---

|        |                             |
|--------|-----------------------------|
| enable | Turn on privileged commands |
|--------|-----------------------------|

---

|                     |                         |
|---------------------|-------------------------|
| <i>enable-level</i> | (Optional) Enable Level |
|---------------------|-------------------------|

---

## Command Mode

- /exec

# enable

[no] enable

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| enable             | enable callhome                                 |

## Command Mode

- /exec/configure/callhome

# enable Cert

[no] enable { Cert-DN-match | user-server-group }

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| enable             | Enable  |
| user-server-group  | Enable/Disable group validation                 |
| Cert-DN-match      | Enable/Disable Cert-DN matching                 |

## Command Mode

- /exec/configure/ldap

## enable secret 0 5

```
{ [ test ] enable secret { 0 <key1> | 5 <key2> | <key3> } [ { priv-lvl <n> | all } ] } | { no enable secret [ { 0
<key1> | 5 <key2> | <key3> } ] [ { priv-lvl <n> | all } ] }
```

### Syntax Description

| Syntax Description |            |   |
|--------------------|------------|---|
| no                 |            | Negate a command or set its defaults  |
| test               | (Optional) | test secrets  |
| enable             |            | create secret for privilege escalation                                      |
| secret             |            | create secret for privilege escalation (defaults to highest priv-lvl 14/15) |
| 0                  |            | Indicates that the secret that follows should be in clear text              |
| <i>key1</i>        |            | Secret for privilege escalation (clear text)                                |
| 5                  |            | Indicates that the secret that follows should be encrypted                  |
| <i>key2</i>        |            | strongly encrypted secret   |
| <i>key3</i>        |            | Secret for user privilege escalation (clear text)                           |
| priv-lvl           | (Optional) | Privilege-level to which this secret belongs                                |
| <i>n</i>           | (Optional) | Privilege-level   |
| all                | (Optional) | Add/remove all privilege level secrets                                      |

### Command Mode

- /exec/configure

# encapsulation dot1Q

encapsulation dot1Q <vlan\_id> | no encapsulation dot1Q [ <vlan\_id> ]

## Syntax Description

|                           |               |   |
|---------------------------|---------------|---|
| <b>Syntax Description</b> | no            | Negate a command or set its defaults    |
|                           | encapsulation | Set encapsulation type for an interface |
|                           | dot1Q         | IEEE 802.1Q Virtual LAN                 |
|                           | vlan_id       | IEEE 802.1Q VLAN ID required            |

## Command Mode

- /exec/configure/if-ether-sub /exec/configure/if-port-channel-sub /exec/configure/if-ether-sub-p2p

# encapsulation dot1Q

encapsulation dot1Q <vlan\_id> | no encapsulation dot1Q [ <vlan\_id> ]

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults    |
| encapsulation      |  | Set encapsulation type for an interface |
| dot1Q              |  | IEEE 802.1Q Virtual LAN                 |
| <i>vlan_id</i>     |  | IEEE 802.1Q VLAN ID required            |

## Command Mode

- /exec/configure/if-gig-ether-sub /exec/configure/if-remote-ethernet-sub

# encapsulation mpls

[ no | default ] encapsulation mpls

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| default            | (Optional) Inherit values from a peer template  |
| encapsulation      | Configure encapsulation type for EVPN routes    |
| mpls               | Mpls encapsulation                              |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-l2vpn-evpn

# encrypt pause-frame

[no] encrypt pause-frame

## Syntax Description

---

**Syntax Description**

---

encrypt    Enable/disable encryption for specific type of frames

---

pause-frame    Ethernet PAUSE frames

---

## Command Mode

- /exec/configure/cts-dot1x /exec/configure/cts-manual



# encryption decrypt type6

encryption decrypt type6

## Syntax Description

---

### Syntax Description

---

encryption Strong encryption for credential(s)

---

decrypt Decrypts strongly encrypted secret(s) to obfuscated type(s)

---

type6 type6 secrets present in system

---

## Command Mode

- /exec

# encryption delete type6

encryption delete type6 [ <uuid> | <name> ]

## Syntax Description

| Syntax Description |                                      |
|--------------------|--------------------------------------|
| encryption         | Strong encryption for credential(s)  |
| delete             | Deletes strongly encrypted secret(s) |
| type6              | type6 secrets present in system      |
| <i>uuid</i>        | (Optional) uuid of the app           |
| <i>name</i>        | (Optional) Service name              |

## Command Mode

- /exec

# encryption re-encrypt obfuscated

encryption re-encrypt obfuscated

## Syntax Description

---

### Syntax Description

---

encryption Strong encryption for credential(s)

---

re-encrypt Re-encrypts weekly encrypted secret(s) to strongly encrypted secret(s)

---

obfuscated type-3/type-7/clear-text secrets present in system

---

## Command Mode

- /exec

# end-job

end-job

## Syntax Description

---

### Syntax Description

---

end-job End scheduler  
job

---

## Command Mode

- /exec

# end

end

## Syntax Description

---

### Syntax Description

---

**end** Go to exec mode

---

## Command Mode

- /global

# enforce-first-as

[no] enforce-first-as

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

enforce-first-as Enforce neighbor AS is the first AS in AS-PATH attribute (EBGP)

---

## Command Mode

- /exec/configure/router-bgp

# enrollment terminal

[no] enrollment terminal

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| enrollment         | Configure trustpoint enrollment                 |
| terminal           | Configure trustpoint enrollment via console     |

## Command Mode

- /exec/configure/trustpoint

## errdisable

```
errdisable { detect cause_detect { all_cause | link-flap_cause | loopback_cause } | recovery { cause_recovery
{ all_recovery | udld | loopback_recovery | bpduguard | security-violation | psecure-violation | link-flap-recovery
| storm-control | dcbx-no-ack | vpc-peerlink | failed-port-state } } } | no errdisable { detect cause_detect {
all_cause | link-flap_cause | loopback_cause } | recovery { cause_recovery { all_recovery | udld |
loopback_recovery | bpduguard | security-violation | psecure-violation | link-flap-recovery | storm-control |
dcbx-no-ack | vpc-peerlink | failed-port-state } } }
```

### Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults  |
| errdisable         |  | Error disable   |
| detect             |  | Error disable detection   |
| cause_detect       |  | Enable error disable detection for application                              |
| all_cause          |  | Enable error detection on all cases   |
| link-flap_cause    |  | Enable error disable detection on linkstate-flapping                        |
| loopback_cause     |  | Enable error disable detection on loopback detected by UDLD                 |
| recovery           |  | Error disable recovery  |
| cause_recovery     |  | Enable error disable recovery for application                               |
| all_recovery       |  | Enable timer to recover from all causes                                     |
| udld               |  | Enable timer to recover from udld error disabled state                      |
| loopback_recovery  |  | Enable timer to recover from loopback error disabled state detected by UDLD |
| bpduguard          |  | Enable timer to recover from BPDU Guard error disabled state                |
| security-violation |  | Enable timer to recover from 802.1x violation disable state                 |
| psecure-violation  |  | Enable timer to recover from psecure violation disable state                |
| link-flap-recovery |  | Enable timer to recover from linkstate flapping                             |
| storm-control      |  | Enable timer to recover from storm control error disabled state             |
| dcbx-no-ack        |  | Enable timer to recover from no DCBX Acks                                   |
| vpc-peerlink       |  | Enable timer to recover from inconsistent vpc peer-link                     |
| failed-port-state  |  | Enable timer to recover from stp set port state failure                     |

### Command Mode

- /exec/configure



# errdisable detect cause acl-exception

[no] errdisable detect cause acl-exception

## Syntax Description

---

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | <b>n</b> (Optional) Negate a command or set its defaults |
|---------------------------|--|

---

## Command Mode

- /exec/configure

# errdisable port detect cause acl-exception

[no] errdisable port detect cause acl-exception

## Syntax Description

---

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | <b>n</b> (Optional) Negate a command or set its defaults |
|---------------------------|--|

---

## Command Mode

- /exec/configure/if-ethernet /exec/configure/if-ethernet-switch

# errdisable recovery interval

errdisable recovery interval <val> | no errdisable recovery interval [ <val> ]

## Syntax Description

|                           |            |                                      |
|---------------------------|------------|--------------------------------------|
| <b>Syntax Description</b> | no         | Negate a command or set its defaults |
|                           | errdisable | Error disable                        |
|                           | recovery   | Error disable recovery               |
|                           | interval   | Error disable recovery timer value   |
|                           | <i>val</i> | timer-interval (sec)                 |

## Command Mode

- /exec/configure

## eth-port-manager internal-errdisable

```
{ eth-port-manager internal-errdisable <ifindex> { udld | bpduguard | loopback | security-violation |
psecure-violation | link-flap | dhcp-rate-limit | arp-inspection | storm-control | ip-addr-conflict |
ipQos-Dcbxp-compat-fail | port-error <enum-port-err> } }
```

### Syntax Description

#### Syntax Description

|                         |                                    |
|-------------------------|------------------------------------|
| eth-port-manager        | ethernet port manager              |
| internal-errdisable     | error-disable a port               |
| <i>ifindex</i>          | specify index                      |
| udld                    | udld                               |
| bpduguard               | BPDU Guard error disable state     |
| loopback                | loopback error recovery            |
| security-violation      | 802.1x violation disable state     |
| psecure-violation       | psecure violation disable state    |
| link-flap               | linkstate flapping                 |
| dhcp-rate-limit         | dhcp-rate-limit                    |
| arp-inspection          | arp-inspection                     |
| storm-control           | storm-control error disabled state |
| ip-addr-conflict        | ip address conflict                |
| ipQos-Dcbxp-compat-fail | ipQos DCBXP compat fail            |
| port-error              | Enter port error                   |
| <i>enum-port-err</i>    | port syserr                        |

### Command Mode

- /exec

# ethanalyzer local

[no] ethanalyzer local [ { { {

## Syntax Description

|                           |             |   |
|---------------------------|-------------|---|
| <b>Syntax Description</b> | {           | (Optional) inband                               |
|                           | no          | (Optional) Negate a command or set its defaults |
|                           | ethanalyzer | Configure cisco packet analyzer                 |
|                           | local       | start local capture of frames to Sup            |

## Command Mode

- /exec

# ethernet-segment

[no] ethernet-segment <es-num>

## Syntax Description

|                           |                  |   |
|---------------------------|------------------|---|
| <b>Syntax Description</b> | no               | (Optional) Negate a command or set its defaults |
|                           | ethernet-segment | Configure Ethernet-Segment                      |
|                           | <i>es-num</i>    | ethernet-segment number                         |

## Command Mode

- /exec/configure/if-eth-port-channel-switch

# ethernet-segment delay-restore time

[no] ethernet-segment delay-restore time <sec>

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| ethernet-segment   | ethernet-segment                                |  |
| delay-restore      | delay-restore                                   |  |
| time               | time  |  |
| sec                | time in seconds                                 |  |

## Command Mode

- /exec/configure/evpn-esi-mh

## ethernet-tag encapsulation dot1q default static

```
{ ethernet-tag encapsulation dot1q default { static <profile-name> | dynamic } } | { no ethernet-tag encapsulation dot1q default }
```

### Syntax Description

| Syntax Description  |  |                                      |
|---------------------|--|--------------------------------------|
| no                  |  | Negate a command or set its defaults |
| ethernet-tag        | Data snooping triggers   |                                      |
| encapsulation       | Encapsulation/Trigger type   |                                      |
| static              | Static Profile Map: Configure profile name via CLI                                     |                                      |
| <i>profile-name</i> |  |                                      |
| dynamic             | Dynamic Profile Map: Retrieve profile name from the external server                    |                                      |
| dot1q               | Dot1Q Encapsulation  |                                      |
| default             | Default (wildcard). Match any dot1q when there is no specific dot1q mapping configured |                                      |

### Command Mode

- /exec/configure/profile-map /exec/configure/profile-map-global



# ethernet-tag encapsulation dot1q static

```
{ ethernet-tag encapsulation dot1q <vlan-id> { static <profile-name> | dynamic } } | { no ethernet-tag encapsulation dot1q <vlan-id> }
```

## Syntax Description

| Syntax Description  |   |
|---------------------|---|
| no                  | Negate a command or set its defaults                                |
| ethernet-tag        | Data snooping triggers  |
| encapsulation       | Encapsulation/Trigger type  |
| static              | Static Profile Map: Configure profile name via CLI                  |
| <i>profile-name</i> |   |
| dynamic             | Dynamic Profile Map: Retrieve profile name from the external server |
| dot1q               | Dot1Q Encapsulation   |
| <i>vlan-id</i>      |   |

## Command Mode

- /exec/configure/profile-map /exec/configure/profile-map-global

## ethernet-tag encapsulation vni default static

```
{ ethernet-tag encapsulation vni default { static <profile-name> | dynamic } } | { no ethernet-tag encapsulation vni default }
```

### Syntax Description

| Syntax Description  |  |                                      |
|---------------------|--|--------------------------------------|
| no                  |  | Negate a command or set its defaults |
| ethernet-tag        | Data snooping triggers   |                                      |
| encapsulation       | Encapsulation/Trigger type   |                                      |
| static              | Static Profile Map: Configure profile name via CLI                                 |                                      |
| <i>profile-name</i> |  |                                      |
| dynamic             | Dynamic Profile Map: Retrieve profile name from the external server                |                                      |
| vni                 | Virtual Network Identifier   |                                      |
| default             | Default (wildcard). Match any vni when there is no specific vni mapping configured |                                      |

### Command Mode

- /exec/configure/profile-map /exec/configure/profile-map-global

# ethernet-tag encapsulation vni static

```
{ ethernet-tag encapsulation vni <vni-id> { static <profile-name> | dynamic } } | { no ethernet-tag encapsulation vni <vni-id> }
```

## Syntax Description

| Syntax Description  |   |
|---------------------|---|
| no                  | Negate a command or set its defaults                                |
| ethernet-tag        | Data snooping triggers  |
| encapsulation       | Encapsulation/Trigger type  |
| static              | Static Profile Map: Configure profile name via CLI                  |
| <i>profile-name</i> |   |
| dynamic             | Dynamic Profile Map: Retrieve profile name from the external server |
| vni                 | Virtual Network Identifier  |
| <i>vni-id</i>       |   |

## Command Mode

- /exec/configure/profile-map /exec/configure/profile-map-global

# evb batch-response disable

{ [ no ] evb batch-response disable }

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| evb                |            | EVB (Edge Virtual Bridge)            |
| batch-response     |            | Disable batch-response               |
| disable            |            | Disable batch-response               |

## Command Mode

- /exec/configure

# evb mac

```
{ evb mac <mac-addr> } | { no evb mac [ <mac-addr> ] }
```

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| evb                |  | EVB (Edge Virtual Bridge)            |
| mac                |  | VDP multicast MAC address            |
| <i>mac-addr</i>    |  | MAC Address                          |

## Command Mode

- /exec/configure

## evb reinit-keep-alive

```
{ evb reinit-keep-alive <exp> } | { no evb reinit-keep-alive [ <exp> ] }
```

### Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults      |
| evb                |  | EVB (Edge Virtual Bridge)                 |
| reinit-keep-alive  |  | Keepalive                                 |
| <i>exp</i>         |  | Timer exponent. (Min 22 exp ~ 40 seconds) |

### Command Mode

- /exec/configure

# evb resource-wait-delay

```
{ evb resource-wait-delay <exp> } | { no evb resource-wait-delay [ <exp> ] }
```

## Syntax Description

| Syntax Description  |  |   |
|---------------------|--|---|
| no                  |  | Negate a command or set its defaults      |
| evb                 |  | EVB (Edge Virtual Bridge)                 |
| resource-wait-delay |  | Resource wait delay                       |
| <i>exp</i>          |  | Timer exponent. (Min 22 exp ~ 40 seconds) |

## Command Mode

- /exec/configure

## event-history

[no] event-history { detail | periodic | objstore } [ size { <size\_in\_text> | <bytes> } ]

### Syntax Description

| Syntax Description  |   |
|---------------------|---|
| no                  | (Optional) Negate a command or set its defaults |
| event-history       | Configure event-history details                 |
| detail              | Detailed event history buffer                   |
| periodic            | Periodic events history buffer                  |
| objstore            | Objstore events history buffer                  |
| size                | (Optional) Set the buffer size                  |
| <i>size_in_text</i> | (Optional) Buffer size                          |
| <i>bytes</i>        | (Optional) Buffer size in bytes                 |

### Command Mode

- /exec/configure/router-bgp



# event-history adbm category all

event-history adbm category all

## Syntax Description

### Syntax Description

|               |   |
|---------------|---|
| event-history | switch wide event history configuration           |
| adbm          | Configure adbm event logs                         |
| category      | Configure adbm event logs for category            |
| all           | Configure adbm event logs for category all events |

## Command Mode

- /exec

# event-history adbm category all

event-history adbm no category all

## Syntax Description

---

### Syntax Description

---

event-history switch wide event history configuration

---

adbm Configure adbm event logs

---

no Disable adbm event logs for category

---

category Configure adbm event logs for category

---

all Configure adbm event logs for category all events

---

## Command Mode

- /exec

## event-history adbm category fc2

```
event-history adbm category fc2 [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ]
```

### Syntax Description

#### Syntax Description

|               |  |
|---------------|--|
| event-history | switch wide event history configuration                |
| adbm          | Configure adbm event logs                              |
| category      | Configure adbm event logs for category                 |
| fc2           | Configure adbm event logs for category FC2             |
| rx            | (Optional) Configure adbm event logs for FC2 Rx frames |
| brief         | (Optional) Configure brief adbm event logs for FC2 Rx  |
| detail        | (Optional) Configure detail adbm event logs for FC2 Rx |
| tx            | (Optional) Configure adbm event logs for FC2 Tx frames |
| brief1        | (Optional) Configure brief adbm event logs for FC2 Tx  |
| detail1       | (Optional) Configure detail adbm event logs for FC2 Tx |

### Command Mode

- /exec

## event-history adbm category fc2

```
event-history adbm no category fc2 [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ]
```

### Syntax Description

#### Syntax Description

|               |  |
|---------------|--|
| event-history | switch wide event history configuration                |
| adbm          | Configure adbm event logs                              |
| no            | Disable adbm event logs for category                   |
| category      | Configure adbm event logs for category                 |
| fc2           | Configure adbm event logs for category FC2             |
| rx            | (Optional) Configure adbm event logs for FC2 Rx frames |
| brief         | (Optional) Configure brief adbm event logs for FC2 Rx  |
| detail        | (Optional) Configure detail adbm event logs for FC2 Rx |
| tx            | (Optional) Configure adbm event logs for FC2 Tx frames |
| brief1        | (Optional) Configure brief adbm event logs for FC2 Tx  |
| detail1       | (Optional) Configure detail adbm event logs for FC2 Tx |

### Command Mode

- /exec

## event-history adbm category mts

```
event-history adbm category mts [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ]
```

### Syntax Description

#### Syntax Description

|               |  |
|---------------|--|
| event-history | switch wide event history configuration                |
| adbm          | Configure adbm event logs                              |
| category      | Configure adbm event logs for category                 |
| mts           | Configure adbm event logs for category mts             |
| rx            | (Optional) Configure adbm event logs for mts Rx frames |
| brief         | (Optional) Configure brief adbm event logs for mts Rx  |
| detail        | (Optional) Configure detail adbm event logs for mts Rx |
| tx            | (Optional) Configure adbm event logs for mts Tx frames |
| brief1        | (Optional) Configure brief adbm event logs for mts Tx  |
| detail1       | (Optional) Configure detail adbm event logs for mts Tx |

### Command Mode

- /exec

## event-history adbm category mts

```
event-history adbm no category mts [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ]
```

### Syntax Description

#### Syntax Description

|               |  |
|---------------|--|
| event-history | switch wide event history configuration                |
| adbm          | Configure adbm event logs                              |
| no            | Disable adbm event logs for category                   |
| category      | Configure adbm event logs for category                 |
| mts           | Configure adbm event logs for category mts             |
| rx            | (Optional) Configure adbm event logs for mts Rx frames |
| brief         | (Optional) Configure brief adbm event logs for mts Rx  |
| detail        | (Optional) Configure detail adbm event logs for mts Rx |
| tx            | (Optional) Configure adbm event logs for mts Tx frames |
| brief1        | (Optional) Configure brief adbm event logs for mts Tx  |
| detail1       | (Optional) Configure detail adbm event logs for mts Tx |

### Command Mode

- /exec

# event-history callhome

```
event-history callhome { mts [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ] | no mts [ { rx [ { brief1 | detail1 } ] | tx [ { brief2 | detail2 } ] } ] }
```

## Syntax Description

### Syntax Description

|               |  |
|---------------|--|
| event-history | switch wide event history configuration                    |
| callhome      | Configure Callhome event logs                              |
| mts           | Configure callhome event logs for MTS                      |
| rx            | (Optional) Configure callhome event logs for MTS Rx frames |
| brief         | (Optional) Configure brief callhome event logs for MTS Rx  |
| detail        | (Optional) Configure detail callhome event logs for MTS Rx |
| tx            | (Optional) Configure callhome event logs for MTS Tx frames |
| brief1        | (Optional) Configure brief callhome event logs for MTS Tx  |
| detail1       | (Optional) Configure detail callhome event logs for MTS Tx |
| no            | Disable callhome event logs for MTS                        |
| mts           | Configure callhome event logs for MTS                      |
| rx            | (Optional) Configure callhome event logs for MTS Rx frames |
| brief1        | (Optional) Configure brief callhome event logs for MTS Rx  |
| detail1       | (Optional) Configure detail callhome event logs for MTS Rx |
| tx            | (Optional) Configure callhome event logs for MTS Tx frames |
| brief2        | (Optional) Configure brief callhome event logs for MTS Tx  |
| detail2       | (Optional) Configure detail callhome event logs for MTS Tx |

## Command Mode

- /exec

## event-history capability

```
event-history capability { category { all | mts [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ] | no
category { all | mts [ { rx [ { brief1 | detail1 } ] | tx [ { brief2 | detail2 } ] } ] }
```

### Syntax Description

| Syntax Description | Description  |
|--------------------|--|
| event-history      | switch wide event history configuration                      |
| capability         | Configure capability event logs                              |
| category           | Configure capability event logs for category                 |
| all                | Configure capability event logs for category all events      |
| mts                | Configure capability event logs for category mts             |
| rx                 | (Optional) Configure capability event logs for mts Rx frames |
| brief              | (Optional) Configure brief capability event logs for mts Rx  |
| detail             | (Optional) Configure detail capability event logs for mts Rx |
| tx                 | (Optional) Configure capability event logs for mts Tx frames |
| brief1             | (Optional) Configure brief capability event logs for mts Tx  |
| detail1            | (Optional) Configure detail capability event logs for mts Tx |
| no                 | Disable capability event logs for category                   |
| category           | Configure capability event logs for category                 |
| all                | Configure capability event logs for category all events      |
| mts                | Configure capability event logs for category mts             |
| rx                 | (Optional) Configure capability event logs for mts Rx frames |
| brief1             | (Optional) Configure brief capability event logs for mts Rx  |
| detail1            | (Optional) Configure detail capability event logs for mts Rx |
| tx                 | (Optional) Configure capability event logs for mts Tx frames |
| brief2             | (Optional) Configure brief capability event logs for mts Tx  |
| detail2            | (Optional) Configure detail capability event logs for mts Tx |

### Command Mode

- /exec



# event-history cli

[no] event-history cli [ size { <size\_in\_text> | <bytes> } ]

## Syntax Description

| Syntax Description  |   |
|---------------------|---|
| no                  | (Optional) Negate a command or set its defaults |
| event-history       | Configure event-history details                 |
| cli                 | CLI event history buffer                        |
| size                | (Optional) Set the buffer size                  |
| <i>size_in_text</i> | (Optional) Buffer size                          |
| <i>bytes</i>        | (Optional) Buffer size in bytes                 |

## Command Mode

- /exec/configure/router-bgp

# event-history copp category all

event-history copp category all

## Syntax Description

---

### Syntax Description

---

event-history switch wide event history configuration

---

copp Configure copp event logs

---

category Configure copp event logs for category

---

all Configure copp event logs for category all events

---

## Command Mode

- /exec

# event-history copp category all

event-history copp no category all

## Syntax Description

---

**Syntax Description**

|               |   |
|---------------|---|
| event-history | switch wide event history configuration           |
| copp          | Configure copp event logs                         |
| no            | Disable copp event logs for category              |
| category      | Configure copp event logs for category            |
| all           | Configure copp event logs for category all events |

---

**Command Mode**

- /exec

## event-history copp category fc2

```
event-history copp category fc2 [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ]
```

### Syntax Description

#### Syntax Description

|               |  |
|---------------|--|
| event-history | switch wide event history configuration                |
| copp          | Configure copp event logs                              |
| category      | Configure copp event logs for category                 |
| fc2           | Configure copp event logs for category FC2             |
| rx            | (Optional) Configure copp event logs for FC2 Rx frames |
| brief         | (Optional) Configure brief copp event logs for FC2 Rx  |
| detail        | (Optional) Configure detail copp event logs for FC2 Rx |
| tx            | (Optional) Configure copp event logs for FC2 Tx frames |
| brief1        | (Optional) Configure brief copp event logs for FC2 Tx  |
| detail1       | (Optional) Configure detail copp event logs for FC2 Tx |

### Command Mode

- /exec

## event-history copp category fc2

```
event-history copp no category fc2 [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ]
```

### Syntax Description

| Syntax Description | Description  |
|--------------------|--|
| event-history      | switch wide event history configuration                |
| copp               | Configure copp event logs                              |
| no                 | Disable copp event logs for category                   |
| category           | Configure copp event logs for category                 |
| fc2                | Configure copp event logs for category FC2             |
| rx                 | (Optional) Configure copp event logs for FC2 Rx frames |
| brief              | (Optional) Configure brief copp event logs for FC2 Rx  |
| detail             | (Optional) Configure detail copp event logs for FC2 Rx |
| tx                 | (Optional) Configure copp event logs for FC2 Tx frames |
| brief1             | (Optional) Configure brief copp event logs for FC2 Tx  |
| detail1            | (Optional) Configure detail copp event logs for FC2 Tx |

### Command Mode

- /exec

## event-history copp category mts

```
event-history copp category mts [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ]
```

### Syntax Description

#### Syntax Description

|               |  |
|---------------|--|
| event-history | switch wide event history configuration                |
| copp          | Configure copp event logs                              |
| category      | Configure copp event logs for category                 |
| mts           | Configure copp event logs for category mts             |
| rx            | (Optional) Configure copp event logs for mts Rx frames |
| brief         | (Optional) Configure brief copp event logs for mts Rx  |
| detail        | (Optional) Configure detail copp event logs for mts Rx |
| tx            | (Optional) Configure copp event logs for mts Tx frames |
| brief1        | (Optional) Configure brief copp event logs for mts Tx  |
| detail1       | (Optional) Configure detail copp event logs for mts Tx |

### Command Mode

- /exec

## event-history copp category mts

```
event-history copp no category mts [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ]
```

### Syntax Description

| Syntax Description |  |
|--------------------|--|
| event-history      | switch wide event history configuration                |
| copp               | Configure copp event logs                              |
| no                 | Disable copp event logs for category                   |
| category           | Configure copp event logs for category                 |
| mts                | Configure copp event logs for category mts             |
| rx                 | (Optional) Configure copp event logs for mts Rx frames |
| brief              | (Optional) Configure brief copp event logs for mts Rx  |
| detail             | (Optional) Configure detail copp event logs for mts Rx |
| tx                 | (Optional) Configure copp event logs for mts Tx frames |
| brief1             | (Optional) Configure brief copp event logs for mts Tx  |
| detail1            | (Optional) Configure detail copp event logs for mts Tx |

### Command Mode

- /exec

## event-history dot1x

```
event-history dot1x { category { all | mts [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ] | no category
{ all | mts [ { rx [ { brief1 | detail1 } ] | tx [ { brief2 | detail2 } ] } ] } }
```

### Syntax Description

#### Syntax Description

|               |   |
|---------------|---|
| event-history | switch wide event history configuration                 |
| dot1x         | Configure dot1x event logs                              |
| category      | Configure dot1x event logs for category                 |
| all           | Configure dot1x event logs for category all events      |
| mts           | Configure dot1x event logs for category mts             |
| rx            | (Optional) Configure dot1x event logs for mts Rx frames |
| brief         | (Optional) Configure brief dot1x event logs for mts Rx  |
| detail        | (Optional) Configure detail dot1x event logs for mts Rx |
| tx            | (Optional) Configure dot1x event logs for mts Tx frames |
| brief1        | (Optional) Configure brief dot1x event logs for mts Tx  |
| detail1       | (Optional) Configure detail dot1x event logs for mts Tx |
| no            | Disable dot1x event logs for category                   |
| category      | Configure dot1x event logs for category                 |
| all           | Configure dot1x event logs for category all events      |
| mts           | Configure dot1x event logs for category mts             |
| rx            | (Optional) Configure dot1x event logs for mts Rx frames |
| brief1        | (Optional) Configure brief dot1x event logs for mts Rx  |
| detail1       | (Optional) Configure detail dot1x event logs for mts Rx |
| tx            | (Optional) Configure dot1x event logs for mts Tx frames |
| brief2        | (Optional) Configure brief dot1x event logs for mts Tx  |
| detail2       | (Optional) Configure detail dot1x event logs for mts Tx |

### Command Mode

- /exec



# event-history eltm category all

event-history eltm category all

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| event-history      | switch wide event history configuration           |
| eltm               | Configure eltm event logs                         |
| category           | Configure eltm event logs for category            |
| all                | Configure eltm event logs for category all events |

## Command Mode

- /exec

# event-history eltm category all

event-history eltm no category all

## Syntax Description

---

### Syntax Description

---

event-history switch wide event history configuration

---

eltm Configure eltm event logs

---

no Disable eltm event logs for category

---

category Configure eltm event logs for category

---

all Configure eltm event logs for category all events

---

## Command Mode

- /exec

## event-history eltm category fc2

```
event-history eltm category fc2 [ { rx [ { brief | detail } ] | tx [ { brief | detail } ] } ]
```

### Syntax Description

| Syntax Description | Description  |
|--------------------|--|
| event-history      | switch wide event history configuration                |
| eltm               | Configure eltm event logs                              |
| category           | Configure eltm event logs for category                 |
| fc2                | Configure eltm event logs for category FC2             |
| rx                 | (Optional) Configure eltm event logs for FC2 Rx frames |
| brief              | (Optional) Configure brief eltm event logs for FC2 Rx  |
| detail             | (Optional) Configure detail eltm event logs for FC2 Rx |
| tx                 | (Optional) Configure eltm event logs for FC2 Tx frames |
| brief              | (Optional) Configure brief eltm event logs for FC2 Tx  |
| detail             | (Optional) Configure detail eltm event logs for FC2 Tx |

### Command Mode

- /exec

## event-history eltm category fc2

```
event-history eltm no category fc2 [ { rx [ { brief | detail } ] | tx [ { brief | detail } ] } ]
```

### Syntax Description

#### Syntax Description

|               |  |
|---------------|--|
| event-history | switch wide event history configuration                |
| eltm          | Configure eltm event logs                              |
| no            | Disable eltm event logs for category                   |
| category      | Configure eltm event logs for category                 |
| fc2           | Configure eltm event logs for category FC2             |
| rx            | (Optional) Configure eltm event logs for FC2 Rx frames |
| brief         | (Optional) Configure brief eltm event logs for FC2 Rx  |
| detail        | (Optional) Configure detail eltm event logs for FC2 Rx |
| tx            | (Optional) Configure eltm event logs for FC2 Tx frames |
| brief         | (Optional) Configure brief eltm event logs for FC2 Tx  |
| detail        | (Optional) Configure detail eltm event logs for FC2 Tx |

### Command Mode

- /exec

## event-history eltm category mts

```
event-history eltm category mts [ { rx [ { brief | detail } ] | tx [ { brief | detail } ] } ]
```

### Syntax Description

#### Syntax Description

|               |  |
|---------------|--|
| event-history | switch wide event history configuration                |
| eltm          | Configure eltm event logs                              |
| category      | Configure eltm event logs for category                 |
| mts           | Configure eltm event logs for category mts             |
| rx            | (Optional) Configure eltm event logs for mts Rx frames |
| brief         | (Optional) Configure brief eltm event logs for mts Rx  |
| detail        | (Optional) Configure detail eltm event logs for mts Rx |
| tx            | (Optional) Configure eltm event logs for mts Tx frames |
| brief         | (Optional) Configure brief eltm event logs for mts Tx  |
| detail        | (Optional) Configure detail eltm event logs for mts Tx |

### Command Mode

- /exec

## event-history eltm category mts

```
event-history eltm no category mts [ { rx [ { brief | detail } ] | tx [ { brief | detail } ] } ]
```

### Syntax Description

#### Syntax Description

|               |  |
|---------------|--|
| event-history | switch wide event history configuration                |
| eltm          | Configure eltm event logs                              |
| no            | Disable eltm event logs for category                   |
| category      | Configure eltm event logs for category                 |
| mts           | Configure eltm event logs for category mts             |
| rx            | (Optional) Configure eltm event logs for mts Rx frames |
| brief         | (Optional) Configure brief eltm event logs for mts Rx  |
| detail        | (Optional) Configure detail eltm event logs for mts Rx |
| tx            | (Optional) Configure eltm event logs for mts Tx frames |
| brief         | (Optional) Configure brief eltm event logs for mts Tx  |
| detail        | (Optional) Configure detail eltm event logs for mts Tx |

### Command Mode

- /exec

## event-history errors

[no] event-history errors [ size { <size\_in\_text> | <bytes> } ]

### Syntax Description

| Syntax Description  |   |
|---------------------|---|
| no                  | (Optional) Negate a command or set its defaults |
| event-history       | Configure event-history details                 |
| errors              | Errors history buffer                           |
| size                | (Optional) Set the buffer size                  |
| <i>size_in_text</i> | (Optional) Buffer size                          |
| <i>bytes</i>        | (Optional) Buffer size in bytes                 |

### Command Mode

- /exec/configure/router-bgp

## event-history ethpm

```
event-history ethpm { category { all | mts [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ] } | no category
{ all | mts [ { rx [ { brief1 | detail1 } ] | tx [ { brief2 | detail2 } ] } ] } }
```

### Syntax Description

#### Syntax Description

|               |   |
|---------------|---|
| event-history | switch wide event history configuration                 |
| ethpm         | Configure ethpm event logs                              |
| category      | Configure ethpm event logs for category                 |
| all           | Configure ethpm event logs for category all events      |
| mts           | Configure ethpm event logs for category mts             |
| rx            | (Optional) Configure ethpm event logs for mts Rx frames |
| brief         | (Optional) Configure brief ethpm event logs for mts Rx  |
| detail        | (Optional) Configure detail ethpm event logs for mts Rx |
| tx            | (Optional) Configure ethpm event logs for mts Tx frames |
| brief1        | (Optional) Configure brief ethpm event logs for mts Tx  |
| detail1       | (Optional) Configure detail ethpm event logs for mts Tx |
| no            | Disable ethpm event logs for category                   |
| category      | Configure ethpm event logs for category                 |
| all           | Configure ethpm event logs for category all events      |
| mts           | Configure ethpm event logs for category mts             |
| rx            | (Optional) Configure ethpm event logs for mts Rx frames |
| brief1        | (Optional) Configure brief ethpm event logs for mts Rx  |
| detail1       | (Optional) Configure detail ethpm event logs for mts Rx |
| tx            | (Optional) Configure ethpm event logs for mts Tx frames |
| brief2        | (Optional) Configure brief ethpm event logs for mts Tx  |
| detail2       | (Optional) Configure detail ethpm event logs for mts Tx |

### Command Mode

- /exec



## event-history events

[no] event-history events [ size { <size\_in\_text> | <bytes> } ]

### Syntax Description

| Syntax Description  |   |
|---------------------|---|
| no                  | (Optional) Negate a command or set its defaults |
| event-history       | Configure event-history details                 |
| events              | Events history buffer                           |
| size                | (Optional) Set the buffer size                  |
| <i>size_in_text</i> | (Optional) Buffer size                          |
| <i>bytes</i>        | (Optional) Buffer size in bytes                 |

### Command Mode

- /exec/configure/router-bgp

# event-history exceptionlog

```
event-history exceptionlog { category { all | mts [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ] | no
category { all | mts [ { rx [ { brief1 | detail1 } ] | tx [ { brief2 | detail2 } ] } ] } }
```

## Syntax Description

| Syntax Description | Description  |
|--------------------|--|
| event-history      | switch wide event history configuration                                |
| exceptionlog       | Configure expl manager event logs                                      |
| category           | Configure exceptionlog manager event logs for category                 |
| all                | Configure explog eventlogs for category all events                     |
| mts                | Configure exceptionlog manager event logs for category mts             |
| rx                 | (Optional) Configure exceptionlog manager event logs for mts Rx frames |
| brief              | (Optional) Configure brief exceptionlog manager event logs for mts Rx  |
| detail             | (Optional) Configure detail exceptionlog manager event logs for mts Rx |
| tx                 | (Optional) Configure exceptionlog manager event logs for mts Tx frames |
| brief1             | (Optional) Configure brief exceptionlog manager event logs for mts Tx  |
| detail1            | (Optional) Configure detail exceptionlog manager event logs for mts Tx |
| no                 | Disable exceptionlog manager event logs for category                   |
| category           | Configure exceptionlog manager event logs for category                 |
| all                | Configure explog eventlogs for category all events                     |
| mts                | Configure exceptionlog manager event logs for category mts             |
| rx                 | (Optional) Configure exceptionlog manager event logs for mts Rx frames |
| brief1             | (Optional) Configure brief exceptionlog manager event logs for mts Rx  |
| detail1            | (Optional) Configure detail exceptionlog manager event logs for mts Rx |
| tx                 | (Optional) Configure exceptionlog manager event logs for mts Tx frames |
| brief2             | (Optional) Configure brief exceptionlog manager event logs for mts Tx  |
| detail2            | (Optional) Configure detail exceptionlog manager event logs for mts Tx |

## Command Mode

- /exec

## event-history im category mts

```
event-history im no category mts [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ]
```

### Syntax Description

| Syntax Description |  |
|--------------------|--|
| event-history      | switch wide event history configuration              |
| im                 | Configure im event logs                              |
| no                 | Disable im event logs for category                   |
| category           | Configure im event logs for category                 |
| mts                | Configure im event logs for category mts             |
| rx                 | (Optional) Configure im event logs for mts Rx frames |
| brief              | (Optional) Configure brief im event logs for mts Rx  |
| detail             | (Optional) Configure detail im event logs for mts Rx |
| tx                 | (Optional) Configure im event logs for mts Tx frames |
| brief1             | (Optional) Configure brief im event logs for mts Tx  |
| detail1            | (Optional) Configure detail im event logs for mts Tx |

### Command Mode

- /exec

# event-history imp category all

event-history imp category all

## Syntax Description

---

### Syntax Description

---

event-history switch wide event history configuration

---

imp Configure imp event logs

---

category Configure imp event logs for category

---

all Configure imp event logs for category all events

---

## Command Mode

- /exec

# event-history imp category all

event-history imp no category all

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| event-history      | switch wide event history configuration          |
| imp                | Configure imp event logs                         |
| no                 | Disable imp event logs for category              |
| category           | Configure imp event logs for category            |
| all                | Configure imp event logs for category all events |

## Command Mode

- /exec

## event-history imp category fc2

```
event-history imp category fc2 [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ]
```

### Syntax Description

#### Syntax Description

|               |   |
|---------------|---|
| event-history | switch wide event history configuration               |
| imp           | Configure imp event logs                              |
| category      | Configure imp event logs for category                 |
| fc2           | Configure imp event logs for category FC2             |
| rx            | (Optional) Configure imp event logs for FC2 Rx frames |
| brief         | (Optional) Configure brief imp event logs for FC2 Rx  |
| detail        | (Optional) Configure detail imp event logs for FC2 Rx |
| tx            | (Optional) Configure imp event logs for FC2 Tx frames |
| brief1        | (Optional) Configure brief imp event logs for FC2 Tx  |
| detail1       | (Optional) Configure detail imp event logs for FC2 Tx |

### Command Mode

- /exec

## event-history imp category fc2

```
event-history imp no category fc2 [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ]
```

### Syntax Description

| Syntax Description | Description   |
|--------------------|---|
| event-history      | switch wide event history configuration               |
| imp                | Configure imp event logs                              |
| no                 | Disable imp event logs for category                   |
| category           | Configure imp event logs for category                 |
| fc2                | Configure imp event logs for category FC2             |
| rx                 | (Optional) Configure imp event logs for FC2 Rx frames |
| brief              | (Optional) Configure brief imp event logs for FC2 Rx  |
| detail             | (Optional) Configure detail imp event logs for FC2 Rx |
| tx                 | (Optional) Configure imp event logs for FC2 Tx frames |
| brief1             | (Optional) Configure brief imp event logs for FC2 Tx  |
| detail1            | (Optional) Configure detail imp event logs for FC2 Tx |

### Command Mode

- /exec

## event-history imp category mts

```
event-history imp category mts [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ]
```

### Syntax Description

#### Syntax Description

|               |   |
|---------------|---|
| event-history | switch wide event history configuration               |
| imp           | Configure imp event logs                              |
| category      | Configure imp event logs for category                 |
| mts           | Configure imp event logs for category mts             |
| rx            | (Optional) Configure imp event logs for mts Rx frames |
| brief         | (Optional) Configure brief imp event logs for mts Rx  |
| detail        | (Optional) Configure detail imp event logs for mts Rx |
| tx            | (Optional) Configure imp event logs for mts Tx frames |
| brief1        | (Optional) Configure brief imp event logs for mts Tx  |
| detail1       | (Optional) Configure detail imp event logs for mts Tx |

### Command Mode

- /exec



## event-history imp category mts

event-history imp no category mts [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ]

### Syntax Description

| Syntax Description | Description   |
|--------------------|---|
| event-history      | switch wide event history configuration               |
| imp                | Configure imp event logs                              |
| no                 | Disable imp event logs for category                   |
| category           | Configure imp event logs for category                 |
| mts                | Configure imp event logs for category mts             |
| rx                 | (Optional) Configure imp event logs for mts Rx frames |
| brief              | (Optional) Configure brief imp event logs for mts Rx  |
| detail             | (Optional) Configure detail imp event logs for mts Rx |
| tx                 | (Optional) Configure imp event logs for mts Tx frames |
| brief1             | (Optional) Configure brief imp event logs for mts Tx  |
| detail1            | (Optional) Configure detail imp event logs for mts Tx |

### Command Mode

- /exec

# event-history interface vlan category all

event-history interface vlan [ no ] category all

## Syntax Description

### Syntax Description

|               |   |
|---------------|---|
| event-history | switch wide event history configuration                     |
| interface     | Configure interfaces  |
| vlan          | Configure interface vlan event logs                         |
| no            | (Optional) Disable interface vlan logs for category         |
| category      | Configure interface vlan event logs for category            |
| all           | Configure interface vlan event logs for category all events |

## Command Mode

- /exec

## event-history interface vlan category mts

```
event-history interface vlan [ no ] category mts [ rx [ { brief | detail } ] ]
```

### Syntax Description

#### Syntax Description

|               |  |
|---------------|--|
| event-history | switch wide event history configuration                          |
| interface     | Configure interfaces   |
| vlan          | Configure interface vlan event logs                              |
| no            | (Optional) Disable interface vlan logs for category              |
| category      | Configure interface vlan event logs for category                 |
| mts           | Configure interface vlan event logs for category mts             |
| rx            | (Optional) Configure interface vlan event logs for mts Rx frames |
| brief         | (Optional) Configure brief interface vlan event logs for mts Rx  |
| detail        | (Optional) Configure detail interface vlan event logs for mts Rx |

### Command Mode

- /exec

## event-history interface vlan category mts

```
event-history interface vlan [ no ] category mts [ tx [ { brief | detail } ] ]
```

### Syntax Description

#### Syntax Description

|               |  |
|---------------|--|
| event-history | switch wide event history configuration                          |
| interface     | Configure interfaces   |
| vlan          | Configure interface vlan event logs                              |
| no            | (Optional) Disable interface vlan logs for category              |
| category      | Configure interface vlan event logs for category                 |
| mts           | Configure interface vlan event logs for category mts             |
| tx            | (Optional) Configure interface vlan event logs for mts Tx frames |
| brief         | (Optional) Configure brief interface vlan event logs for mts Tx  |
| detail        | (Optional) Configure detail interface vlan event logs for mts Tx |

### Command Mode

- /exec

# event-history keystore

```
event-history { keystore | sksd } { category { all | mts [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ] } | no category { all | mts [ { rx [ { brief1 | detail1 } ] | tx [ { brief2 | detail2 } ] } ] } }
```

## Syntax Description

### Syntax Description

|               |  |
|---------------|--|
| event-history | switch wide event history configuration                    |
| keystore      | Configure keystore event logs                              |
| sksd          | Configure keystore/sksd event logs                         |
| category      | Configure keystore event logs for category                 |
| all           | Configure keystore event logs for category all events      |
| mts           | Configure keystore event logs for category mts             |
| rx            | (Optional) Configure keystore event logs for mts Rx frames |
| brief         | (Optional) Configure brief keystore event logs for mts Rx  |
| detail        | (Optional) Configure detail keystore event logs for mts Rx |
| tx            | (Optional) Configure keystore event logs for mts Tx frames |
| brief1        | (Optional) Configure brief keystore event logs for mts Tx  |
| detail1       | (Optional) Configure detail keystore event logs for mts Tx |
| no            | Disable keystore event logs for category                   |
| category      | Configure keystore event logs for category                 |
| all           | Configure keystore event logs for category all events      |
| mts           | Configure keystore event logs for category mts             |
| rx            | (Optional) Configure keystore event logs for mts Rx frames |
| brief1        | (Optional) Configure brief keystore event logs for mts Rx  |
| detail1       | (Optional) Configure detail keystore event logs for mts Rx |
| tx            | (Optional) Configure keystore event logs for mts Tx frames |
| brief2        | (Optional) Configure brief keystore event logs for mts Tx  |
| detail2       | (Optional) Configure detail keystore event logs for mts Tx |

## Command Mode

- /exec

# event-history lacp category all

event-history lacp category all

## Syntax Description

---

### Syntax Description

---

event-history switch wide event history configuration

---

lacp Configure lacp event logs

---

category Configure lacp event logs for category

---

all Configure lacp event logs for category all events

---

## Command Mode

- /exec

# event-history lacp category all

event-history lacp no category all

## Syntax Description

---

**Syntax Description**

---

event-history switch wide event history configuration

---

lacp Configure lacp event logs

---

no Disable lacp event logs for category

---

category Configure lacp event logs for category

---

all Configure lacp event logs for category all events

---

## Command Mode

- /exec

## event-history lacp category fc2

```
event-history lacp category fc2 [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ]
```

### Syntax Description

#### Syntax Description

|               |  |
|---------------|--|
| event-history | switch wide event history configuration                |
| lacp          | Configure lacp event logs                              |
| category      | Configure lacp event logs for category                 |
| fc2           | Configure lacp event logs for category FC2             |
| rx            | (Optional) Configure lacp event logs for FC2 Rx frames |
| brief         | (Optional) Configure brief lacp event logs for FC2 Rx  |
| detail        | (Optional) Configure detail lacp event logs for FC2 Rx |
| tx            | (Optional) Configure lacp event logs for FC2 Tx frames |
| brief1        | (Optional) Configure brief lacp event logs for FC2 Tx  |
| detail1       | (Optional) Configure detail lacp event logs for FC2 Tx |

### Command Mode

- /exec



## event-history lacp category fc2

```
event-history lacp no category fc2 [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ]
```

### Syntax Description

| Syntax Description | Description  |
|--------------------|--|
| event-history      | switch wide event history configuration                |
| lacp               | Configure lacp event logs                              |
| no                 | Disable lacp event logs for category                   |
| category           | Configure lacp event logs for category                 |
| fc2                | Configure lacp event logs for category FC2             |
| rx                 | (Optional) Configure lacp event logs for FC2 Rx frames |
| brief              | (Optional) Configure brief lacp event logs for FC2 Rx  |
| detail             | (Optional) Configure detail lacp event logs for FC2 Rx |
| tx                 | (Optional) Configure lacp event logs for FC2 Tx frames |
| brief1             | (Optional) Configure brief lacp event logs for FC2 Tx  |
| detail1            | (Optional) Configure detail lacp event logs for FC2 Tx |

### Command Mode

- /exec

## event-history lacp category mts

```
event-history lacp category mts [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ]
```

### Syntax Description

#### Syntax Description

|               |  |
|---------------|--|
| event-history | switch wide event history configuration                |
| lacp          | Configure lacp event logs                              |
| category      | Configure lacp event logs for category                 |
| mts           | Configure lacp event logs for category mts             |
| rx            | (Optional) Configure lacp event logs for mts Rx frames |
| brief         | (Optional) Configure brief lacp event logs for mts Rx  |
| detail        | (Optional) Configure detail lacp event logs for mts Rx |
| tx            | (Optional) Configure lacp event logs for mts Tx frames |
| brief1        | (Optional) Configure brief lacp event logs for mts Tx  |
| detail1       | (Optional) Configure detail lacp event logs for mts Tx |

### Command Mode

- /exec

## event-history lacp category mts

```
event-history lacp no category mts [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ]
```

### Syntax Description

| Syntax Description | Description  |
|--------------------|--|
| event-history      | switch wide event history configuration                |
| lacp               | Configure lacp event logs                              |
| no                 | Disable lacp event logs for category                   |
| category           | Configure lacp event logs for category                 |
| mts                | Configure lacp event logs for category mts             |
| rx                 | (Optional) Configure lacp event logs for mts Rx frames |
| brief              | (Optional) Configure brief lacp event logs for mts Rx  |
| detail             | (Optional) Configure detail lacp event logs for mts Rx |
| tx                 | (Optional) Configure lacp event logs for mts Tx frames |
| brief1             | (Optional) Configure brief lacp event logs for mts Tx  |
| detail1            | (Optional) Configure detail lacp event logs for mts Tx |

### Command Mode

- /exec

## event-history license

```
event-history license { category { all | mts [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ] } | no category
{ all | mts [ { rx [ { brief1 | detail1 } ] | tx [ { brief2 | detail2 } ] } ] } }
```

### Syntax Description

| Syntax Description | Description   |
|--------------------|---|
| event-history      | switch wide event history configuration                           |
| license            | Configure license manager event logs                              |
| category           | Configure license manager event logs for category                 |
| all                | Configure license manager event logs for category all events      |
| mts                | Configure license manager event logs for category mts             |
| rx                 | (Optional) Configure license manager event logs for mts Rx frames |
| brief              | (Optional) Configure brief license manager event logs for mts Rx  |
| detail             | (Optional) Configure detail license manager event logs for mts Rx |
| tx                 | (Optional) Configure license manager event logs for mts Tx frames |
| brief1             | (Optional) Configure brief license manager event logs for mts Tx  |
| detail1            | (Optional) Configure detail license manager event logs for mts Tx |
| no                 | Disable license manager event logs for category                   |
| category           | Configure license manager event logs for category                 |
| all                | Configure license manager event logs for category all events      |
| mts                | Configure license manager event logs for category mts             |
| rx                 | (Optional) Configure license manager event logs for mts Rx frames |
| brief1             | (Optional) Configure brief license manager event logs for mts Rx  |
| detail1            | (Optional) Configure detail license manager event logs for mts Rx |
| tx                 | (Optional) Configure license manager event logs for mts Tx frames |
| brief2             | (Optional) Configure brief license manager event logs for mts Tx  |
| detail2            | (Optional) Configure detail license manager event logs for mts Tx |

### Command Mode

- /exec

# event-history lldp category all

event-history lldp category all

## Syntax Description

---

### Syntax Description

---

event-history switch wide event history configuration

---

lldp Configure lldp event logs

---

category Configure lldp event logs for category

---

all Configure lldp event logs for category all events

---

## Command Mode

- /exec

# event-history lldp category all

event-history lldp no category all

## Syntax Description

---

### Syntax Description

---

event-history switch wide event history configuration

---

lldp Configure lldp event logs

---

no Disable lldp event logs for category

---

category Configure lldp event logs for category

---

all Configure lldp event logs for category all events

---

## Command Mode

- /exec

## event-history lldp category fc2

```
event-history lldp category fc2 [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ]
```

### Syntax Description

| Syntax Description | Description  |
|--------------------|--|
| event-history      | switch wide event history configuration                |
| lldp               | Configure lldp event logs                              |
| category           | Configure lldp event logs for category                 |
| fc2                | Configure lldp event logs for category FC2             |
| rx                 | (Optional) Configure lldp event logs for FC2 Rx frames |
| brief              | (Optional) Configure brief lldp event logs for FC2 Rx  |
| detail             | (Optional) Configure detail lldp event logs for FC2 Rx |
| tx                 | (Optional) Configure lldp event logs for FC2 Tx frames |
| brief1             | (Optional) Configure brief lldp event logs for FC2 Tx  |
| detail1            | (Optional) Configure detail lldp event logs for FC2 Tx |

### Command Mode

- /exec

## event-history lldp category fc2

```
event-history lldp no category fc2 [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ]
```

### Syntax Description

#### Syntax Description

|               |  |
|---------------|--|
| event-history | switch wide event history configuration                |
| lldp          | Configure lldp event logs                              |
| no            | Disable lldp event logs for category                   |
| category      | Configure lldp event logs for category                 |
| fc2           | Configure lldp event logs for category FC2             |
| rx            | (Optional) Configure lldp event logs for FC2 Rx frames |
| brief         | (Optional) Configure brief lldp event logs for FC2 Rx  |
| detail        | (Optional) Configure detail lldp event logs for FC2 Rx |
| tx            | (Optional) Configure lldp event logs for FC2 Tx frames |
| brief1        | (Optional) Configure brief lldp event logs for FC2 Tx  |
| detail1       | (Optional) Configure detail lldp event logs for FC2 Tx |

### Command Mode

- /exec



## event-history lldp category mts

```
event-history lldp category mts [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ]
```

### Syntax Description

| Syntax Description | Description  |
|--------------------|--|
| event-history      | switch wide event history configuration                |
| lldp               | Configure lldp event logs                              |
| category           | Configure lldp event logs for category                 |
| mts                | Configure lldp event logs for category mts             |
| rx                 | (Optional) Configure lldp event logs for mts Rx frames |
| brief              | (Optional) Configure brief lldp event logs for mts Rx  |
| detail             | (Optional) Configure detail lldp event logs for mts Rx |
| tx                 | (Optional) Configure lldp event logs for mts Tx frames |
| brief1             | (Optional) Configure brief lldp event logs for mts Tx  |
| detail1            | (Optional) Configure detail lldp event logs for mts Tx |

### Command Mode

- /exec

## event-history lldp category mts

```
event-history lldp no category mts [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ]
```

### Syntax Description

#### Syntax Description

|               |  |
|---------------|--|
| event-history | switch wide event history configuration                |
| lldp          | Configure lldp event logs                              |
| no            | Disable lldp event logs for category                   |
| category      | Configure lldp event logs for category                 |
| mts           | Configure lldp event logs for category mts             |
| rx            | (Optional) Configure lldp event logs for mts Rx frames |
| brief         | (Optional) Configure brief lldp event logs for mts Rx  |
| detail        | (Optional) Configure detail lldp event logs for mts Rx |
| tx            | (Optional) Configure lldp event logs for mts Tx frames |
| brief1        | (Optional) Configure brief lldp event logs for mts Tx  |
| detail1       | (Optional) Configure detail lldp event logs for mts Tx |

### Command Mode

- /exec

# event-history mmode category all

```
event-history mmode [ no ] category { all | mts [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ] }
```

## Syntax Description

### Syntax Description

|               |   |
|---------------|---|
| event-history | switch wide event history configuration                 |
| mmode         | Configure mmode event logs                              |
| no            | (Optional) Disable mmode event logs for category        |
| category      | Configure mmode event logs for category                 |
| all           | Configure mmode event logs for category all events      |
| mts           | Configure mmode event logs for category mts             |
| rx            | (Optional) Configure mmode event logs for mts Rx frames |
| brief         | (Optional) Configure brief mmode event logs for mts Rx  |
| detail        | (Optional) Configure detail mmode event logs for mts Rx |
| tx            | (Optional) Configure mmode event logs for mts Tx frames |
| brief1        | (Optional) Configure brief mmode event logs for mts Tx  |
| detail1       | (Optional) Configure detail mmode event logs for mts Tx |

## Command Mode

- /exec

## event-history module

```
event-history module { category { all | mts [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ] } | no category
{ all | mts [ { rx [ { brief1 | detail1 } ] | tx [ { brief2 | detail2 } ] } ] } }
```

### Syntax Description

#### Syntax Description

|               |  |
|---------------|--|
| event-history | switch wide event history configuration                  |
| module        | Configure module event logs                              |
| category      | Configure module event logs for category                 |
| all           | Configure module event logs for category all events      |
| mts           | Configure module event logs for category mts             |
| rx            | (Optional) Configure module event logs for mts Rx frames |
| brief         | (Optional) Configure brief module event logs for mts Rx  |
| detail        | (Optional) Configure detail module event logs for mts Rx |
| tx            | (Optional) Configure module event logs for mts Tx frames |
| brief1        | (Optional) Configure brief module event logs for mts Tx  |
| detail1       | (Optional) Configure detail module event logs for mts Tx |
| no            | Disable module event logs for category                   |
| category      | Configure module event logs for category                 |
| all           | Configure module event logs for category all events      |
| mts           | Configure module event logs for category mts             |
| rx            | (Optional) Configure module event logs for mts Rx frames |
| brief1        | (Optional) Configure brief module event logs for mts Rx  |
| detail1       | (Optional) Configure detail module event logs for mts Rx |
| tx            | (Optional) Configure module event logs for mts Tx frames |
| brief2        | (Optional) Configure brief module event logs for mts Tx  |
| detail2       | (Optional) Configure detail module event logs for mts Tx |

### Command Mode

- /exec

# event-history pfstat category all

event-history pfstat category all

## Syntax Description

### Syntax Description

|               |   |
|---------------|---|
| event-history | switch wide event history configuration             |
| pfstat        | Configure pfstat event logs                         |
| category      | Configure pfstat event logs for category            |
| all           | Configure pfstat event logs for category all events |

## Command Mode

- /exec

# event-history pfstat category all

event-history pfstat no category all

## Syntax Description

---

### Syntax Description

---

event-history switch wide event history configuration

---

pfstat Configure pfstat event logs

---

no Disable pfstat event logs for category

---

category Configure pfstat event logs for category

---

all Configure pfstat event logs for category all events

---

## Command Mode

- /exec

## event-history pfstat category fc2

```
event-history pfstat category fc2 [ { rx [ { brief | detail } ] | tx [ { brief | detail } ] } ]
```

### Syntax Description

#### Syntax Description

|               |  |
|---------------|--|
| event-history | switch wide event history configuration                  |
| pfstat        | Configure pfstat event logs                              |
| category      | Configure pfstat event logs for category                 |
| fc2           | Configure pfstat event logs for category FC2             |
| rx            | (Optional) Configure pfstat event logs for FC2 Rx frames |
| brief         | (Optional) Configure brief pfstat event logs for FC2 Rx  |
| detail        | (Optional) Configure detail pfstat event logs for FC2 Rx |
| tx            | (Optional) Configure pfstat event logs for FC2 Tx frames |
| brief         | (Optional) Configure brief pfstat event logs for FC2 Tx  |
| detail        | (Optional) Configure detail pfstat event logs for FC2 Tx |

### Command Mode

- /exec

## event-history pfstat category fc2

```
event-history pfstat no category fc2 [ { rx [ { brief | detail } ] | tx [ { brief | detail } ] } ]
```

### Syntax Description

#### Syntax Description

|               |  |
|---------------|--|
| event-history | switch wide event history configuration                  |
| pfstat        | Configure pfstat event logs                              |
| no            | Disable pfstat event logs for category                   |
| category      | Configure pfstat event logs for category                 |
| fc2           | Configure pfstat event logs for category FC2             |
| rx            | (Optional) Configure pfstat event logs for FC2 Rx frames |
| brief         | (Optional) Configure brief pfstat event logs for FC2 Rx  |
| detail        | (Optional) Configure detail pfstat event logs for FC2 Rx |
| tx            | (Optional) Configure pfstat event logs for FC2 Tx frames |
| brief         | (Optional) Configure brief pfstat event logs for FC2 Tx  |
| detail        | (Optional) Configure detail pfstat event logs for FC2 Tx |

### Command Mode

- /exec



## event-history pfstat category mts

```
event-history pfstat category mts [ { rx [ { brief | detail } ] | tx [ { brief | detail } ] } ]
```

### Syntax Description

#### Syntax Description

|               |  |
|---------------|--|
| event-history | switch wide event history configuration                  |
| pfstat        | Configure pfstat event logs                              |
| category      | Configure pfstat event logs for category                 |
| mts           | Configure pfstat event logs for category mts             |
| rx            | (Optional) Configure pfstat event logs for mts Rx frames |
| brief         | (Optional) Configure brief pfstat event logs for mts Rx  |
| detail        | (Optional) Configure detail pfstat event logs for mts Rx |
| tx            | (Optional) Configure pfstat event logs for mts Tx frames |
| brief         | (Optional) Configure brief pfstat event logs for mts Tx  |
| detail        | (Optional) Configure detail pfstat event logs for mts Tx |

### Command Mode

- /exec

## event-history pfstat category mts

```
event-history pfstat no category mts [ { rx [ { brief | detail } ] | tx [ { brief | detail } ] } ]
```

### Syntax Description

#### Syntax Description

|               |  |
|---------------|--|
| event-history | switch wide event history configuration                  |
| pfstat        | Configure pfstat event logs                              |
| no            | Disable pfstat event logs for category                   |
| category      | Configure pfstat event logs for category                 |
| mts           | Configure pfstat event logs for category mts             |
| rx            | (Optional) Configure pfstat event logs for mts Rx frames |
| brief         | (Optional) Configure brief pfstat event logs for mts Rx  |
| detail        | (Optional) Configure detail pfstat event logs for mts Rx |
| tx            | (Optional) Configure pfstat event logs for mts Tx frames |
| brief         | (Optional) Configure brief pfstat event logs for mts Tx  |
| detail        | (Optional) Configure detail pfstat event logs for mts Tx |

### Command Mode

- /exec

# event-history platform buffer-size

event-history platform buffer-size <i0>

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | event-history switch wide event history configuration |
| platform                  | Configure platform event logs                         |
| buffer-size               | Configure platform event logs buffer size             |
| <i>i0</i>                 | please enter buffer size                              |

## Command Mode

- /exec

## event-history platform category all

```
event-history platform category { all | mts [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ] }
```

### Syntax Description

#### Syntax Description

|               |  |
|---------------|--|
| event-history | switch wide event history configuration                    |
| platform      | Configure platform event logs                              |
| category      | Configure platform event logs for category                 |
| all           | Configure platform event logs for category all events      |
| mts           | Configure platform event logs for category mts             |
| rx            | (Optional) Configure platform event logs for mts Rx frames |
| brief         | (Optional) Configure brief platform event logs for mts Rx  |
| detail        | (Optional) Configure detail platform event logs for mts Rx |
| tx            | (Optional) Configure platform event logs for mts Tx frames |
| brief1        | (Optional) Configure brief platform event logs for mts Tx  |
| detail1       | (Optional) Configure detail platform event logs for mts Tx |

### Command Mode

- /exec

# event-history platform category all

```
event-history platform no category { all | mts [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ] }
```

## Syntax Description

### Syntax Description

|               |  |
|---------------|--|
| event-history | switch wide event history configuration                    |
| platform      | Configure platform event logs                              |
| no            | Disable platform event logs for category                   |
| category      | Configure platform event logs for category                 |
| all           | Configure platform event logs for category all events      |
| mts           | Configure platform event logs for category mts             |
| rx            | (Optional) Configure platform event logs for mts Rx frames |
| brief         | (Optional) Configure brief platform event logs for mts Rx  |
| detail        | (Optional) Configure detail platform event logs for mts Rx |
| tx            | (Optional) Configure platform event logs for mts Tx frames |
| brief1        | (Optional) Configure brief platform event logs for mts Tx  |
| detail1       | (Optional) Configure detail platform event logs for mts Tx |

## Command Mode

- /exec

# event-history pltfm\_config category all

event-history pltfm\_config category all

## Syntax Description

---

### Syntax Description

---

event-history switch wide event history configuration

---

pltfm\_config Configure pltfm\_config event logs

---

category Configure pltfm\_config event logs for category

---

all Configure pltfm\_config event logs for category all events

---

## Command Mode

- /exec

# event-history pltfm\_config category all

event-history pltfm\_config no category all

## Syntax Description

---

**Syntax Description**

---

event-history switch wide event history configuration

---

pltfm\_config Configure pltfm\_config event logs

---

no Disable pltfm\_config event logs for category

---

category Configure pltfm\_config event logs for category

---

all Configure pltfm\_config event logs for category all events

---

## Command Mode

- /exec

## event-history pltfm\_config category fc2

```
event-history pltfm_config category fc2 [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ]
```

### Syntax Description

#### Syntax Description

|               |  |
|---------------|--|
| event-history | switch wide event history configuration                        |
| pltfm_config  | Configure pltfm_config event logs                              |
| category      | Configure pltfm_config event logs for category                 |
| fc2           | Configure pltfm_config event logs for category FC2             |
| rx            | (Optional) Configure pltfm_config event logs for FC2 Rx frames |
| brief         | (Optional) Configure brief pltfm_config event logs for FC2 Rx  |
| detail        | (Optional) Configure detail pltfm_config event logs for FC2 Rx |
| tx            | (Optional) Configure pltfm_config event logs for FC2 Tx frames |
| brief1        | (Optional) Configure brief pltfm_config event logs for FC2 Tx  |
| detail1       | (Optional) Configure detail pltfm_config event logs for FC2 Tx |

### Command Mode

- /exec



## event-history pltfm\_config category fc2

```
event-history pltfm_config no category fc2 [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ]
```

### Syntax Description

#### Syntax Description

|               |  |
|---------------|--|
| event-history | switch wide event history configuration                        |
| pltfm_config  | Configure pltfm_config event logs                              |
| no            | Disable pltfm_config event logs for category                   |
| category      | Configure pltfm_config event logs for category                 |
| fc2           | Configure pltfm_config event logs for category FC2             |
| rx            | (Optional) Configure pltfm_config event logs for FC2 Rx frames |
| brief         | (Optional) Configure brief pltfm_config event logs for FC2 Rx  |
| detail        | (Optional) Configure detail pltfm_config event logs for FC2 Rx |
| tx            | (Optional) Configure pltfm_config event logs for FC2 Tx frames |
| brief1        | (Optional) Configure brief pltfm_config event logs for FC2 Tx  |
| detail1       | (Optional) Configure detail pltfm_config event logs for FC2 Tx |

### Command Mode

- /exec

## event-history pltfm\_config category mts

```
event-history pltfm_config category mts [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ]
```

### Syntax Description

#### Syntax Description

|               |  |
|---------------|--|
| event-history | switch wide event history configuration                        |
| pltfm_config  | Configure pltfm_config event logs                              |
| category      | Configure pltfm_config event logs for category                 |
| mts           | Configure pltfm_config event logs for category mts             |
| rx            | (Optional) Configure pltfm_config event logs for mts Rx frames |
| brief         | (Optional) Configure brief pltfm_config event logs for mts Rx  |
| detail        | (Optional) Configure detail pltfm_config event logs for mts Rx |
| tx            | (Optional) Configure pltfm_config event logs for mts Tx frames |
| brief1        | (Optional) Configure brief pltfm_config event logs for mts Tx  |
| detail1       | (Optional) Configure detail pltfm_config event logs for mts Tx |

### Command Mode

- /exec

## event-history pltfm\_config category mts

```
event-history pltfm_config no category mts [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ]
```

### Syntax Description

#### Syntax Description

|               |  |
|---------------|--|
| event-history | switch wide event history configuration                        |
| pltfm_config  | Configure pltfm_config event logs                              |
| no            | Disable pltfm_config event logs for category                   |
| category      | Configure pltfm_config event logs for category                 |
| mts           | Configure pltfm_config event logs for category mts             |
| rx            | (Optional) Configure pltfm_config event logs for mts Rx frames |
| brief         | (Optional) Configure brief pltfm_config event logs for mts Rx  |
| detail        | (Optional) Configure detail pltfm_config event logs for mts Rx |
| tx            | (Optional) Configure pltfm_config event logs for mts Tx frames |
| brief1        | (Optional) Configure brief pltfm_config event logs for mts Tx  |
| detail1       | (Optional) Configure detail pltfm_config event logs for mts Tx |

### Command Mode

- /exec

## event-history plugin

```
event-history plugin { category { all | mts [ { rx [ { brief | detail } ] | tx [ { brief | detail } ] ] } | no category
{ all | mts [ { rx [ { brief | detail } ] | tx [ { brief | detail } ] ] } }
```

### Syntax Description

| Syntax Description | Description  |
|--------------------|--|
| event-history      | switch wide event history configuration                  |
| plugin             | Configure plugin event logs                              |
| category           | Configure plugin event logs for category                 |
| all                | Configure plugin event logs for category all events      |
| mts                | Configure plugin event logs for category mts             |
| rx                 | (Optional) Configure plugin event logs for mts Rx frames |
| brief              | (Optional) Configure brief plugin event logs for mts Rx  |
| detail             | (Optional) Configure detail plugin event logs for mts Rx |
| tx                 | (Optional) Configure plugin event logs for mts Tx frames |
| brief              | (Optional) Configure brief plugin event logs for mts Tx  |
| detail             | (Optional) Configure detail plugin event logs for mts Tx |
| no                 | Disable plugin event logs for category                   |
| category           | Configure plugin event logs for category                 |
| all                | Configure plugin event logs for category all events      |
| mts                | Configure plugin event logs for category mts             |
| rx                 | (Optional) Configure plugin event logs for mts Rx frames |
| brief              | (Optional) Configure brief plugin event logs for mts Rx  |
| detail             | (Optional) Configure detail plugin event logs for mts Rx |
| tx                 | (Optional) Configure plugin event logs for mts Tx frames |
| brief              | (Optional) Configure brief plugin event logs for mts Tx  |
| detail             | (Optional) Configure detail plugin event logs for mts Tx |

### Command Mode

- /exec

# event-history poap category all

event-history poap category all

## Syntax Description

---

### Syntax Description

---

event-history switch wide event history configuration

---

poap Configure poap event logs

---

category Configure poap event logs for category

---

all Configure poap event logs for category all events

---

## Command Mode

- /exec

# event-history poap category all

event-history poap no category all

## Syntax Description

---

### Syntax Description

---

event-history switch wide event history configuration

---

poap Configure poap event logs

---

no Disable poap event logs for category

---

category Configure poap event logs for category

---

all Configure poap event logs for category all events

---

## Command Mode

- /exec

## event-history poap category fc2

```
event-history poap category fc2 [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ]
```

### Syntax Description

#### Syntax Description

|               |  |
|---------------|--|
| event-history | switch wide event history configuration                |
| poap          | Configure poap event logs                              |
| category      | Configure poap event logs for category                 |
| fc2           | Configure poap event logs for category FC2             |
| rx            | (Optional) Configure poap event logs for FC2 Rx frames |
| brief         | (Optional) Configure brief poap event logs for FC2 Rx  |
| detail        | (Optional) Configure detail poap event logs for FC2 Rx |
| tx            | (Optional) Configure poap event logs for FC2 Tx frames |
| brief1        | (Optional) Configure brief poap event logs for FC2 Tx  |
| detail1       | (Optional) Configure detail poap event logs for FC2 Tx |

### Command Mode

- /exec

## event-history poap category fc2

```
event-history poap no category fc2 [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ]
```

### Syntax Description

#### Syntax Description

|               |  |
|---------------|--|
| event-history | switch wide event history configuration                |
| poap          | Configure poap event logs                              |
| no            | Disable poap event logs for category                   |
| category      | Configure poap event logs for category                 |
| fc2           | Configure poap event logs for category FC2             |
| rx            | (Optional) Configure poap event logs for FC2 Rx frames |
| brief         | (Optional) Configure brief poap event logs for FC2 Rx  |
| detail        | (Optional) Configure detail poap event logs for FC2 Rx |
| tx            | (Optional) Configure poap event logs for FC2 Tx frames |
| brief1        | (Optional) Configure brief poap event logs for FC2 Tx  |
| detail1       | (Optional) Configure detail poap event logs for FC2 Tx |

### Command Mode

- /exec



## event-history poap category mts

```
event-history poap category mts [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ]
```

### Syntax Description

| Syntax Description | Description  |
|--------------------|--|
| event-history      | switch wide event history configuration                |
| poap               | Configure poap event logs                              |
| category           | Configure poap event logs for category                 |
| mts                | Configure poap event logs for category mts             |
| rx                 | (Optional) Configure poap event logs for mts Rx frames |
| brief              | (Optional) Configure brief poap event logs for mts Rx  |
| detail             | (Optional) Configure detail poap event logs for mts Rx |
| tx                 | (Optional) Configure poap event logs for mts Tx frames |
| brief1             | (Optional) Configure brief poap event logs for mts Tx  |
| detail1            | (Optional) Configure detail poap event logs for mts Tx |

### Command Mode

- /exec

## event-history poap category mts

```
event-history poap no category mts [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ]
```

### Syntax Description

#### Syntax Description

|               |  |
|---------------|--|
| event-history | switch wide event history configuration                |
| poap          | Configure poap event logs                              |
| no            | Disable poap event logs for category                   |
| category      | Configure poap event logs for category                 |
| mts           | Configure poap event logs for category mts             |
| rx            | (Optional) Configure poap event logs for mts Rx frames |
| brief         | (Optional) Configure brief poap event logs for mts Rx  |
| detail        | (Optional) Configure detail poap event logs for mts Rx |
| tx            | (Optional) Configure poap event logs for mts Tx frames |
| brief1        | (Optional) Configure brief poap event logs for mts Tx  |
| detail1       | (Optional) Configure detail poap event logs for mts Tx |

### Command Mode

- /exec

# event-history port-profile category all

event-history port-profile [ no ] category all

## Syntax Description

### Syntax Description

---

event-history switch wide event history configuration

---

port-profile Configure port-profile event logs

---

category Configure port-profile event logs for category

---

no (Optional) Disable port-profile event logs for category

---

all Configure port-profile event logs for category all events

---

## Command Mode

- /exec

## event-history port-profile category mts

```
event-history port-profile [ no ] category mts [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ]
```

### Syntax Description

#### Syntax Description

|               |  |
|---------------|--|
| event-history | switch wide event history configuration                        |
| port-profile  | Configure port-profile event logs                              |
| no            | (Optional) Disable port-profile event logs for category        |
| category      | Configure port-profile event logs for category                 |
| mts           | Configure port-profile event logs for category mts             |
| rx            | (Optional) Configure port-profile event logs for mts Rx frames |
| brief         | (Optional) Configure brief port-profile event logs for mts Rx  |
| detail        | (Optional) Configure detail port-profile event logs for mts Rx |
| tx            | (Optional) Configure port-profile event logs for mts Tx frames |
| brief1        | (Optional) Configure brief port-profile event logs for mts Tx  |
| detail1       | (Optional) Configure detail port-profile event logs for mts Tx |

### Command Mode

- /exec

# event-history port-security category all

event-history port-security category all

## Syntax Description

---

### Syntax Description

---

event-history switch wide event history configuration

---

port-security Configure port-security event logs

---

category Configure port-security event logs for category

---

all Configure port-security event logs for category all events

---

## Command Mode

- /exec

# event-history port-security category all

event-history port-security no category all

## Syntax Description

---

### Syntax Description

---

event-history switch wide event history configuration

---

port-security Configure port-security event logs

---

no Disable port-security event logs for category

---

category Configure port-security event logs for category

---

all Configure port-security event logs for category all events

---

## Command Mode

- /exec

## event-history port-security category fc2

```
event-history port-security category fc2 [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ]
```

### Syntax Description

#### Syntax Description

|               |   |
|---------------|---|
| event-history | switch wide event history configuration                         |
| port-security | Configure port-security event logs                              |
| category      | Configure port-security event logs for category                 |
| fc2           | Configure port-security event logs for category FC2             |
| rx            | (Optional) Configure port-security event logs for FC2 Rx frames |
| brief         | (Optional) Configure brief port-security event logs for FC2 Rx  |
| detail        | (Optional) Configure detail port-security event logs for FC2 Rx |
| tx            | (Optional) Configure port-security event logs for FC2 Tx frames |
| brief1        | (Optional) Configure brief port-security event logs for FC2 Tx  |
| detail1       | (Optional) Configure detail port-security event logs for FC2 Tx |

### Command Mode

- /exec

## event-history port-security category fc2

```
event-history port-security no category fc2 [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ]
```

### Syntax Description

| Syntax Description | Description   |
|--------------------|---|
| event-history      | switch wide event history configuration                         |
| port-security      | Configure port-security event logs                              |
| no                 | Disable port-security event logs for category                   |
| category           | Configure port-security event logs for category                 |
| fc2                | Configure port-security event logs for category FC2             |
| rx                 | (Optional) Configure port-security event logs for FC2 Rx frames |
| brief              | (Optional) Configure brief port-security event logs for FC2 Rx  |
| detail             | (Optional) Configure detail port-security event logs for FC2 Rx |
| tx                 | (Optional) Configure port-security event logs for FC2 Tx frames |
| brief1             | (Optional) Configure brief port-security event logs for FC2 Tx  |
| detail1            | (Optional) Configure detail port-security event logs for FC2 Tx |

### Command Mode

- /exec



## event-history port-security category mts

```
event-history port-security category mts [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ]
```

### Syntax Description

| Syntax Description | Description   |
|--------------------|---|
| event-history      | switch wide event history configuration                         |
| port-security      | Configure port-security event logs                              |
| category           | Configure port-security event logs for category                 |
| mts                | Configure port-security event logs for category mts             |
| rx                 | (Optional) Configure port-security event logs for mts Rx frames |
| brief              | (Optional) Configure brief port-security event logs for mts Rx  |
| detail             | (Optional) Configure detail port-security event logs for mts Rx |
| tx                 | (Optional) Configure port-security event logs for mts Tx frames |
| brief1             | (Optional) Configure brief port-security event logs for mts Tx  |
| detail1            | (Optional) Configure detail port-security event logs for mts Tx |

### Command Mode

- /exec

## event-history port-security category mts

```
event-history port-security no category mts [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ]
```

### Syntax Description

#### Syntax Description

|               |   |
|---------------|---|
| event-history | switch wide event history configuration                         |
| port-security | Configure port-security event logs                              |
| no            | Disable port-security event logs for category                   |
| category      | Configure port-security event logs for category                 |
| mts           | Configure port-security event logs for category mts             |
| rx            | (Optional) Configure port-security event logs for mts Rx frames |
| brief         | (Optional) Configure brief port-security event logs for mts Rx  |
| detail        | (Optional) Configure detail port-security event logs for mts Rx |
| tx            | (Optional) Configure port-security event logs for mts Tx frames |
| brief1        | (Optional) Configure brief port-security event logs for mts Tx  |
| detail1       | (Optional) Configure detail port-security event logs for mts Tx |

### Command Mode

- /exec

# event-history port\_client category all

event-history port\_client category all

## Syntax Description

---

### Syntax Description

---

event-history switch wide event history configuration

---

port\_client Configure port\_client event logs

---

category Configure port\_client event logs for category

---

all Configure port\_client event logs for category all events

---

## Command Mode

- /exec

# event-history port\_client category all

event-history port\_client no category all

## Syntax Description

---

### Syntax Description

---

event-history switch wide event history configuration

---

port\_client Configure port\_client event logs

---

no Disable port\_client event logs for category

---

category Configure port\_client event logs for category

---

all Configure port\_client event logs for category all events

---

## Command Mode

- /exec

## event-history port\_client category fc2

```
event-history port_client category fc2 [ { rx [ { brief | detail } ] | tx [ { brief | detail } ] } ]
```

### Syntax Description

#### Syntax Description

|               |   |
|---------------|---|
| event-history | switch wide event history configuration                       |
| port_client   | Configure port_client event logs                              |
| category      | Configure port_client event logs for category                 |
| fc2           | Configure port_client event logs for category FC2             |
| rx            | (Optional) Configure port_client event logs for FC2 Rx frames |
| brief         | (Optional) Configure brief port_client event logs for FC2 Rx  |
| detail        | (Optional) Configure detail port_client event logs for FC2 Rx |
| tx            | (Optional) Configure port_client event logs for FC2 Tx frames |
| brief         | (Optional) Configure brief port_client event logs for FC2 Tx  |
| detail        | (Optional) Configure detail port_client event logs for FC2 Tx |

### Command Mode

- /exec

## event-history port\_client category fc2

```
event-history port_client no category fc2 [ { rx [ { brief | detail } ] | tx [ { brief | detail } ] } ]
```

### Syntax Description

#### Syntax Description

|               |   |
|---------------|---|
| event-history | switch wide event history configuration                       |
| port_client   | Configure port_client event logs                              |
| no            | Disable port_client event logs for category                   |
| category      | Configure port_client event logs for category                 |
| fc2           | Configure port_client event logs for category FC2             |
| rx            | (Optional) Configure port_client event logs for FC2 Rx frames |
| brief         | (Optional) Configure brief port_client event logs for FC2 Rx  |
| detail        | (Optional) Configure detail port_client event logs for FC2 Rx |
| tx            | (Optional) Configure port_client event logs for FC2 Tx frames |
| brief         | (Optional) Configure brief port_client event logs for FC2 Tx  |
| detail        | (Optional) Configure detail port_client event logs for FC2 Tx |

### Command Mode

- /exec

## event-history port\_client category mts

```
event-history port_client category mts [ { rx [ { brief | detail } ] | tx [ { brief | detail } ] } ]
```

### Syntax Description

#### Syntax Description

|               |   |
|---------------|---|
| event-history | switch wide event history configuration                       |
| port_client   | Configure port_client event logs                              |
| category      | Configure port_client event logs for category                 |
| mts           | Configure port_client event logs for category mts             |
| rx            | (Optional) Configure port_client event logs for mts Rx frames |
| brief         | (Optional) Configure brief port_client event logs for mts Rx  |
| detail        | (Optional) Configure detail port_client event logs for mts Rx |
| tx            | (Optional) Configure port_client event logs for mts Tx frames |
| brief         | (Optional) Configure brief port_client event logs for mts Tx  |
| detail        | (Optional) Configure detail port_client event logs for mts Tx |

### Command Mode

- /exec

## event-history port\_client category mts

```
event-history port_client no category mts [ { rx [ { brief | detail } ] | tx [ { brief | detail } ] } ]
```

### Syntax Description

#### Syntax Description

|               |   |
|---------------|---|
| event-history | switch wide event history configuration                       |
| port_client   | Configure port_client event logs                              |
| no            | Disable port_client event logs for category                   |
| category      | Configure port_client event logs for category                 |
| mts           | Configure port_client event logs for category mts             |
| rx            | (Optional) Configure port_client event logs for mts Rx frames |
| brief         | (Optional) Configure brief port_client event logs for mts Rx  |
| detail        | (Optional) Configure detail port_client event logs for mts Rx |
| tx            | (Optional) Configure port_client event logs for mts Tx frames |
| brief         | (Optional) Configure brief port_client event logs for mts Tx  |
| detail        | (Optional) Configure detail port_client event logs for mts Tx |

### Command Mode

- /exec



# event-history private-vlan category all

event-history private-vlan [ no ] category all

## Syntax Description

---

### Syntax Description

---

event-history switch wide event history configuration

---

private-vlan Configure private VLAN event logs

---

no (Optional) Disable private VLAN logs for category

---

category Configure private VLAN event logs for category

---

all Configure private VLAN event logs for category all events

---

## Command Mode

- /exec

## event-history private-vlan category mts

```
event-history private-vlan [ no ] category mts [ rx [ { brief | detail } ] ]
```

### Syntax Description

| Syntax Description | Description  |
|--------------------|--|
| event-history      | switch wide event history configuration                        |
| private-vlan       | Configure private VLAN event logs                              |
| no                 | (Optional) Disable private VLAN logs for category              |
| category           | Configure private VLAN event logs for category                 |
| mts                | Configure private VLAN event logs for category mts             |
| rx                 | (Optional) Configure private VLAN event logs for mts Rx frames |
| brief              | (Optional) Configure brief private VLAN event logs for mts Rx  |
| detail             | (Optional) Configure detail private VLAN event logs for mts Rx |

### Command Mode

- /exec

## event-history private-vlan category mts

```
event-history private-vlan [ no ] category mts [ tx [ { brief | detail } ] ]
```

### Syntax Description

| Syntax Description | Description  |
|--------------------|--|
| event-history      | switch wide event history configuration                        |
| private-vlan       | Configure private VLAN event logs                              |
| no                 | (Optional) Disable private VLAN logs for category              |
| category           | Configure private VLAN event logs for category                 |
| mts                | Configure private VLAN event logs for category mts             |
| tx                 | (Optional) Configure private VLAN event logs for mts Tx frames |
| brief              | (Optional) Configure brief private VLAN event logs for mts Tx  |
| detail             | (Optional) Configure detail private VLAN event logs for mts Tx |

### Command Mode

- /exec

## event-history sensor

```
event-history sensor { category { all | mts [ { rx [ { brief | detail } ] | tx [ { brief | detail } ] ] } } | no category
{ all | mts [ { rx [ { brief | detail } ] | tx [ { brief | detail } ] ] } }
```

### Syntax Description

| Syntax Description | event-history switch wide event history configuration        |
|--------------------|--|
| sensor             | Configure sensor USD event logs                              |
| category           | Configure sensor USD event logs for category                 |
| all                | Configure sensor USD event logs for category all events      |
| mts                | Configure sensor USD event logs for category mts             |
| rx                 | (Optional) Configure sensor USD event logs for mts Rx frames |
| brief              | (Optional) Configure brief sensor USD event logs for mts Rx  |
| detail             | (Optional) Configure detail sensor USD event logs for mts Rx |
| tx                 | (Optional) Configure sensor USD event logs for mts Tx frames |
| brief              | (Optional) Configure brief sensor USD event logs for mts Tx  |
| detail             | (Optional) Configure detail sensor USD event logs for mts Tx |
| no                 | Disable sensor USD event logs for category                   |
| category           | Configure sensor USD event logs for category                 |
| all                | Configure sensor USD event logs for category all events      |
| mts                | Configure sensor USD event logs for category mts             |
| rx                 | (Optional) Configure sensor USD event logs for mts Rx frames |
| brief              | (Optional) Configure brief sensor USD event logs for mts Rx  |
| detail             | (Optional) Configure detail sensor USD event logs for mts Rx |
| tx                 | (Optional) Configure sensor USD event logs for mts Tx frames |
| brief              | (Optional) Configure brief sensor USD event logs for mts Tx  |
| detail             | (Optional) Configure detail sensor USD event logs for mts Tx |

### Command Mode

- /exec

# event-history session-mgr category all

event-history session-mgr category all

## Syntax Description

---

### Syntax Description

---

event-history switch wide event history configuration

---

session-mgr Configure session-mgr event logs

---

category Configure session-mgr event logs for category

---

all Configure session-mgr event logs for category all events

---

## Command Mode

- /exec

# event-history session-mgr category all

event-history session-mgr no category all

## Syntax Description

---

### Syntax Description

---

event-history switch wide event history configuration

---

session-mgr Configure session-mgr event logs

---

no Disable session-mgr event logs for category

---

category Configure session-mgr event logs for category

---

all Configure session-mgr event logs for category all events

---

## Command Mode

- /exec

## event-history session-mgr category mts

```
event-history session-mgr category mts [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ]
```

### Syntax Description

| Syntax Description |   |
|--------------------|---|
| event-history      | switch wide event history configuration                       |
| session-mgr        | Configure session-mgr event logs                              |
| category           | Configure session-mgr event logs for category                 |
| mts                | Configure session-mgr event logs for category mts             |
| rx                 | (Optional) Configure session-mgr event logs for mts Rx frames |
| brief              | (Optional) Configure brief session-mgr event logs for mts Rx  |
| detail             | (Optional) Configure detail session-mgr event logs for mts Rx |
| tx                 | (Optional) Configure session-mgr event logs for mts Tx frames |
| brief1             | (Optional) Configure brief session-mgr event logs for mts Tx  |
| detail1            | (Optional) Configure detail session-mgr event logs for mts Tx |

### Command Mode

- /exec

## event-history session-mgr category mts

```
event-history session-mgr no category mts [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ]
```

### Syntax Description

#### Syntax Description

|               |   |
|---------------|---|
| event-history | switch wide event history configuration                       |
| session-mgr   | Configure session-mgr event logs                              |
| no            | Disable session-mgr event logs for category                   |
| category      | Configure session-mgr event logs for category                 |
| mts           | Configure session-mgr event logs for category mts             |
| rx            | (Optional) Configure session-mgr event logs for mts Rx frames |
| brief         | (Optional) Configure brief session-mgr event logs for mts Rx  |
| detail        | (Optional) Configure detail session-mgr event logs for mts Rx |
| tx            | (Optional) Configure session-mgr event logs for mts Tx frames |
| brief1        | (Optional) Configure brief session-mgr event logs for mts Tx  |
| detail1       | (Optional) Configure detail session-mgr event logs for mts Tx |

### Command Mode

- /exec



## event-history sflow

```
event-history sflow { category { all | mts [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ] } | no category
{ all | mts [ { rx [ { brief1 | detail1 } ] | tx [ { brief2 | detail2 } ] } ] } }
```

### Syntax Description

#### Syntax Description

|               |   |
|---------------|---|
| event-history | switch wide event history configuration                 |
| sflow         | Configure sFlow event logs                              |
| category      | Configure sFlow event logs for category                 |
| all           | Configure sFlow event logs for category all events      |
| mts           | Configure sFlow event logs for category mts             |
| rx            | (Optional) Configure sFlow event logs for mts Rx frames |
| brief         | (Optional) Configure brief sFlow event logs for mts Rx  |
| detail        | (Optional) Configure detail sFlow event logs for mts Rx |
| tx            | (Optional) Configure sFlow event logs for mts Tx frames |
| brief1        | (Optional) Configure brief sFlow event logs for mts Tx  |
| detail1       | (Optional) Configure detail sFlow event logs for mts Tx |
| no            | Disable sFlow event logs for category                   |
| category      | Configure sFlow event logs for category                 |
| all           | Configure sFlow event logs for category all events      |
| mts           | Configure sFlow event logs for category mts             |
| rx            | (Optional) Configure sFlow event logs for mts Rx frames |
| brief1        | (Optional) Configure brief sFlow event logs for mts Rx  |
| detail1       | (Optional) Configure detail sFlow event logs for mts Rx |
| tx            | (Optional) Configure sFlow event logs for mts Tx frames |
| brief2        | (Optional) Configure brief sFlow event logs for mts Tx  |
| detail2       | (Optional) Configure detail sFlow event logs for mts Tx |

### Command Mode

- /exec

## event-history snmp

```
event-history snmp { category { all | mts [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ] | no category
{ all | mts [ { rx [ { brief1 | detail1 } ] | tx [ { brief2 | detail2 } ] } ] } }
```

### Syntax Description

| Syntax Description | Description  |
|--------------------|--|
| event-history      | switch wide event history configuration                |
| snmp               | Configure SNMP event logs                              |
| category           | Configure SNMP event logs for category                 |
| all                | Configure SNMP event logs for category all events      |
| mts                | Configure snmp event logs for category MTS             |
| rx                 | (Optional) Configure snmp event logs for MTS Rx frames |
| brief              | (Optional) Configure brief SNMP event logs for MTS Rx  |
| detail             | (Optional) Configure detail SNMP event logs for MTS Rx |
| tx                 | (Optional) Configure SNMP event logs for MTS Tx frames |
| brief1             | (Optional) Configure brief SNMP event logs for MTS Tx  |
| detail1            | (Optional) Configure detail snmp event logs for MTS Tx |
| no                 | Disable SNMP event logs for category                   |
| category           | Configure SNMP event logs for category                 |
| all                | Configure SNMP event logs for category all events      |
| mts                | Configure snmp event logs for category MTS             |
| rx                 | (Optional) Configure snmp event logs for MTS Rx frames |
| brief1             | (Optional) Configure brief SNMP event logs for MTS Rx  |
| detail1            | (Optional) Configure detail SNMP event logs for MTS Rx |
| tx                 | (Optional) Configure SNMP event logs for MTS Tx frames |
| brief2             | (Optional) Configure brief SNMP event logs for MTS Tx  |
| detail2            | (Optional) Configure detail snmp event logs for MTS Tx |

### Command Mode

- /exec

# event-history spanning-tree category all

event-history spanning-tree category all

## Syntax Description

|                           |               |  |
|---------------------------|---------------|--|
| <b>Syntax Description</b> | event-history | switch wide event history configuration          |
|                           | spanning-tree | Configure stp event logs                         |
|                           | category      | Configure stp event logs for category            |
|                           | all           | Configure stp event logs for category all events |

## Command Mode

- /exec

# event-history stripcl category all

event-history stripcl category all

## Syntax Description

---

### Syntax Description

---

event-history switch wide event history configuration

---

stripcl Configure stripcl event logs

---

category Configure stripcl event logs for category

---

all Configure stripcl event logs for category all events

---

## Command Mode

- /exec

# event-history stripcl category all

event-history stripcl no category all

## Syntax Description

### Syntax Description

|               |  |
|---------------|--|
| event-history | switch wide event history configuration              |
| stripcl       | Configure stripcl event logs                         |
| no            | Disable stripcl event logs for category              |
| category      | Configure stripcl event logs for category            |
| all           | Configure stripcl event logs for category all events |

## Command Mode

- /exec

## event-history stripcl category mts

```
event-history stripcl category mts [ { rx [ { brief | detail } ] | tx [ { brief | detail } ] } ]
```

### Syntax Description

#### Syntax Description

|               |   |
|---------------|---|
| event-history | switch wide event history configuration                   |
| stripcl       | Configure stripcl event logs                              |
| category      | Configure stripcl event logs for category                 |
| mts           | Configure stripcl event logs for category mts             |
| rx            | (Optional) Configure stripcl event logs for mts Rx frames |
| brief         | (Optional) Configure brief stripcl event logs for mts Rx  |
| detail        | (Optional) Configure detail stripcl event logs for mts Rx |
| tx            | (Optional) Configure stripcl event logs for mts Tx frames |
| brief         | (Optional) Configure brief stripcl event logs for mts Tx  |
| detail        | (Optional) Configure detail stripcl event logs for mts Tx |

### Command Mode

- /exec

# event-history tamnw category all

event-history tamnw category all

## Syntax Description

### Syntax Description

|               |  |
|---------------|--|
| event-history | switch wide event history configuration            |
| tamnw         | Configure tamnw event logs                         |
| category      | Configure tamnw event logs for category            |
| all           | Configure tamnw event logs for category all events |

## Command Mode

- /exec

# event-history tamnw category all

event-history tamnw no category all

## Syntax Description

---

### Syntax Description

---

|               |  |
|---------------|--|
| event-history | switch wide event history configuration            |
| tamnw         | Configure tamnw event logs                         |
| no            | Disable tamnw event logs for category              |
| category      | Configure tamnw event logs for category            |
| all           | Configure tamnw event logs for category all events |

---

## Command Mode

- /exec



## event-history tamnw category fc2

```
event-history tamnw category fc2 [ { rx [ { brief | detail } ] | tx [ { brief | detail } ] } ]
```

### Syntax Description

#### Syntax Description

|               |   |
|---------------|---|
| event-history | switch wide event history configuration                 |
| tamnw         | Configure tamnw event logs                              |
| category      | Configure tamnw event logs for category                 |
| fc2           | Configure tamnw event logs for category FC2             |
| rx            | (Optional) Configure tamnw event logs for FC2 Rx frames |
| brief         | (Optional) Configure brief tamnw event logs for FC2 Rx  |
| detail        | (Optional) Configure detail tamnw event logs for FC2 Rx |
| tx            | (Optional) Configure tamnw event logs for FC2 Tx frames |
| brief         | (Optional) Configure brief tamnw event logs for FC2 Tx  |
| detail        | (Optional) Configure detail tamnw event logs for FC2 Tx |

### Command Mode

- /exec

## event-history tamnw category fc2

```
event-history tamnw no category fc2 [ { rx [ { brief | detail } ] | tx [ { brief | detail } ] } ]
```

### Syntax Description

#### Syntax Description

|               |   |
|---------------|---|
| event-history | switch wide event history configuration                 |
| tamnw         | Configure tamnw event logs                              |
| no            | Disable tamnw event logs for category                   |
| category      | Configure tamnw event logs for category                 |
| fc2           | Configure tamnw event logs for category FC2             |
| rx            | (Optional) Configure tamnw event logs for FC2 Rx frames |
| brief         | (Optional) Configure brief tamnw event logs for FC2 Rx  |
| detail        | (Optional) Configure detail tamnw event logs for FC2 Rx |
| tx            | (Optional) Configure tamnw event logs for FC2 Tx frames |
| brief         | (Optional) Configure brief tamnw event logs for FC2 Tx  |
| detail        | (Optional) Configure detail tamnw event logs for FC2 Tx |

### Command Mode

- /exec

## event-history tamnw category mts

```
event-history tamnw category mts [ { rx [ { brief | detail } ] | tx [ { brief | detail } ] } ]
```

### Syntax Description

#### Syntax Description

|               |   |
|---------------|---|
| event-history | switch wide event history configuration                 |
| tamnw         | Configure tamnw event logs                              |
| category      | Configure tamnw event logs for category                 |
| mts           | Configure tamnw event logs for category mts             |
| rx            | (Optional) Configure tamnw event logs for mts Rx frames |
| brief         | (Optional) Configure brief tamnw event logs for mts Rx  |
| detail        | (Optional) Configure detail tamnw event logs for mts Rx |
| tx            | (Optional) Configure tamnw event logs for mts Tx frames |
| brief         | (Optional) Configure brief tamnw event logs for mts Tx  |
| detail        | (Optional) Configure detail tamnw event logs for mts Tx |

### Command Mode

- /exec

## event-history tamnw category mts

```
event-history tamnw no category mts [ { rx [ { brief | detail } ] | tx [ { brief | detail } ] } ]
```

### Syntax Description

#### Syntax Description

|               |   |
|---------------|---|
| event-history | switch wide event history configuration                 |
| tamnw         | Configure tamnw event logs                              |
| no            | Disable tamnw event logs for category                   |
| category      | Configure tamnw event logs for category                 |
| mts           | Configure tamnw event logs for category mts             |
| rx            | (Optional) Configure tamnw event logs for mts Rx frames |
| brief         | (Optional) Configure brief tamnw event logs for mts Rx  |
| detail        | (Optional) Configure detail tamnw event logs for mts Rx |
| tx            | (Optional) Configure tamnw event logs for mts Tx frames |
| brief         | (Optional) Configure brief tamnw event logs for mts Tx  |
| detail        | (Optional) Configure detail tamnw event logs for mts Tx |

### Command Mode

- /exec

# event-history udd category all

event-history udd category all

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| event-history      | switch wide event history configuration          |
| udd                | Configure udd event logs                         |
| category           | Configure udd event logs for category            |
| all                | Configure udd event logs for category all events |

## Command Mode

- /exec

# event-history vdc category all

event-history vdc category all

## Syntax Description

---

### Syntax Description

---

event-history switch wide event history configuration

---

vdc Configure vdc\_mgr event logs

---

category Configure vdc\_mgr event logs for category

---

all Configure vdc\_mgr event logs for category all events

---

## Command Mode

- /exec

# event-history vdc category all

event-history vdc no category all

## Syntax Description

### Syntax Description

|               |  |
|---------------|--|
| event-history | switch wide event history configuration              |
| vdc           | Configure vdc_mgr event logs                         |
| no            | Disable vdc_mgr event logs for category              |
| category      | Configure vdc_mgr event logs for category            |
| all           | Configure vdc_mgr event logs for category all events |

## Command Mode

- /exec

## event-history vdc category mts

```
event-history vdc no category mts [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ]
```

### Syntax Description

| Syntax Description | Description   |
|--------------------|---|
| event-history      | switch wide event history configuration                   |
| vdc                | Configure vdc_mgr event logs                              |
| no                 | Disable vdc_mgr event logs for category                   |
| category           | Configure vdc_mgr event logs for category                 |
| mts                | Configure vdc_mgr event logs for category mts             |
| rx                 | (Optional) Configure vdc_mgr event logs for mts Rx frames |
| brief              | (Optional) Configure brief vdc_mgr event logs for mts Rx  |
| detail             | (Optional) Configure detail vdc_mgr event logs for mts Rx |
| tx                 | (Optional) Configure vdc_mgr event logs for mts Tx frames |
| brief1             | (Optional) Configure brief vdc_mgr event logs for mts Tx  |
| detail1            | (Optional) Configure detail vdc_mgr event logs for mts Tx |

### Command Mode

- /exec



# event-history xbar category all

event-history xbar category all

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| event-history      | switch wide event history configuration           |
| xbar               | Configure xbar event logs                         |
| category           | Configure xbar event logs for category            |
| all                | Configure xbar event logs for category all events |

## Command Mode

- /exec

# event-history xbar category all

event-history xbar no category all

## Syntax Description

---

### Syntax Description

---

event-history switch wide event history configuration

---

xbar Configure xbar event logs

---

no Disable xbar event logs for category

---

category Configure xbar event logs for category

---

all Configure xbar event logs for category all events

---

## Command Mode

- /exec

## event-history xbar category debug

event-history xbar category debug { demux | deque | flow | ha | init }

### Syntax Description

#### Syntax Description

|               |  |
|---------------|--|
| event-history | switch wide event history configuration      |
| xbar          | Configure xbar event logs                    |
| category      | Configure xbar event logs for category       |
| debug         | Configure xbar event logs for category debug |
| demux         | Configure xbar event logs for category demux |
| deque         | Configure xbar event logs for category deque |
| flow          | Configure xbar event logs for category flow  |
| ha            | Configure xbar event logs for category HA    |
| init          | Configure xbar event logs for category init  |

### Command Mode

- /exec

## event-history xbar category debug

event-history xbar no category debug { demux | deque | flow | ha | init }

### Syntax Description

#### Syntax Description

|               |  |
|---------------|--|
| event-history | switch wide event history configuration      |
| xbar          | Configure xbar event logs                    |
| no            | Disable xbar event logs for category         |
| category      | Configure xbar event logs for category       |
| debug         | Configure xbar event logs for category debug |
| demux         | Configure xbar event logs for category demux |
| deque         | Configure xbar event logs for category deque |
| flow          | Configure xbar event logs for category flow  |
| ha            | Configure xbar event logs for category HA    |
| init          | Configure xbar event logs for category init  |

### Command Mode

- /exec

## event-history xbar category mts

```
event-history xbar category mts [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ]
```

### Syntax Description

| Syntax Description |  |
|--------------------|--|
| event-history      | switch wide event history configuration                |
| xbar               | Configure xbar event logs                              |
| category           | Configure xbar event logs for category                 |
| mts                | Configure xbar event logs for category mts             |
| rx                 | (Optional) Configure xbar event logs for mts Rx frames |
| brief              | (Optional) Configure brief xbar event logs for mts Rx  |
| detail             | (Optional) Configure detail xbar event logs for mts Rx |
| tx                 | (Optional) Configure xbar event logs for mts Tx frames |
| brief1             | (Optional) Configure brief xbar event logs for mts Tx  |
| detail1            | (Optional) Configure detail xbar event logs for mts Tx |

### Command Mode

- /exec

## event-history xbar category mts

```
event-history xbar no category mts [ { rx [ { brief | detail } ] | tx [ { brief1 | detail1 } ] } ]
```

### Syntax Description

#### Syntax Description

|               |  |
|---------------|--|
| event-history | switch wide event history configuration                |
| xbar          | Configure xbar event logs                              |
| no            | Disable xbar event logs for category                   |
| category      | Configure xbar event logs for category                 |
| mts           | Configure xbar event logs for category mts             |
| rx            | (Optional) Configure xbar event logs for mts Rx frames |
| brief         | (Optional) Configure brief xbar event logs for mts Rx  |
| detail        | (Optional) Configure detail xbar event logs for mts Rx |
| tx            | (Optional) Configure xbar event logs for mts Tx frames |
| brief1        | (Optional) Configure brief xbar event logs for mts Tx  |
| detail1       | (Optional) Configure detail xbar event logs for mts Tx |

### Command Mode

- /exec

# event-log-size

```
{ { [ eigrp ] event-log-size <size> } | { no [ eigrp ] event-log-size [ <size> ] } }
```

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults           |
| eigrp              |  | (Optional) EIGRP router configuration commands |
| event-log-size     |  | Set IP-EIGRP event log size                    |
| size               |  | Event log size                                 |

## Command Mode

- /exec/configure/router-eigrp/router-eigrp-vrf-common /exec/configure/router-eigrp/router-eigrp-af-common

# event-logging

[no] [ eigrp ] event-logging

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| eigrp              | (Optional) EIGRP router configuration commands  |
| event-logging      | Log IP-EIGRP routing events                     |

## Command Mode

- /exec/configure/router-eigrp/router-eigrp-vrf-common /exec/configure/router-eigrp/router-eigrp-af-common



# event

[no] event

## Syntax Description

---

### Syntax Description

---

no Negate a command or set its defaults

---

event Configure an event specification

---

## Command Mode

- /exec/configure/event-manager-applet

## event application sub-system type

[no] event application [ tag <tag\_id> ] sub-system <sub-system-id> type <event-type>

### Syntax Description

| Syntax Description   |            |   |
|----------------------|------------|---|
| no                   | (Optional) | Negate a command or set its defaults                  |
| event                |            | Configure an event specification                      |
| application          |            | Application specific event                            |
| tag                  | (Optional) | event tag identifier                                  |
| <i>tag_id</i>        | (Optional) | tag name  |
| sub-system           |            | Sub-system ID that will publish the application event |
| <i>sub-system-id</i> |            | Sub-system ID value                                   |
| type                 |            | Event type within the specified sub-system            |
| <i>event-type</i>    |            | Event type value                                      |

### Command Mode

- /exec/configure/event-manager-applet

# event cli match

```
[no] event cli [ tag <tag_id> ] match <regex> [ count <countnum> [ time <interval> ] ]
```

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults                       |
| event              | Configure an event specification                                      |
| cli                | Create a cli event specification                                      |
| tag                | (Optional) event tag identifier                                       |
| <i>tag_id</i>      | (Optional) tag name   |
| match              | Enter cli regex to be used for matching                               |
| <i>regex</i>       | CLI regex, use * to wildcard a token                                  |
| count              | (Optional) Enter an integer to be used as count                       |
| <i>countnum</i>    | (Optional) Integer count  |
| time               | (Optional) Enter time interval within which the events need to happen |
| <i>interval</i>    | (Optional) Time interval in seconds, 0 for indefinitely               |

## Command Mode

- /exec/configure/event-manager-applet

## event counter name entry-val entry-op

[no] event counter [ tag <tag\_id> ] name <counter-name> entry-val <entry-val> entry-op <entry-op> [ exit-val <exit-val> exit-op <exit-op> ]

### Syntax Description

| Syntax Description  |            |   |
|---------------------|------------|---|
| no                  | (Optional) | Negate a command or set its defaults                    |
| event               |            | Configure an event specification                        |
| counter             |            | Create a counter event                                  |
| tag                 | (Optional) | event tag identifier                                    |
| <i>tag_id</i>       | (Optional) | tag name  |
| name                |            | Enter the name of the counter                           |
| <i>counter-name</i> |            | Name of the counter                                     |
| entry-val           |            | Specify the counter entry conditions                    |
| <i>entry-val</i>    |            | Specify the value for comparison with the counter value |
| entry-op            |            | Specify the operator to be used for comparison          |
| <i>entry-op</i>     |            | Specify the comparison operator                         |
| exit-val            | (Optional) | Specify the counter exit conditions                     |
| <i>exit-val</i>     | (Optional) | Specify the value for comparison with the counter value |
| exit-op             | (Optional) | Specify the operator to be used for comparison          |
| <i>exit-op</i>      | (Optional) | Specify the comparison operator                         |

### Command Mode

- /exec/configure/event-manager-applet

## event fanabsent time

[no] event fanabsent [ fan <fan-number> ] time <time-interval>

### Syntax Description

| Syntax Description   |            |   |
|----------------------|------------|---|
| no                   | (Optional) | Negate a command or set its defaults      |
| event                |            | Configure an event specification          |
| fanabsent            |            | Create fanabsent event specification      |
| fan                  | (Optional) | Optional. Enter fan number (optional arg) |
| <i>fan-number</i>    | (Optional) | Enter fan-number                          |
| time                 |            | Enter time                                |
| <i>time-interval</i> |            | Time in seconds fan can stay absent       |

### Command Mode

- /exec/configure/event-manager-applet

## event fanbad time

[no] event fanbad [ fan <fan-number> ] time <time-interval>

### Syntax Description

| Syntax Description   |            |   |
|----------------------|------------|---|
| no                   | (Optional) | Negate a command or set its defaults      |
| event                |            | Configure an event specification          |
| fanbad               |            | Create fanbad event specification         |
| fan                  | (Optional) | Optional. Enter fan number (optional arg) |
| <i>fan-number</i>    | (Optional) | Enter fan-number                          |
| time                 |            | Enter time                                |
| <i>time-interval</i> |            | Time in seconds fan can stay bad          |

### Command Mode

- /exec/configure/event-manager-applet

# event gold module test testing-type scheduled consecutive-failure

```
event gold module { <module> | all } test { <name> } [ severity { minor | moderate | major } ] testing-type {
scheduled | monitoring } consecutive-failure <cnt> | no event gold module { <module> | all } test { <name>
}
```

## Syntax Description

| Syntax Description  |  |  |
|---------------------|--|--|
| no                  |  | Negate a command or set its defaults             |
| event               |  | Configure an event specification                 |
| gold                |  | Create a 'Diagnostic' event specification        |
| module              |  | Module keyword                                   |
| <i>module</i>       |  | Module Number                                    |
| all                 |  | Select all module ID                             |
| test                |  | Diagnostic test selection                        |
| <i>name</i>         |  | Test name  |
| severity            |  | (Optional) Severity of failure                   |
| minor               |  | (Optional) Minor failure                         |
| moderate            |  | (Optional) Moderate failure                      |
| major               |  | (Optional) Major failure                         |
| testing-type        |  | Type of Diagnostic test                          |
| scheduled           |  | Scheduled Test                                   |
| monitoring          |  | Monitoring Test                                  |
| consecutive-failure |  | Consecutive number of times failure has occurred |
| <i>cnt</i>          |  | Failure count                                    |

## Command Mode

- /exec/configure/event-manager-applet

## event interface name parameter entry-val entry-op entry-type poll-interval

```
[no] event interface [ tag <tag_id> ] name <interface-name> parameter <counter-name> entry-val <entry-val>
entry-op { en_gt | en_ge | en_eq | en_ne | en_lt | en_le } entry-type { en_value | en_increment | en_rate }
poll-interval <poll-int-val> [ exit-comb { or | and } ] [ exit-val <exit-val> exit-op { ex_gt | ex_ge | ex_eq |
ex_ne | ex_lt | ex_le } exit-type { ex_value | ex_increment | ex_rate } ] [ exit-time <exit-time-val> ] [ exit-event
{ false | true } ] [ average-factor <avg-factor-val> ]
```

### Syntax Description

#### Syntax Description

|                       |  |
|-----------------------|--|
| no                    | (Optional) Negate a command or set its defaults    |
| event                 | Configure an event specification                   |
| interface             | Interface event                                    |
| tag                   | (Optional) event tag identifier                    |
| <i>tag_id</i>         | (Optional) tag name                                |
| name                  | Interface name                                     |
| <i>interface-name</i> | Interface name string                              |
| parameter             | Interface counter to monitor                       |
| <i>counter-name</i>   | Name of the interface counter                      |
| entry-val             | Counter value be compared to raise interface event |
| <i>entry-val</i>      | Entry counter value                                |
| entry-op              | Entry comparison operator                          |
| en_gt                 | Greater than                                       |
| en_ge                 | Greater than or equal to                           |
| en_eq                 | Equal to   |
| en_ne                 | Not equal to                                       |
| en_lt                 | Less than  |
| en_le                 | Less than or equal to                              |
| entry-type            | Entry comparison type                              |
| en_value              | Entry-val specifies an absolute value              |
| en_increment          | Entry-val specifies an increment                   |



|                       |  |
|-----------------------|--|
| en_rate               | Entry-val specifies the rate of change over a period           |
| poll-interval         | Interval between consecutive polls in seconds                  |
| exit-comb             | (Optional) Exit combination operator for exit condition tests  |
| or                    | (Optional) Either exit-op/exit-val or exit-time must exist     |
| and                   | (Optional) Both exit-op/exit-val and exit-time must exist      |
| exit-val              | (Optional) Exit counter value for interface event              |
| <i>exit-val</i>       | (Optional) Exit value  |
| exit-op               | (Optional) Exit comparison operator                            |
| ex_gt                 | (Optional) Greater than  |
| ex_ge                 | (Optional) Greater than or equal to                            |
| ex_eq                 | (Optional) Equal to  |
| ex_ne                 | (Optional) Not equal to  |
| ex_lt                 | (Optional) Less than   |
| ex_le                 | (Optional) Less than or equal to                               |
| exit-type             | (Optional) Exit comparison type                                |
| ex_value              | (Optional) Exit-val specifies an absolute value                |
| ex_increment          | (Optional) Exit-val specifies an increment                     |
| ex_rate               | (Optional) Exit-val specifies the rate of change over a period |
| exit-time             | (Optional) Time before event monitoring is reenabled           |
| exit-event            | (Optional) Raise an exit event upon exit                       |
| false                 | (Optional) Do not raise an exit event upon exit                |
| true                  | (Optional) Raise an exit event upon exit                       |
| average-factor        | (Optional) Period used for rate based calculations             |
| <i>avg-factor-val</i> | (Optional) Average factor value                                |

### Command Mode

- /exec/configure/event-manager-applet

# event internal-link-flap count

[no] event internal-link-flap count <countnum> [ time <interval> ]

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults                       |
| event              |            | Configure an event specification                           |
| internal-link-flap |            | Create a 'internal-link-flap' event specification          |
| count              |            | Enter an integer to be used as count                       |
| <i>countnum</i>    |            | Integer count  |
| time               | (Optional) | Enter time interval within which the events need to happen |
| <i>interval</i>    | (Optional) | Time interval in seconds                                   |

## Command Mode

- /exec/configure/event-manager-applet

# event manager applet

[no] event manager applet <name> [ module <module-id> ] [ override <override-name> ]

## Syntax Description

| Syntax Description   |  |
|----------------------|--|
| no                   | (Optional) Negate a command or set its defaults  |
| event                | Event Manager commands   |
| manager              | Event Manager commands   |
| applet               | Create/Modify an Event Manager Policy  |
| <i>name</i>          | Name of policy (cannot have underscore in first two characters)                        |
| module               | (Optional) Restrict policy to a module   |
| <i>module-id</i>     | (Optional)   |
| override             | (Optional) Override a system policy  |
| <i>override-name</i> | (Optional) Name of the system policy to override - should begin with double underscore |

## Command Mode

- /exec/configure

# event manager clear counter

event manager clear counter <counter-name>

## Syntax Description

| Syntax Description |                     |                                 |
|--------------------|---------------------|---------------------------------|
|                    | event               | Event Manager commands          |
|                    | manager             | Event Manager commands          |
|                    | clear               | Clear event manager information |
|                    | counter             | Clear the value of a counter    |
|                    | <i>counter-name</i> | Name of the counter             |

## Command Mode

- /exec

# event manager clear history events

event manager clear history events

## Syntax Description

---

### Syntax Description

---

|         |  |
|---------|--|
| event   | Event Manager commands                                   |
| manager | Event Manager commands                                   |
| clear   | Clear event manager information                          |
| history | Clear the stored/archived information                    |
| events  | Clear all the stored/archived event history for this VDC |

---

## Command Mode

- /exec

# event manager command maximum-timeout

event manager command maximum-timeout

## Syntax Description

---

**Syntax Description**

|                 |  |
|-----------------|--|
| event           | Event Manager commands                         |
| manager         | Event Manager commands                         |
| command         | Cli's configured as policy actions             |
| maximum-timeout | Allot maximum timeout for cli action execution |

---

**Command Mode**

- /exec

# event manager environment

event manager environment <varname> <varvalue> | no event manager environment <varname>

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| event              |  | Event Manager commands               |
| manager            |  | Event Manager commands               |
| environment        |  | Configure an environment variable    |
| <i>varname</i>     |  | Name of the environment variable     |
| <i>varvalue</i>    |  | Value of the environment variable    |

## Command Mode

- /exec/configure

# event manager policy

event manager policy <name>

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| event              | Event Manager commands                   |
| manager            | Event Manager commands                   |
| policy             | Register a script policy and activate it |
| name               | Name of the script policy file           |

## Command Mode

- /exec/configure



## event manager run

```
event manager run <policy-name> [ <arg1> [ <arg2> [ <arg3> [ <arg4> [ <arg5> [ <arg6> [ <arg7> [ <arg8>
[ <arg9> [ <arg10> ]]]]]]]]]]]
```

### Syntax Description

#### Syntax Description

|                    |   |
|--------------------|---|
| event              | Event Manager commands  |
| manager            | Event Manager commands  |
| run                | Trigger/run an event manager policy manually                            |
| <i>policy-name</i> | Name of the policy to be triggered-cannot specify default system policy |
| <i>arg1</i>        | (Optional) User specified data value 1                                  |
| <i>arg2</i>        | (Optional) User specified data value 2                                  |
| <i>arg3</i>        | (Optional) User specified data value 3                                  |
| <i>arg4</i>        | (Optional) User specified data value 4                                  |
| <i>arg5</i>        | (Optional) User specified data value 5                                  |
| <i>arg6</i>        | (Optional) User specified data value 6                                  |
| <i>arg7</i>        | (Optional) User specified data value 7                                  |
| <i>arg8</i>        | (Optional) User specified data value 8                                  |
| <i>arg9</i>        | (Optional) User specified data value 9                                  |
| <i>arg10</i>       | (Optional) User specified data value 10                                 |

### Command Mode

- /exec

# event manager script

[no] event manager script <name> [ override <override-name> ]

## Syntax Description

| Syntax Description   |            |   |
|----------------------|------------|---|
| no                   | (Optional) | Negate a command or set its defaults  |
| event                |            | Event Manager commands  |
| manager              |            | Event Manager commands  |
| script               |            | Create/Modify an Event Manager Policy                                       |
| <i>name</i>          |            | Name of the policy - cannot have underscore in first two characters         |
| override             | (Optional) | Have this policy override a system policy                                   |
| <i>override-name</i> | (Optional) | Name of the system policy to override - should begin with double underscore |

## Command Mode

- /exec/configure

# event memory

[no] event memory { minor | severe | critical }

## Syntax Description

| Syntax   | Description                                     |
|----------|---|
| no       | (Optional) Negate a command or set its defaults |
| event    | Configure an event specification                |
| memory   | Create memory thresholds event specification    |
| minor    | Minor alert                                     |
| severe   | Severe alert                                    |
| critical | Critical alert                                  |

## Command Mode

- /exec/configure/event-manager-applet

## event module-failure type module count

[no] event module-failure [ tag <tag\_id> ] type <err-name> module { all | <module> } count <countnum> [ time <interval> ]

### Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults                       |
| event              |            | Configure an event specification                           |
| module-failure     |            | Create a 'module-failure' event specification              |
| tag                | (Optional) | event tag identifier                                       |
| <i>tag_id</i>      | (Optional) | tag name   |
| type               |            | Enter an error type  |
| <i>err-name</i>    |            |  |
| module             |            | Enter a module number                                      |
| all                |            | All modules  |
| <i>module</i>      |            | Enter module number  |
| count              |            | Enter an integer to be used as count                       |
| <i>countnum</i>    |            | Integer count  |
| time               | (Optional) | Enter time interval within which the events need to happen |
| <i>interval</i>    | (Optional) | Time interval in seconds                                   |

### Command Mode

- /exec/configure/event-manager-applet

# event module status module1

```
[no] event module [ tag <tag_id> ] status { online | offline | any } module1 { all | <module> }
```

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| event              | Configure an event specification                |
| module             | Create a 'module' event specification           |
| tag                | (Optional) event tag identifier                 |
| <i>tag_id</i>      | (Optional) tag name                             |
| status             | Status event                                    |
| online             | Online status                                   |
| offline            | Offline status                                  |
| any                | Online or offline status                        |
| module1            | Enter a module number                           |
| all                | All modules                                     |
| <i>module</i>      | Enter module number                             |

## Command Mode

- /exec/configure/event-manager-applet

# event neighbor-discovery

[no] event [ tag <tag\_id> ] neighbor-discovery

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| event              |            | Configure an event specification     |
| tag                | (Optional) | event tag identifier                 |
| <i>tag_id</i>      | (Optional) | tag name                             |
| neighbor-discovery |            | Show CDP new neighbors               |

## Command Mode

- /exec/configure/event-manager-applet

# event none

[no] event none [ tag <tag\_id> ]

## Syntax Description

---

**Syntax Description**

---

no (Optional) Negate a command or set its defaults

---

event Configure an event specification

---

none Manually run policy event with none

---

tag (Optional) event tag identifier

---

*tag\_id* (Optional) tag name

---

## Command Mode

- /exec/configure/event-manager-applet

## event oir fan

[no] event oir [ tag <tag\_id> ] fan { insert | remove | anyoir } [ <fannum> ]

### Syntax Description

#### Syntax Description

|               |   |
|---------------|---|
| no            | (Optional) Negate a command or set its defaults     |
| event         | Configure an event specification                    |
| oir           | Create Online-Insertion-Removal event specification |
| tag           | (Optional) event tag identifier                     |
| <i>tag_id</i> | (Optional) tag name                                 |
| fan           | Fan OIR   |
| insert        | OIR insert  |
| remove        | OIR remove  |
| anyoir        | any OIR (Either insert or remove)                   |
| <i>fannum</i> | (Optional) Optional. Enter Fan number.              |

### Command Mode

- /exec/configure/event-manager-applet



# event oir module

[no] event oir [ tag <tag\_id> ] module { insert | remove | anyoir } [ <module> ]

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults     |
| event              | Configure an event specification                    |
| oir                | Create Online-Insertion-Removal event specification |
| tag                | (Optional) event tag identifier                     |
| <i>tag_id</i>      | (Optional) tag name                                 |
| module             | Module OIR  |
| insert             | OIR insert  |
| remove             | OIR remove  |
| anyoir             | any OIR (Either insert or remove)                   |
| <i>module</i>      | (Optional) Optional. Enter module number            |

## Command Mode

- /exec/configure/event-manager-applet

## event oir powersupply

```
[no] event oir [ tag <tag_id> ] powersupply { insert | remove | anyoir } [ <powersupnum> ]
```

### Syntax Description

| Syntax Description |             |   |
|--------------------|-------------|---|
| no                 | (Optional)  | Negate a command or set its defaults                |
| event              |             | Configure an event specification                    |
| oir                |             | Create Online-Insertion-Removal event specification |
| tag                | (Optional)  | event tag identifier                                |
| <i>tag_id</i>      | (Optional)  | tag name  |
| powersupply        | powersupply | OIR   |
| insert             |             | OIR insert  |
| remove             |             | OIR remove  |
| anyoir             |             | any OIR (Either insert or remove)                   |
| <i>powersupnum</i> | (Optional)  | Optional. Enter powersupply number                  |

### Command Mode

- /exec/configure/event-manager-applet

# event policy-default count

[no] event policy-default count <countnum> [ time <interval> ]

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults                       |
| event              | Configure an event specification                                      |
| policy-default     | Use the event in the system policy being overridden                   |
| count              | Enter an integer to be used as count                                  |
| <i>countnum</i>    | Integer count   |
| time               | (Optional) Enter time interval within which the events need to happen |
| <i>interval</i>    | (Optional) Time interval in seconds                                   |

## Command Mode

- /exec/configure/event-manager-applet

# event poweroverbudget

[no] event poweroverbudget

## Syntax Description

| Syntax Description |                 |   |
|--------------------|-----------------|---|
|                    | no              | (Optional) Negate a command or set its defaults |
|                    | event           | Configure an event specification                |
|                    | poweroverbudget | Create poweroverbudget event specification      |

## Command Mode

- /exec/configure/event-manager-applet

## event snmp oid get-type exact entry-op entry-val poll-interval

```
[no] event snmp [ tag <tag_id> ] oid <oid-val> get-type { exact | next } entry-op { ent_gt | ent_ge | ent_eq |
ent_ne | ent_lt | ent_le } entry-val <entry-val> [ { exit-comb { or | and } exit-op { ex_gt | ex_ge | ex_eq | ex_ne
| ex_lt | ex_le } exit-val <exit-val> exit-time <exit-time-val> } | { exit-op1 { ex_gt1 | ex_ge1 | ex_eq1 | ex_ne1
| ex_lt1 | ex_le1 } exit-val1 <exit-val1> } ] poll-interval <poll-int-val>
```

### Syntax Description

#### Syntax Description

|                  |   |
|------------------|---|
| no               | (Optional) Negate a command or set its defaults |
| event            | Configure an event specification                |
| snmp             | Create a 'snmp' event specification.            |
| tag              | (Optional) event tag identifier                 |
| <i>tag_id</i>    | (Optional) tag name                             |
| oid              | oid of data element in dot notation.            |
| <i>oid-val</i>   | oid of data element in dot notation.            |
| get-type         | The type of SNMP get operation.                 |
| exact            | exact   |
| next             | next  |
| entry-op         | entry comparison operator.                      |
| ent_gt           | greater than                                    |
| ent_ge           | greater than or equal to                        |
| ent_eq           | equal to  |
| ent_ne           | not equal to                                    |
| ent_lt           | less than                                       |
| ent_le           | less than or equal to                           |
| entry-val        | value to compare with the current polled value  |
| <i>entry-val</i> | value to compare with the current polled value  |
| exit-comb        | (Optional) exit criterion combination           |
| or               | (Optional) logical OR                           |
| and              | (Optional) logical AND                          |
| exit-op          | (Optional) exit comparison operator.            |

|                            |   |
|----------------------------|---|
| <code>ex_gt</code>         | (Optional) greater than                                   |
| <code>ex_ge</code>         | (Optional) greater than or equal to                       |
| <code>ex_eq</code>         | (Optional) equal to                                       |
| <code>ex_ne</code>         | (Optional) not equal to                                   |
| <code>ex_lt</code>         | (Optional) less than                                      |
| <code>ex_le</code>         | (Optional) less than or equal to                          |
| <code>exit-val</code>      | (Optional) value to compare with the current polled value |
| <code>exit-val</code>      | (Optional) value to compare with the current polled value |
| <code>exit-op1</code>      | (Optional) exit comparison operator.                      |
| <code>ex_gt1</code>        | (Optional) greater than                                   |
| <code>ex_ge1</code>        | (Optional) greater than or equal to                       |
| <code>ex_eq1</code>        | (Optional) equal to                                       |
| <code>ex_ne1</code>        | (Optional) not equal to                                   |
| <code>ex_lt1</code>        | (Optional) less than                                      |
| <code>ex_le1</code>        | (Optional) less than or equal to                          |
| <code>exit-val1</code>     | (Optional) value to compare with the current polled value |
| <code>exit-val1</code>     | (Optional) value to compare with the current polled value |
| <code>exit-time</code>     | (Optional) exit time                                      |
| <code>exit-time-val</code> | (Optional) exit time in seconds                           |
| <code>poll-interval</code> | polling interval  |
| <code>poll-int-val</code>  | polling interval in seconds                               |

### Command Mode

- `/exec/configure/event-manager-applet`

# event storm-control

[no] event storm-control

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| event              | Configure an event specification                |
| storm-control      | Create a storm control event specification      |

## Command Mode

- /exec/configure/event-manager-applet

## event syslog pattern

[no] event syslog [ tag <tag\_id> ] [ occurs <num-occurrences> ] [ period <period-value> ] [ priority [ <i0> | alerts | critical | debugging | emergencies | errors | informational | notifications | warnings ] ] pattern <regex>

### Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults                       |
| event              |            | Configure an event specification                           |
| syslog             |            | Create a syslog event specification                        |
| tag                | (Optional) | event tag identifier                                       |
| tag_id             | (Optional) | tag name   |
| occurs             | (Optional) | Enter an integer to be used for number of occurrences      |
| num-occurrences    | (Optional) | Integer count  |
| period             | (Optional) | Enter time interval within which the events need to happen |
| period-value       | (Optional) | Time interval in seconds, 0 for indefinitely               |
| priority           | (Optional) | Priority of the log message                                |
| i0                 | (Optional) | Enter priority of the log message                          |
| alerts             | (Optional) | Alert log message  |
| critical           | (Optional) | Critical log message                                       |
| debugging          | (Optional) | Debugging log message                                      |
| emergencies        | (Optional) | Emergency log message                                      |
| errors             | (Optional) | Error log message  |
| informational      | (Optional) | Informational log message                                  |
| notifications      | (Optional) | Notifications log message                                  |
| warnings           | (Optional) | Warning log message  |
| pattern            |            | Enter regex to be used for matching                        |
| regex              |            | SYSLOG regex   |

### Command Mode

- /exec/configure/event-manager-applet



# event sysmgr memory major minor clear

[no] event sysmgr memory [ module <module> ] major <i0> minor <i1> clear <i2>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| event              | Configure an event specification                |
| sysmgr             | system manager related events                   |
| memory             | memory alert event                              |
| module             | (Optional) Optional. Enter module number        |
| <i>module</i>      | (Optional) Enter module-number                  |
| major              | set major memory threshold                      |
| <i>i0</i>          | major memory threshold                          |
| minor              | set minor memory threshold                      |
| <i>i1</i>          | minor memory threshold                          |
| clear              | set clear memory alert threshold                |
| <i>i2</i>          | clear memory threshold                          |

## Command Mode

- /exec/configure/event-manager-applet

## event sysmgr switchover count time

[no] event sysmgr switchover count <countnum> time <interval>

### Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults             |  |
| event              | Configure an event specification                            |  |
| sysmgr             | System manager related events                               |  |
| switchover         | Switchover related event                                    |  |
| count              | Number of switchovers after which event should be triggered |  |
| <i>countnum</i>    | Integer count   |  |
| time               | Enter time interval within which the events need to happen  |  |
| <i>interval</i>    | Time interval in seconds                                    |  |

### Command Mode

- /exec/configure/event-manager-applet

# event temperature threshold

[no] event temperature [ module <module> ] [ sensor <sensornum> ] threshold { major | minor | any }

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults         |
| event              | Configure an event specification                        |
| temperature        | Create temperature event specification                  |
| module             | (Optional) Optional. Enter module number (optional arg) |
| <i>module</i>      | (Optional) Enter module-number                          |
| sensor             | (Optional) Optional. Enter sensor number (optional arg) |
| <i>sensornum</i>   | (Optional) Enter sensor number                          |
| threshold          | Enter Major or Minor threshold                          |
| major              | Major threshold   |
| minor              | Minor threshold   |
| any                | Major or Minor  |

## Command Mode

- /exec/configure/event-manager-applet

## event test match

```
[no] event test [ tag <tag_id> ] match <num> [ count <countnum> ] [ time <interval> ]
```

### Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults     |
| event              |            | Configure an event specification         |
| tag                | (Optional) | event tag identifier                     |
| <i>tag_id</i>      | (Optional) | tag name                                 |
| test               |            | Create a 'test' event specification      |
| match              |            | Enter an integer to be used for matching |
| <i>num</i>         |            | Integer value                            |
| count              | (Optional) | Enter an integer to be used as count     |
| <i>countnum</i>    | (Optional) | Integer count                            |
| <i>time</i>        | (Optional) | <interval>                               |
| <i>interval</i>    | (Optional) | Time interval in seconds                 |

### Command Mode

- /exec/configure/event-manager-applet

# event timer

```
[no] event timer [ tag <tag_id> ] { watchdog wtime <watchdog-time> | absolute atime <absolute-time> |
countdown ctime <countdown-time> | cron cron-entry <cron-time> } [ name <timer_name> ]
```

## Syntax Description

| Syntax Description    |  |
|-----------------------|--|
| no                    | (Optional) Negate a command or set its defaults                      |
| event                 | Configure an event specification                                     |
| timer                 | Create a timer event specification                                   |
| tag                   | (Optional) event tag identifier                                      |
| <i>tag_id</i>         | (Optional) tag name  |
| name                  | (Optional) name of the timer   |
| <i>timer_name</i>     | (Optional) Enter the timer name                                      |
| watchdog              | Watchdog timer event   |
| wtime                 | Time period for watchdog   |
| <i>watchdog-time</i>  | <1-1924991999[.0-999]> Enter seconds[.milliseconds] value            |
| absolute              | Absolute timer event.  |
| atime                 | epoch time for absolute. Try epochconverter online tool to get value |
| <i>absolute-time</i>  | <1-1924991999[.0-999]> Enter seconds[.milliseconds] value            |
| countdown             | Countdown timer event  |
| ctime                 | Time period for countdown  |
| <i>countdown-time</i> | <1-1924991999[.0-999]> Enter seconds[.milliseconds] value            |
| cron                  | Cron timer event   |
| cron-entry            | Cron entry string  |
| <i>cron-time</i>      | format: * * * * * => min hour dom month dow                          |

## Command Mode

- /exec/configure/event-manager-applet

## event track state

event track [ tag <tag\_id> ] <object-id> state { any | up | down } | no event track [ tag <tag\_id> ] <object-id>

### Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| event              |  | Configure an event specification     |
| track              |  | Create a 'track' event specification |
| tag                |  | (Optional) event tag identifier      |
| <i>tag_id</i>      |  | (Optional) tag name                  |
| <i>object-id</i>   |  | Track objects                        |
| state              |  | State of tracking object             |
| any                |  | Any state                            |
| down               |  | Down state                           |
| up                 |  | Up state                             |

### Command Mode

- /exec/configure/event-manager-applet

# evpn

[no] evpn

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | no (Optional) Negate a command or set its defaults |
|                           | evpn Enter EVPN configuration mode                 |

## Command Mode

- /exec/configure

# evpn esi multihoming

[no] evpn esi multihoming

## Syntax Description

| Syntax Description |             |                                    |
|--------------------|-------------|------------------------------------|
|                    | no          | (Optional) unconfigure the command |
|                    | evpn        | VxLAN evpn feature                 |
|                    | esi         | ESI based multihoming              |
|                    | multihoming | Multihoming feature                |

## Command Mode

- /exec/configure/evpn-esi-multihoming



# evpn multihoming core-tracking

[no] evpn multihoming core-tracking

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| evpn               | VxLAN evpn feature                              |
| multihoming        | VxLAN evpn multihoming                          |
| core-tracking      | core interface tracking                         |

## Command Mode

- /exec/configure/if-port-channel /exec/configure/if-routing /exec/configure/if-vlan

# exceptionlog module syserr devid errtype errcode phylayer ports harderror

```
exceptionlog module <module> syserr <syserr> devid <id> errtype <type> errcode <code> phylayer <phy>
ports <list> harderror <hard> [ { desc <str> } ] [ { inband <intinband> } ]
```

## Syntax Description

### Syntax Description

|                  |                                    |
|------------------|------------------------------------|
| exceptionlog     | Exception log                      |
| module           | Enter a module number              |
| <i>module</i>    | Enter module number                |
| syserr           | Enter syserr                       |
| <i>syserr</i>    | Syserr code                        |
| devid            | Enter device id                    |
| <i>id</i>        | Device id                          |
| errtype          | Enter error type                   |
| <i>type</i>      | Error type                         |
| errcode          | Enter error code                   |
| <i>code</i>      | Error code                         |
| phylayer         | Enter phy layer                    |
| <i>phy</i>       | Phy layer                          |
| ports            | Enter failed ports                 |
| <i>list</i>      | List of ports                      |
| harderror        | Irrecoverable error?               |
| <i>hard</i>      | Error sub-category                 |
| desc             | (Optional) Enter error description |
| <i>str</i>       | (Optional) Error description       |
| inband           | (Optional) inband flag             |
| <i>intinband</i> | (Optional) inband flag             |

## Command Mode

- /exec

# exclude access-list

[no] exclude access-list <acl-name>

## Syntax Description

|                           |                 |   |
|---------------------------|-----------------|---|
| <b>Syntax Description</b> | no              | (Optional) Negate a command or set its defaults |
|                           | exclude         | ACL to exclude from redirection                 |
|                           | access-list     | ITD access-list name                            |
|                           | <i>acl-name</i> | ITD exclude ACL name                            |

## Command Mode

- /exec/configure/itd

# exclude access-list

[no] exclude access-list <acl-name>

## Syntax Description

|                           |                 |   |
|---------------------------|-----------------|---|
| <b>Syntax Description</b> | no              | (Optional) Negate a command or set its defaults |
|                           | exclude         | ACL to exclude from redirection                 |
|                           | access-list     | ITD access-list name                            |
|                           | <i>acl-name</i> | ITD exclude ACL name                            |

## Command Mode

- /exec/configure/itd

# exclude access-list

[no] exclude access-list <acl-name>

## Syntax Description

|                           |                 |   |
|---------------------------|-----------------|---|
| <b>Syntax Description</b> | no              | (Optional) Negate a command or set its defaults |
|                           | exclude         | ACL to exclude from redirection                 |
|                           | access-list     | PLB access-list name                            |
|                           | <i>acl-name</i> | PLB exclude ACL name                            |

## Command Mode

- /exec/configure/plb

# exec-timeout

{ exec-timeout <i0> | no exec-timeout [ <i0> ] }

## Syntax Description

|                           |              |  |
|---------------------------|--------------|--|
| <b>Syntax Description</b> | no           | Negate a command or set its defaults   |
|                           | exec-timeout | Configure exec timeout                 |
|                           | <i>i0</i>    | Enter timeout in minutes, 0 to disable |

## Command Mode

- /exec/configure/console

# exec-timeout

{ exec-timeout <i0> | no exec-timeout [ <i0> ] }

## Syntax Description

|                           |              |  |
|---------------------------|--------------|--|
| <b>Syntax Description</b> | no           | Negate a command or set its defaults   |
|                           | exec-timeout | Configure exec timeout                 |
|                           | <i>i0</i>    | Enter timeout in minutes, 0 to disable |

## Command Mode

- /exec/configure/line

# exit

exit

## Syntax Description

---

### Syntax Description

---

**exit** Exit from command interpreter

---

## Command Mode

- /global



# exit

exit

## Syntax Description

---

### Syntax Description

---

**exit** Exit from command interpreter

---

## Command Mode

- /exec/configure/ip-sla/udp /exec/configure/ip-sla/jitter /exec/configure/ip-sla/tcp /exec/configure/ip-sla/icmpEcho /exec/configure/ip-sla/dns /exec/configure/ip-sla/fabricPathEcho /exec/configure/ip-sla/http

## exp

```
[no] exp { default | <val> [ <val> [ <val> [ <val> [ <val> [ <val> [ <val> [ <val> ] ] ] ] ] ] ] [ default ] }
```

### Syntax Description

#### Syntax Description

|                |   |
|----------------|---|
| <b>no</b>      | (Optional) Negate a command or set its defaults             |
| <b>exp</b>     | Set the experimental values allowed for this interface      |
| <b>default</b> | Default all unconfigured exp to this interface              |
| <b>val</b>     | Enter up to 8 experimental values separated by white-spaces |

### Command Mode

- /exec/configure/tunnel-te/cbts-member

# explicit-null

explicit-null [ for <px-list> ] [ to <peer-px-list> ] | no explicit-null

## Syntax Description

| Syntax Description  |  |  |
|---------------------|--|--|
| no                  |  | Negate a command or set its defaults                               |
| explicit-null       |  | Advertise Explicit Null label in place of Implicit Null            |
| for                 |  | (Optional) Prefix list specifying controls on destination prefixes |
| <i>px-list</i>      |  | (Optional) Name of prefix list                                     |
| to                  |  | (Optional) Access-list specifying controls on LDP peers            |
| <i>peer-px-list</i> |  | (Optional) Name of prefix list                                     |

## Command Mode

- /exec/configure/ldp

# explicit-path identifier

[no] explicit-path { identifier <id> | name <string> }

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| explicit-path      | Configure explicit-path                         |  |
| identifier         | Specify explicit path by number                 |  |
| <i>id</i>          | Enter number                                    |  |
| name               | Specify explicit path by name                   |  |
| <i>string</i>      | Enter name                                      |  |

## Command Mode

- /exec/configure/te

# export map

[no] export map <rmap-name>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| export             | VRF export                                      |
| map                | Route-map based VRF export                      |
| <i>rmap-name</i>   | Route-map name                                  |

## Command Mode

- /exec/configure/vrf-af-ipv4 /exec/configure/vrf-af-ipv6

## export vrf default map

[no] export vrf default [ <prefix-limit> ] map <rmap-name>

### Syntax Description

| Syntax Description  |            |                                      |
|---------------------|------------|--------------------------------------|
| no                  | (Optional) | Negate a command or set its defaults |
| export              |            | VRF export                           |
| vrf                 |            | Virtual Router Context               |
| default             |            | VRF name (default)                   |
| <i>prefix-limit</i> | (Optional) | Maximum prefix limit                 |
| map                 |            | Route-map based VRF import           |
| <i>rmap-name</i>    |            | Route-map name                       |

### Command Mode

- /exec/configure/vrf-af-ipv4 /exec/configure/vrf-af-ipv6

# exporter

[no] exporter <exportername>

## Syntax Description

---

### Syntax Description

---

exporter      Add an Exporter to use to export records

---

*exportername*    Name of exporter

---

## Command Mode

- /exec/configure/nfm-monitor







## F Commands

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- [fabric-soo](#), on page 1368
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# fabric-soo

[no] fabric-soo { <ext-comm-soo-aa2nn4> | <ext-comm-soo-aa4nn2> }

## Syntax Description

| Syntax Description         |            |                                      |
|----------------------------|------------|--------------------------------------|
| no                         | (Optional) | Negate a command or set its defaults |
| fabric-soo                 |            | Fabric Site of Origin                |
| <i>ext-comm-soo-aa4nn2</i> | VPN        | extcommunity in aa4:fabric_id format |
| <i>ext-comm-soo-aa2nn4</i> | VPN        | extcommunity in aa:fabric_id format  |

## Command Mode

- /exec/configure/router-bgp

## fabric database auto-pull dci vrf node-id

fabric database auto-pull dci vrf <vrf-name> node-id <mgmt-ip-address> [ peer-id <peer-ip-address> ]

### Syntax Description

| Syntax Description |                        |  |
|--------------------|------------------------|--|
|                    | fabric                 | Fabric                                   |
|                    | database               | Fabric Database                          |
|                    | auto-pull              | Pull configuration                       |
|                    | dci                    | DCI profile                              |
|                    | vrf                    | Display per-VRF information              |
|                    | <i>vrf-name</i>        | VRF name                                 |
|                    | node-id                | management ip address of this node       |
|                    | <i>mgmt-ip-address</i> | IP address in CIDR format                |
|                    | peer-id                | (Optional) management ip address of peer |
|                    | <i>peer-ip-address</i> | (Optional) IP address in CIDR format     |

### Command Mode

- /exec

## fabric database auto-pull vni interface

```
fabric database auto-pull { vni <vni-id> | dot1q <vlan-id> } interface <interface-id> [ { overwrite-vlan |
overwrite-bd } <ow-vlan-id> ]
```

### Syntax Description

| Syntax Description  |            |                                       |
|---------------------|------------|---------------------------------------|
| fabric              |            | Fabric                                |
| database            |            | Fabric Database                       |
| auto-pull           |            | Pull configuration                    |
| vni                 |            | Pull ethernet-tag vni configuration   |
| <i>vni-id</i>       |            |                                       |
| dot1q               |            | Pull ethernet-tag dot1q configuration |
| <i>vlan-id</i>      |            |                                       |
| interface           |            | Applied interface                     |
| <i>interface-id</i> |            | Name of interface                     |
| overwrite-vlan      | (Optional) | Overwrite the system generate vlan    |
| overwrite-bd        | (Optional) | Overwrite the system generate bd      |
| <i>ow-vlan-id</i>   | (Optional) |                                       |

### Command Mode

- /exec

# fabric database inherit-profile-map

{ fabric database inherit-profile-map <id> } | { no fabric database inherit-profile-map }

## Syntax Description

| Syntax Description  |  |   |
|---------------------|--|---|
| no                  |  | Negate a command or set its defaults                              |
| fabric              |  | Fabric  |
| database            |  | Configure Fabric Database   |
| inherit-profile-map |  | Inherit a profile map. All non-global mappings will be inherited. |
| <i>id</i>           |  | Profile Map ID  |

## Command Mode

- /exec/configure/if-eth-any /exec/configure/if-port-channel

# fabric database mobility-domain

[no] fabric database mobility-domain <name>

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| fabric             | Fabric  |  |
| database           | Configure Fabric Database                       |  |
| mobility-domain    | Tag to identify mobility domain name            |  |
| <i>name</i>        | Mobility Domain Name                            |  |

## Command Mode

- /exec/configure



# fabric database override-profile

[no] fabric database override-profile <profilename>

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults               |
| fabric             |            | Fabric   |
| database           |            | Configure Fabric Database                          |
| override-profile   |            | Override the network profile name                  |
| <i>profilename</i> |            | Enter the profile name to override network profile |

## Command Mode

- /exec/configure

# fabric database override-vrf-profile

[no] fabric database override-vrf-profile <profilename>

## Syntax Description

| Syntax Description   |            |  |
|----------------------|------------|--|
| no                   | (Optional) | Negate a command or set its defaults           |
| fabric               |            | Fabric   |
| database             |            | Configure Fabric Database                      |
| override-vrf-profile |            | Override the VRF (partition) profile name      |
| <i>profilename</i>   |            | Enter the profile name to override VRF profile |

## Command Mode

- /exec/configure

# fabric database profile-map

[no] fabric database profile-map <id>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| fabric             | Fabric  |
| database           | Configure Fabric Database                       |
| profile-map        | Configure a profile map                         |
| <i>id</i>          | Profile Map ID                                  |

## Command Mode

- /exec/configure

# fabric database profile-map global

[no] fabric database profile-map global

## Syntax Description

| Syntax Description |                |                                      |
|--------------------|----------------|--------------------------------------|
| no                 | (Optional)     | Negate a command or set its defaults |
| fabric             | Fabric         |                                      |
| database           | Configure      | Fabric Database                      |
| profile-map        | Configure      | a profile map                        |
| global             | Global profile | (apply to all interfaces)            |

## Command Mode

- /exec/configure

# fabric database refresh dot1q

```
fabric database refresh dot1q <vlan-id> [ { mobility-domain <name> | interface <interface-id> } ]
```

## Syntax Description

| Syntax Description |                     |   |
|--------------------|---------------------|---|
|                    | fabric              | Fabric  |
|                    | database            | Fabric Database                                 |
|                    | refresh             | Refresh profile configuration                   |
|                    | dot1q               | Dot1Q Encapsulation                             |
|                    | <i>vlan-id</i>      |   |
|                    | interface           | (Optional) Applied interface                    |
|                    | <i>interface-id</i> | (Optional) Name of interface                    |
|                    | mobility-domain     | (Optional) Tag to identify mobility domain name |
|                    | <i>name</i>         | (Optional) Mobility Domain Name                 |

## Command Mode

- /exec

# fabric database refresh vni

```
fabric database refresh { vni <vni-id> | include-vrf { <vrf-name> } }
```

## Syntax Description

### Syntax Description

|                 |                               |
|-----------------|-------------------------------|
| fabric          | Fabric                        |
| database        | Fabric Database               |
| refresh         | Refresh profile configuration |
| vni             | Virtual Network Identifier    |
| <i>vni-id</i>   |                               |
| include-vrf     | Include VRF name              |
| <i>vrf-name</i> | VRF name                      |

## Command Mode

- /exec

# fabric database timer

[no] fabric database timer { cleanup | recovery | vdp | re-add } <timeout>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults                           |
| fabric             |   |
| database           |   |
| timer              | HMM timers  |
| cleanup            | Delay in minutes before profile is deleted                                |
| recovery           | Delay in minutes before recovered profile is deleted                      |
| vdp                | Delay in minutes before new VDP requests (after un-apply) are accepted    |
| re-add             | Delay in minutes before new client requests (after un-apply) are accepted |
| timeout            | Set timeout in minutes  |

## Command Mode

- /exec/configure

# fabric database type bl-dci

[no] fabric database type bl-dci

## Syntax Description

|                           |          |   |
|---------------------------|----------|---|
| <b>Syntax Description</b> | no       | (Optional) Negate a command or set its defaults |
|                           | fabric   | Fabric  |
|                           | database | Configure Fabric Database                       |
|                           | type     | Configure database type                         |
|                           | bl-dci   | Border Leaf - DCI                               |

## Command Mode

- /exec/configure



# fabric database type cabling

[no] fabric database type cabling

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| fabric             | Fabric  |
| database           | Configure Fabric Database                       |
| type               | Configure database type                         |
| cabling            | Cable Management Database                       |

## Command Mode

- /exec/configure

# fabric database type network

[no] fabric database type network

## Syntax Description

|                           |          |   |
|---------------------------|----------|---|
| <b>Syntax Description</b> | no       | (Optional) Negate a command or set its defaults |
|                           | fabric   | Fabric  |
|                           | database | Configure Fabric Database                       |
|                           | type     | Configure database type                         |
|                           | network  | Network Database                                |

## Command Mode

- /exec/configure

# fabric database type partition

[no] fabric database type partition

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| fabric             | Fabric  |
| database           | Configure Fabric Database                       |
| type               | Configure database type                         |
| partition          | Partition Database                              |

## Command Mode

- /exec/configure

# fabric database type profile

[no] fabric database type profile

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| fabric             | Fabric  |
| database           | Configure Fabric Database                       |
| type               | Configure database type                         |
| profile            | Port or Switch Profile Database                 |

## Command Mode

- /exec/configure

## fabric forwarding anycast-gateway-mac

{ fabric forwarding anycast-gateway-mac <mac-addr> } | { no fabric forwarding anycast-gateway-mac }

### Syntax Description

| Syntax Description  |  |   |
|---------------------|--|---|
| no                  |  | Negate a command or set its defaults                    |
| fabric              |  | Fabric  |
| forwarding          |  | Fabric Forwarding Protocol: Host Mobility Manager (HMM) |
| anycast-gateway-mac |  | Anycast Gateway MAC of the Switch                       |
| <i>mac-addr</i>     |  | MAC address   |

### Command Mode

- /exec/configure

# fabric forwarding dup-host-ip-addr-detection

```
{ fabric forwarding dup-host-ip-addr-detection <mmoves> <nsecs> | no fabric forwarding
dup-host-ip-addr-detection }
```

## Syntax Description

| Syntax Description         |  |  |
|----------------------------|--|--|
| no                         |  | Negate a command or set its defaults                                       |
| fabric                     |  | Fabric   |
| forwarding                 |  | Fabric Forwarding Protocol: Host Mobility Manager (HMM)                    |
| dup-host-ip-addr-detection |  | To detect duplicate host address in n secs                                 |
| <i>mmoves</i>              |  | Set Number of host moves to be allowed in n secs. Default is 5             |
| <i>nsecs</i>               |  | Set the duplicate detection timeout in secs for host moves. Default is 180 |

## Command Mode

- /exec/configure

## fabric forwarding dup-host-recovery-timer recover-count

{ fabric forwarding dup-host-recovery-timer <timeout> recover-count <count> | no fabric forwarding dup-host-recovery-timer }

### Syntax Description

| Syntax Description      |  |   |
|-------------------------|--|---|
| no                      |  | Negate a command or set its defaults                                      |
| fabric                  |  | Fabric  |
| forwarding              |  | Fabric Forwarding Protocol: Host Mobility Manager (HMM)                   |
| dup-host-recovery-timer |  | Refresh the frozen duplicate host   |
| <i>timeout</i>          |  | Set the timeout in secs to refresh the duplicate host. Default is 30 secs |
| recover-count           |  | Maximum number of refreshes   |
| <i>count</i>            |  | Set the maximum number of host refresh. Default is 5.                     |

### Command Mode

- /exec/configure

## fabric forwarding limit-vlan-mac

[no] fabric forwarding limit-vlan-mac <max-limit>

### Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults   |
| fabric             |            | Fabric   |
| forwarding         |            | Fabric Forwarding Protocol: Host Mobility Manager (HMM)  |
| limit-vlan-mac     |            | Maximum number of end-hosts allowed to have the same (vlan, MAC) mapping in a given vrf (Default is 4) |
| <i>max-limit</i>   |            | Set max-limit  |

### Command Mode

- /exec/configure



# fabric forwarding mode anycast-gateway

{ fabric forwarding mode anycast-gateway } | { no fabric forwarding mode }

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults                    |
| fabric             |  | Fabric  |
| forwarding         |  | Fabric Forwarding Protocol: Host Mobility Manager (HMM) |
| mode               |  | Forwarding Modes  |
| anycast-gateway    |  | Anycast Gateway Forwarding Mode                         |

## Command Mode

- /exec/configure/if-vlan /exec/configure/if-vlan-range

# fabric forwarding selective-host-probe

[no] fabric forwarding selective-host-probe

## Syntax Description

| Syntax Description   |            |   |
|----------------------|------------|---|
| no                   | (Optional) | Negate a command or set its defaults                    |
| fabric               |            | Fabric  |
| forwarding           |            | Fabric Forwarding Protocol: Host Mobility Manager (HMM) |
| selective-host-probe |            | Trigger unconditional host probe                        |

## Command Mode

- /exec/configure

# failaction

[no] failaction { [ node { reassign | drop | least-bucket } ] | [ bucket { distribute } ] | [ cluster drop ] }

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| failaction         | ITD failaction                                  |
| node               | (Optional) ITD failaction node                  |
| reassign           | (Optional) ITD failaction reassign              |
| drop               | (Optional) ITD failaction drop                  |
| least-bucket       | (Optional) ITD failaction least-bucket node     |
| bucket             | (Optional) ITD failaction bucket reassign       |
| distribute         | (Optional) ITD failaction distribute reassign   |
| cluster            | (Optional) ITD failaction cluster               |

## Command Mode

- /exec/configure/itd

# failaction

[no] failaction { [ node { reassign | drop } ] | [ cluster drop ] } +

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| failaction         | ITD failaction                                  |
| node               | (Optional) ITD failaction node                  |
| reassign           | (Optional) ITD failaction reassign              |
| drop               | (Optional) ITD failaction drop                  |
| cluster            | (Optional) ITD failaction cluster               |

## Command Mode

- /exec/configure/itd

# failaction

[no] failaction { [ node { reassign | drop } ] | [ cluster drop ] } +

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| failaction         | PLB failaction                                  |
| node               | (Optional) PLB failaction node                  |
| reassign           | (Optional) PLB failaction reassign              |
| drop               | (Optional) PLB failaction drop                  |
| cluster            | (Optional) PLB failaction cluster               |

## Command Mode

- /exec/configure/plb

# fast-external-fallover

[no] fast-external-fallover

## Syntax Description

---

### Syntax Description

no (Optional) Negate a command or set its defaults

---

fast-external-fallover Immediately reset the session if the link to a directly connected BGP peer goes down

---

## Command Mode

- /exec/configure/router-bgp

# fast-flood enable

[no] fast-flood enable

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| fast-flood         | Fast flood the LSP's                            |
| enable             | Turn on fast-flooding                           |

## Command Mode

- /exec/configure/otv-isis/otv-isis-vrf-common

# fast-flood enable

[no] fast-flood enable

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| fast-flood         | Fast flood the LSP's                            |
| enable             | Turn on fast-flooding                           |

## Command Mode

- /exec/configure/router-isis/router-isis-vrf-common



# fast-flood interval

[no] fast-flood interval <interval>

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | <i>no</i> (Optional) Negate a command or set its defaults  |
|                           | <i>fast-flood</i> Fast flood the LSP's                     |
|                           | <i>interval</i> Duration/interval of the fast-flood timer. |
|                           | <i>interval</i> Specify the value (ms)                     |

## Command Mode

- /exec/configure/otv-isis/otv-isis-vrf-common

# fast-flood interval

[no] fast-flood interval <interval>

## Syntax Description

|                           |                   |   |
|---------------------------|-------------------|---|
| <b>Syntax Description</b> | <i>no</i>         | (Optional) Negate a command or set its defaults |
|                           | <i>fast-flood</i> | Fast flood the LSP's                            |
|                           | <i>interval</i>   | Duration/interval of the fast-flood timer.      |
|                           | <i>interval</i>   | Specify the value (ms)                          |

## Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

# fast-reload

```
fast-reload { [ nxos <uri> | trigger-gr | save-config | [ non-interruptive | nosrg ] ] + | force-all [ nxos <uri> ] +
} [ override ]
```

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| fast-reload        |  | fast-reload software  |
| nxos               |  | (Optional) boot-variable name                                       |
| <i>uri</i>         |  | (Optional) Enter image uri  |
| non-interruptive   |  | (Optional) Non-Interruptive image upgrade                           |
| nosrg              |  | (Optional) nosrg  |
| override           |  | (Optional) Do fast-reload without impact check                      |
| trigger-gr         |  | (Optional) Enable BGP GR for compatible peers                       |
| save-config        |  | (Optional) Save running-config to startup-config before fast-reload |
| force-all          |  | Force upgrade the system  |

## Command Mode

- /exec

# fast-reroute

[no] fast-reroute | fast-reroute [ node-protect | bw-protect ] +

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | Negate a command or set its defaults     |
| fast-reroute       | Specify mpls tunnel can be fast-rerouted |
| node-protect       | (Optional) node protection desired       |
| bw-protect         | (Optional) bandwidth protection desired  |

## Command Mode

- /exec/configure/if-te /exec/configure/tunnel-te/cbts-member

# fast-reroute backup-prot-preempt optimize-bw

[no] fast-reroute backup-prot-preempt optimize-bw | no fast-reroute timers promotion | fast-reroute timers promotion <seconds>

## Syntax Description

| Syntax Description  |   |  |
|---------------------|---|--|
| no                  | (Optional) Negate a command or set its defaults             |  |
| fast-reroute        | fast-reroute parameters                                     |  |
| backup-prot-preempt | Preemption algorithm for backup tunnels                     |  |
| optimize-bw         | Reduce bandwidth wastage (default: minimize LSPs preempted) |  |
| timers              | configure fast-reroute timer                                |  |
| promotion           | Configure how often we scan for LSP backup promotion        |  |
| <i>seconds</i>      | seconds between promotions (0 disables promotion.)          |  |

## Command Mode

- /exec/configure/te

# feature-set

[no] feature-set <fs>

## Syntax Description

| Syntax Description |                                      |
|--------------------|--------------------------------------|
| no                 | Negate a command or set its defaults |
| feature-set        | Enable feature-set                   |
| fs                 | allow feature-set                    |

## Command Mode

- /exec/configure

# feature-set

feature-set <fs>

## Syntax Description

| Syntax Description |                       |
|--------------------|-----------------------|
| feature-set        | Enable<br>feature-set |
| <i>fs</i>          | allow feature-set     |

## Command Mode

- /exec/configure

# feature

[no] feature <arg1>

## Syntax Description

---

|                           |    |   |
|---------------------------|----|---|
| <b>Syntax Description</b> | no | (Optional) Negate a command or set its defaults |
|---------------------------|----|---|

---

|         |              |
|---------|--------------|
| feature | Feature name |
|---------|--------------|

---

|             |                    |
|-------------|--------------------|
| <i>arg1</i> | Enter feature name |
|-------------|--------------------|

---

## Command Mode

- /exec/configure/rolefeaturegrp



# feature bash-shell

[no] feature bash-shell

## Syntax Description

|                           |            |   |
|---------------------------|------------|---|
| <b>Syntax Description</b> | no         | (Optional) Negate a command or set its defaults |
|                           | feature    | Command to enable/disable features              |
|                           | bash-shell | Enable/Disable bash-shell                       |

## Command Mode

- /exec/configure

# feature bfd

[no] feature bfd

## Syntax Description

---

|                           |    |   |
|---------------------------|----|---|
| <b>Syntax Description</b> | no | (Optional) Negate a command or set its defaults |
|---------------------------|----|---|

---

|         |                                    |
|---------|------------------------------------|
| feature | Command to enable/disable features |
|---------|------------------------------------|

---

|     |     |
|-----|-----|
| bfd | bfd |
|-----|-----|

---

## Command Mode

- /exec/configure

# feature bgp

[no] feature bgp

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| feature            | Command to enable/disable features              |
| bgp                | Enable/Disable Border Gateway Protocol (BGP)    |

## Command Mode

- /exec/configure

# feature container-tracker

[no] feature container-tracker

## Syntax Description

| Syntax Description |                   |   |
|--------------------|-------------------|---|
|                    | no                | (Optional) Negate a command or set its defaults |
|                    | feature           | Command to enable/disable features              |
|                    | container-tracker | Enable/Disable NXOS Container Tracker           |

## Command Mode

- /exec/configure

# feature eigrp

[no] feature eigrp

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

feature Command to enable/disable features

---

eigrp Enable/Disable Enhanced Interior Gateway Routing Protocol (EIGRP)

---

## Command Mode

- /exec/configure

# feature evb

[no] feature evb

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| feature            | Command to enable/disable features              |
| evb                | Enable/Disable Edge Virtual Bridge (EVB)        |

## Command Mode

- /exec/configure

# feature evmed

[no] feature evmed

## Syntax Description

---

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | no (Optional) Negate a command or set its defaults |
|---------------------------|--|

---

|         |                                    |
|---------|------------------------------------|
| feature | Command to enable/disable features |
|---------|------------------------------------|

---

|       |  |
|-------|--|
| evmed | Enable/Disable Generic event detectors |
|-------|--|

---

## Command Mode

- /exec/configure

# feature fabric forwarding

[no] feature fabric forwarding

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults                        |
| feature            | Command to enable/disable features                                     |
| fabric             | Enable/Disable Fabric Services   |
| forwarding         | Enable/Disable Fabric Forwarding Protocol: Host Mobility Manager (HMM) |

## Command Mode

- /exec/configure



# feature interface-vlan

[no] feature interface-vlan

## Syntax Description

| Syntax         | Description                                     |
|----------------|---|
| no             | (Optional) Negate a command or set its defaults |
| feature        | Command to enable/disable features              |
| interface-vlan | Enable/Disable interface vlan                   |

## Command Mode

- /exec/configure

# feature isis

[no] feature isis

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

feature Command to enable/disable features

---

isis Enable/Disable IS-IS Unicast Routing Protocol (IS-IS)

---

## Command Mode

- /exec/configure

# feature lacp

[no] feature lacp

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| feature            | Command to enable/disable features              |
| lacp               | Enable/Disable LACP                             |

## Command Mode

- /exec/configure

# feature ldap

[no] feature ldap

## Syntax Description

---

|                           |    |   |
|---------------------------|----|---|
| <b>Syntax Description</b> | no | (Optional) Negate a command or set its defaults |
|---------------------------|----|---|

---

|         |                                    |
|---------|------------------------------------|
| feature | Command to enable/disable features |
|---------|------------------------------------|

---

|      |                     |
|------|---------------------|
| ldap | Enable/Disable ldap |
|------|---------------------|

---

## Command Mode

- /exec/configure

# feature lldp

[no] feature lldp

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| feature            | Command to enable/disable features              |
| lldp               | Enable/Disable LLDP                             |

## Command Mode

- /exec/configure

# feature msdp

[no] feature msdp

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

feature Command to enable/disable features

---

msdp Enable/Disable Multicast Source Discovery Protocol (MSDP)

---

## Command Mode

- /exec/configure

# feature nat

[no] feature nat

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| feature            | Command to enable/disable features              |
| nat                | Enable/Disable NAT                              |

## Command Mode

- /exec/configure

# feature ntp

[no] feature ntp

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its default |
| feature            | Command to enable/disable features             |
| ntp                | Enable/Disable NTP                             |

## Command Mode

- /exec/configure



# feature nxapi

[no] feature nxapi

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | no (Optional) Negate a command or set its defaults |
|                           | feature Command to enable/disable features         |
|                           | nxapi Enable/Disable nxapi                         |

## Command Mode

- /exec/configure

# feature nxdb

[no] feature nxdb

## Syntax Description

---

|                           |    |   |
|---------------------------|----|---|
| <b>Syntax Description</b> | no | (Optional) Negate a command or set its defaults |
|---------------------------|----|---|

---

|  |         |                                    |
|--|---------|------------------------------------|
|  | feature | Command to enable/disable features |
|--|---------|------------------------------------|

---

|  |      |                     |
|--|------|---------------------|
|  | nxdb | Enable/Disable nxdb |
|--|------|---------------------|

---

## Command Mode

- /exec/configure

# feature nxsdk

[no] feature nxsdk

## Syntax Description

---

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | no (Optional) Negate a command or set its defaults |
|---------------------------|--|

---

|         |                                    |
|---------|------------------------------------|
| feature | Command to enable/disable features |
|---------|------------------------------------|

---

|       |                               |
|-------|-------------------------------|
| nxsdk | Enable/Disable nxsdk Services |
|-------|-------------------------------|

---

## Command Mode

- /exec/configure

# feature ospf

[no] feature ospf

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

feature Command to enable/disable features

---

ospf Enable/Disable Open Shortest Path First Protocol (OSPF)

---

## Command Mode

- /exec/configure

# feature ospfv3

[no] feature ospfv3

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

feature Command to enable/disable features

---

ospfv3 Enable/Disable Open Shortest Path First Version 3 Protocol (OSPFv3)

---

## Command Mode

- /exec/configure

# feature password encryption aes

[no] feature password encryption aes

## Syntax Description

|                           |            |   |
|---------------------------|------------|---|
| <b>Syntax Description</b> | no         | (Optional) Negate a command or set its defaults |
|                           | feature    | Enable the feature                              |
|                           | password   | Credential(s) for the user(s)/device(s)         |
|                           | encryption | Strong encryption for credential(s)             |
|                           | aes        | Encrypt using AES encryption standard           |

## Command Mode

- /exec/configure

# feature pbr

[no] feature pbr

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| feature            | Command to enable/disable features              |
| pbr                | Enable/Disable Policy Based Routing(PBR)        |

## Command Mode

- /exec/configure

# feature pim

[no] feature pim

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

feature Command to enable/disable features

---

pim Enable/Disable Protocol Independent Multicast (PIM)

---

## Command Mode

- /exec/configure



# feature pim6

[no] feature pim6

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

feature Command to enable/disable features

---

pim6 Enable/Disable Protocol Independent Multicast (PIM) for IPv6

---

## Command Mode

- /exec/configure

# feature poap

[no] feature poap

## Syntax Description

|                           |         |   |
|---------------------------|---------|---|
| <b>Syntax Description</b> | no      | (Optional) Negate a command or set its defaults |
|                           | feature | Command to enable/disable features              |
|                           | poap    | Enable/Disable POAP                             |

## Command Mode

- /exec/configure

# feature privilege

[no] feature privilege

## Syntax Description

|                           |           |   |
|---------------------------|-----------|---|
| <b>Syntax Description</b> | no        | (Optional) Negate a command or set its defaults |
|                           | feature   | Command to enable/disable features              |
|                           | privilege | Enable/Disable IOS type privilege level support |

## Command Mode

- /exec/configure

# feature rip

[no] feature rip

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

feature Command to enable/disable features

---

rip Enable/Disable Routing Information Protocol (RIP)

---

## Command Mode

- /exec/configure

# feature rise

[no] feature rise

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| feature            | Command to enable/disable features              |
| rise               | Enable/Disable RISE                             |

## Command Mode

- /exec/configure

# feature scheduler

[no] feature scheduler

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| feature            | Command to enable/disable features              |
| scheduler          | Enable/Disable scheduler                        |

## Command Mode

- /exec/configure

# feature scp-server

[no] feature scp-server

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| feature            | Command to enable/disable features              |
| scp-server         | Enable/Disable SCP server                       |

## Command Mode

- /exec/configure

# feature sftp-server

[no] feature sftp-server

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| feature            | Command to enable/disable features              |
| sftp-server        | Enable/Disable SFTP server                      |

## Command Mode

- /exec/configure



# feature ssh

[no] feature ssh

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| feature            | Command to enable/disable features              |
| ssh                | Enable/Disable ssh                              |

## Command Mode

- /exec/configure

# feature tacacs

[no] feature tacacs +

## Syntax Description

| Syntax  | Description                                     |
|---------|---|
| no      | (Optional) Negate a command or set its defaults |
| feature | Command to enable/disable features              |

## Command Mode

- /exec/configure

# feature telemetry

[no] feature telemetry

## Syntax Description

|                           |           |   |
|---------------------------|-----------|---|
| <b>Syntax Description</b> | no        | (Optional) Negate a command or set its defaults |
|                           | feature   | Command to enable/disable features              |
|                           | telemetry | Enable/Disable Telemetry                        |

## Command Mode

- /exec/configure

# feature telnet

[no] feature telnet

## Syntax Description

---

|                           |    |   |
|---------------------------|----|---|
| <b>Syntax Description</b> | no | (Optional) Negate a command or set its defaults |
|---------------------------|----|---|

---

|         |                                    |
|---------|------------------------------------|
| feature | Command to enable/disable features |
|---------|------------------------------------|

---

|        |                       |
|--------|-----------------------|
| telnet | Enable/Disable telnet |
|--------|-----------------------|

---

## Command Mode

- /exec/configure

# feature vtp

[no] feature vtp

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| feature            | Command to enable/disable features              |
| vtp                | Enable/Disable VTP                              |

## Command Mode

- /exec/configure

# fec

fec <fec\_val> | no fec [ <fec\_val> ]

## Syntax Description

| Syntax Description |                                      |
|--------------------|--------------------------------------|
| no                 | Negate a command or set its defaults |
| fec                | Forwarding error correction          |
| <i>fec_val</i>     | Interface FEC options                |

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-eth-base

# fhrp delay minimum

[no] fhrp delay minimum | fhrp delay minimum <delay>

## Syntax Description

| Syntax Description |         |                                       |
|--------------------|---------|---------------------------------------|
| no                 |         | Negate a command or set its defaults  |
| fhrp               |         | FHRP interface configuration commands |
| delay              |         | Configure FHRP delay                  |
| minimum            | minimum | delay                                 |
| delay              |         | Seconds to delay                      |

## Command Mode

- /exec/configure/if-eth-any /exec/configure/if-vlan

# fhrp delay reload

[no] fhrp delay reload | fhrp delay reload <delay>

## Syntax Description

|                           |              |                                       |
|---------------------------|--------------|---------------------------------------|
| <b>Syntax Description</b> | no           | Negate a command or set its defaults  |
|                           | fhrp         | FHRP interface configuration commands |
|                           | delay        | Configure FHRP delay                  |
|                           | reload       | reload delay                          |
|                           | <i>delay</i> | Seconds to delay                      |

## Command Mode

- /exec/configure/if-eth-any /exec/configure/if-vlan



# fileSYS delete

fileSYS delete <s0>

## Syntax Description

---

|                           |                             |
|---------------------------|-----------------------------|
| <b>Syntax Description</b> | fileSYS file system command |
|---------------------------|-----------------------------|

---

|        |                              |
|--------|------------------------------|
| delete | delete a file on file system |
|--------|------------------------------|

---

|    |           |
|----|-----------|
| s0 | file name |
|----|-----------|

---

## Command Mode

- /exec

# filter

[no] filter [ subject-name <s0> | altname-email <s1> | altname-upn <s2> ]

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults     |
| filter             |            | Configure mapping filter                 |
| subject-name       | (Optional) | Subject name of the certificate          |
| s0                 | (Optional) | Subject name                             |
| altname-email      | (Optional) | Email id as an alternate name            |
| s1                 | (Optional) | Email id                                 |
| altname-upn        | (Optional) | User principal name as an alternate name |
| s2                 | (Optional) | User principal name                      |

## Command Mode

- /exec/configure/certmap-filter

# filter out

[ no | default ] { filter-list <fltrlist-name> } { out | in }

## Syntax Description

| Syntax Description   |            |                                      |
|----------------------|------------|--------------------------------------|
| no                   | (Optional) | Negate a command or set its defaults |
| default              | (Optional) | Inherit values from a peer template  |
| filter-list          |            | Apply AS-PATH filter-list            |
| <i>fltrlist-name</i> |            | Name of filter-list                  |
| out                  |            | Apply policy to outgoing routes      |
| in                   |            | Apply policy to incoming routes      |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-vpnv4
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv4-mdt
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-vpnv6
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-link-state
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-l2vpn-vpls
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv4-mvpn
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv6-mvpn
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-l2vpn-evpn
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv4-label
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv6-label

# find

find <*s0*>

## Syntax Description

---

### Syntax Description

---

**fd** Find a file below the current directory

---

*s0* Enter the filename prefix to search

---

## Command Mode

- /exec

## fips debug errors debug

[no] fips debug errors { debug-lc-post-on-maint | reset-debug-lc-post-on-maint }

### Syntax Description

| Syntax Description           |   |  |
|------------------------------|---|--|
| no                           | (Optional) Negate a command or set its defaults         |  |
| fips                         | Enable/Disable FIPS mode                                |  |
| debug                        | Introduce errors into FIPS tests                        |  |
| errors                       | Introduce errors  |  |
| debug-lc-post-on-maint       | Run the switch on debug mode for fips maintenance state |  |
| reset-debug-lc-post-on-maint | Reset the mode from debug-lc-post-on-maint              |  |

### Command Mode

- /exec/

# fips mode enable

[no] fips mode enable

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| fips               | Enable/Disable FIPS mode                        |
| mode               | FIPS mode                                       |
| enable             | Enable/Disable FIPS mode                        |

## Command Mode

- /exec/configure

# flow exporter

[no] flow exporter <exportername>

## Syntax Description

| Syntax Description  |  |                                      |
|---------------------|--|--------------------------------------|
| flow                |  | Enable/Disable NetFlow configuration |
| exporter            |  | Define a Flow Exporter               |
| <i>exportername</i> |  | Name of Flow Exporter                |

## Command Mode

- /exec/configure

# flow forward

[no] flow { forward | reverse }

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| flow               | Configure ngoam flow                            |
| forward            | Ngoam forward flow                              |
| reverse            | Ngoam reverse flow                              |

## Command Mode

- /exec/configure/configngoamprofile



# flow monitor

[no] flow monitor <monitorname>

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| flow               |  | Enable/Disable NetFlow configuration |
| monitor            |  | Define a Flow Monitor                |
| <i>monitorname</i> |  | Name of Flow Monitor                 |

## Command Mode

- /exec/configure

# flow record

[no] flow record <recordname>

## Syntax Description

| Syntax Description |                   |                                      |
|--------------------|-------------------|--------------------------------------|
|                    | flow              | Enable/Disable NetFlow configuration |
|                    | record            | Define a Flow Record                 |
|                    | <i>recordname</i> | Record name                          |

## Command Mode

- /exec/configure

# flow timeout

```
{ [ no ] flow timeout <time> | no flow timeout }
```

## Syntax Description

|                           |                |   |
|---------------------------|----------------|---|
| <b>Syntax Description</b> | <i>flow</i>    | Enable/Disable NetFlow configuration            |
|                           | <i>timeout</i> | Define a Flow Timeout                           |
|                           | <i>time</i>    | Time in seconds (flush-cache-Only for F2 cards) |

## Command Mode

- /exec/configure

# flow timeout active

{ [ no ] flow timeout active <time> | no flow timeout active }

## Syntax Description

|                           |                |                                      |
|---------------------------|----------------|--------------------------------------|
| <b>Syntax Description</b> | <i>flow</i>    | Enable/Disable NetFlow configuration |
|                           | <i>timeout</i> | Define a Flow Timeout                |
|                           | <i>active</i>  | Active or long timeout               |
|                           | <i>time</i>    | Time in seconds                      |

## Command Mode

- /exec/configure

# flow timeout aggressive threshold

{ [ no ] flow timeout aggressive threshold <percentage> | no flow timeout aggressive }

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| flow               |  | Enable/Disable NetFlow configuration    |
| timeout            |  | Define a Flow Timeout                   |
| aggressive         |  | Aggressive aging                        |
| threshold          |  | Threshold to start the aggressive aging |
| <i>percentage</i>  |  | Percentage of NetFlow Table full        |

## Command Mode

- /exec/configure

# flow timeout fast threshold

```
{ [ no ] flow timeout fast <time> threshold <packets> | no flow timeout fast }
```

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| flow               | Enable/Disable NetFlow configuration                                |
| timeout            | Define a Flow Timeout   |
| fast               | Fast aging timeout  |
| <i>time</i>        | Time in seconds   |
| threshold          | Threshold to start fast aging                                       |
| <i>packets</i>     | Number of packets in flow before timeout for the flow to not expire |

## Command Mode

- /exec/configure

# flow timeout inactive

{ [ no ] flow timeout inactive <time> | no flow timeout inactive }

## Syntax Description

|                           |                 |                                      |
|---------------------------|-----------------|--------------------------------------|
| <b>Syntax Description</b> | <i>flow</i>     | Enable/Disable NetFlow configuration |
|                           | <i>timeout</i>  | Define a Flow Timeout                |
|                           | <i>inactive</i> | inactive or normal timeout           |
|                           | <i>time</i>     | Time in seconds                      |

## Command Mode

- /exec/configure

# flow timeout session

[no] flow timeout session

## Syntax Description

| Syntax Description |                                      |
|--------------------|--------------------------------------|
| flow               | Enable/Disable NetFlow configuration |
| timeout            | Define a Flow Timeout                |
| session            | Enable TCP session aging             |

## Command Mode

- /exec/configure



# flowcontrol hardware

[no] flowcontrol hardware

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| flowcontrol        | Set flow control                                |
| hardware           | Set hardware flowcontrol                        |

## Command Mode

- /exec/configure/com1

# flowcontrol receive

```
flowcontrol { receive { <rx_flowctrl> } | send { <tx_flowctrl> } } | no flowcontrol { receive [ { <rx_flowctrl>
} ] | send [ { <tx_flowctrl> } ] }
```

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| flowcontrol        |  | Configure interface flowcontrol      |
| receive            |  | Receive pause frames                 |
| <i>rx_flowctrl</i> |  | Receive flow control                 |
| send               |  | Send pause frames                    |
| <i>tx_flowctrl</i> |  | Send flow control                    |

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-eth-non-member /exec/configure/if-port-channel

# flush-routes

[no] flush-routes

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| flush-routes       | Flush routes in RIB during restart              |

## Command Mode

- /exec/configure/router-rip

# flush-routes

[no] flush-routes

## Syntax Description

|                           |              |   |
|---------------------------|--------------|---|
| <b>Syntax Description</b> | no           | (Optional) Negate a command or set its defaults |
|                           | flush-routes | Flush routes in RIB upon controlled restart     |

## Command Mode

- /exec/configure/router-bgp

# flush-routes

[no] flush-routes

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults   |
| flush-routes       | Flush routes on a non-graceful controlled restart |

## Command Mode

- /exec/configure/router-ospf

# flush-routes

[no] flush-routes

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| flush-routes       | Flush routes on non-graceful controlled restart |

## Command Mode

- /exec/configure/router-isis

# flush-routes

[no] flush-routes

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults   |
| flush-routes       | Flush routes on a non-graceful controlled restart |

## Command Mode

- /exec/configure/router-ospf3

# flush-routes

[no] flush-routes

## Syntax Description

|                           |              |   |
|---------------------------|--------------|---|
| <b>Syntax Description</b> | no           | (Optional) Negate a command or set its defaults |
|                           | flush-routes | Flush routes in RIB during restart              |

## Command Mode

- /exec/configure/router-eigrp



# follow

follow <name> | no follow

## Syntax Description

---

### Syntax Description

---

no Negate a command or set its defaults

---

follow Group to be followed

---

*name* master name string to follow

---

## Command Mode

- /exec/configure/if-eth-any/hsrp\_ipv4 /exec/configure/if-eth-any/hsrp\_ipv6

## forceshut reset-reason

```
forceshut [ { module <module> | <s0> <santa-cruz-range> | zone <zonenumber> <subzone> } ] reset-reason
<reset_reason_string>
```

### Syntax Description

| Syntax Description         |  |   |
|----------------------------|--|---|
| forceshut                  |  | Force the entire switch to shut down                      |
| module                     |  | (Optional) Optional. Module to be forceshut(optional arg) |
| <i>module</i>              |  | (Optional) please enter the module number                 |
| <i>s0</i>                  |  | (Optional) Power off a specific xbar                      |
| <i>santa-cruz-range</i>    |  | (Optional) please enter the xbar number                   |
| zone                       |  | (Optional) Optional. Zone to be forceshut(optional arg)   |
| <i>zonenumber</i>          |  | (Optional) please enter the zone number                   |
| <i>subzone</i>             |  | (Optional) please enter the subzone number                |
| reset-reason               |  | Shut down (with reset-reason)                             |
| <i>reset_reason_string</i> |  | please enter reset_reason_string in quotes                |

### Command Mode

- /exec

# format bootflash

format bootflash:

## Syntax Description

---

### Syntax Description

---

format    Format disks

---

bootflash:    Format  
bootflash:

---

## Command Mode

- /exec

# format bootflash check-filesystem

format bootflash: check-filesystem

## Syntax Description

---

### Syntax Description

---

|        |              |
|--------|--------------|
| format | Format disks |
|--------|--------------|

---

|            |                   |
|------------|-------------------|
| bootflash: | Format bootflash: |
|------------|-------------------|

---

|                  |   |
|------------------|---|
| check-filesystem | Format bootflash: and fix any errors in file system |
|------------------|---|

---

## Command Mode

- /exec

# format usb1

format usb1:

## Syntax Description

---

### Syntax Description

---

`format` Format disks

---

`usb1:` Format usb1:

---

### Command Mode

- /exec

# format usb2

format usb2:

## Syntax Description

---

### Syntax Description

---

format Format  
disks

---

usb2: Format  
usb2:

---

## Command Mode

- /exec

# forward

[no] forward

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

forward Configure paths

---

## Command Mode

- /exec/configure/mpls\_static/ipv4/lsp/inlabel

# forwarder preempt

[no] forwarder preempt [ delay minimum <min-delay> ]

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| forwarder          | Forwarder Configuration                         |
| preempt            | Overthrow lower priority designated routers     |
| delay              | (Optional) Wait before preempting               |
| minimum            | (Optional) Delay at least this long             |
| <i>min-delay</i>   | (Optional) Number of seconds for minimum delay  |

## Command Mode

- /exec/configure/if-eth-any/glbp



# forwarding-adjacency

[no] forwarding-adjacency | forwarding-adjacency [ holdtime <msec> ]

## Syntax Description

| Syntax Description   |   |
|----------------------|---|
| no                   | Negate a command or set its defaults  |
| forwarding-adjacency | Treat this tunnel as a Forwarding Adjacency                                   |
| holdtime             | (Optional) How long in msec to wait upon flooding a down Forwarding Adjacency |
| msec                 | (Optional) Holdtime on MPLS TE Down   |

## Command Mode

- /exec/configure/if-te

# fragments

[no] fragments <opt\_type>

## Syntax Description

|                           |                 |   |
|---------------------------|-----------------|---|
| <b>Syntax Description</b> | no              | (Optional) Negate a command or set its defaults |
|                           | <i>opt_type</i> | frag_op_type                                    |

## Command Mode

- /exec/configure/ipacl /exec/configure/ipv6acl

# frequency

{ { no | default } frequency | frequency <seconds> }

## Syntax Description

### Syntax Description

---

no

---

default Set a command to its defaults

---

frequency Frequency of an operation

---

seconds Frequency in seconds

---

## Command Mode

- /exec/configure/ip-sla/udp /exec/configure/ip-sla/jitter /exec/configure/ip-sla/tcp /exec/configure/ip-sla/icmpEcho /exec/configure/ip-sla/dns /exec/configure/ip-sla/fabricPathEcho /exec/configure/ip-sla/http

# from to

```
[no] { { from <frm-list> to <to-val> } | { default { <value> | copy | ignore } } }
```

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| from               | Map values from this                            |
| <i>frm-list</i>    | Original list of values which are to be mapped  |
| to                 | Map values to this                              |
| <i>to-val</i>      | New mapped value                                |
| default            | map default values                              |
| <i>value</i>       | default value to be set                         |
| copy               | Do a default copy                               |
| ignore             | Ignore any unspecified values                   |

## Command Mode

- /exec/configure/table-map

# from to

```
{ [ no ] { { from <frm-list> to <to-val> } | { default <value> } } } | default copy
```

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| from               | Map values from this                            |
| <i>frm-list</i>    | Original list of values which are to be mapped  |
| to                 | Map values to this                              |
| <i>to-val</i>      | New mapped value                                |
| default            | map default values                              |
| <i>value</i>       | default value to be set                         |
| copy               | Do a default copy                               |

## Command Mode

- /exec/configure/def-tmap

from to



## G Commands

---

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- [getnext](#), on page 1485
- [global-block](#), on page 1486
- [graceful-restart-helper](#), on page 1487
- [graceful-restart](#), on page 1488
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# generate type7\_encrypted\_secret

generate type7\_encrypted\_secret

## Syntax Description

---

**Syntax Description**

generate generate

---

type7\_encrypted\_secret Type 7 Encrypted Secret

---

## Command Mode

- /exec



# getnext

| getnext

## Syntax Description

---

### Syntax Description

| Pipe command output to filter

---

getnext return next instance instead of specified one, or first instance if none specified (if supported by feature)

---

## Command Mode

- /output

# global-block

[no] global-block <min-srgb-label> <max-srgb-label>

## Syntax Description

|                           |                       |   |
|---------------------------|-----------------------|---|
| <b>Syntax Description</b> | no                    | (Optional) Negate a command or set its defaults         |
|                           | global-block          | Specify global block range for Segment Routing bindings |
|                           | <i>min-srgb-label</i> | Minimum label value                                     |
|                           | <i>max-srgb-label</i> | Maximum label value                                     |

## Command Mode

- /exec/configure/ulib

# graceful-restart-helper

[no] graceful-restart-helper

## Syntax Description

| Syntax Description      |  |
|-------------------------|--|
| no                      | (Optional) Negate a command or set its defaults      |
| graceful-restart-helper | Configure Graceful Restart Helper mode functionality |

## Command Mode

- /exec/configure/router-bgp/vrf-cmds

# graceful-restart

[no] graceful-restart

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| graceful-restart   | Configure Graceful Restart functionality        |

## Command Mode

- /exec/configure/router-bgp/vrf-cmds

# graceful-restart

[no] graceful-restart

## Syntax Description

|                           |                  |   |
|---------------------------|------------------|---|
| <b>Syntax Description</b> | no               | (Optional) Negate a command or set its defaults |
|                           | graceful-restart | Enable graceful restart for IS-IS               |

## Command Mode

- /exec/configure/otv-isis/otv-isis-vrf-common

# graceful-restart

[no] graceful-restart [ planned-only ]

## Syntax Description

---

**Syntax Description**

---

no (Optional) Negate a command or set its defaults

---

graceful-restart Configure graceful restart

---

planned-only (Optional) Enable graceful restart only for a planned restart

---

## Command Mode

- /exec/configure/router-ospf /exec/configure/router-ospf/vrf

# graceful-restart

```
graceful-restart [ timers { forwarding-holding <fwdg-holdtime> | max-recovery <recovery-time> |
neighbor-liveness <peer-liveness-time> } ] | no graceful-restart [ timers { forwarding-holding | max-recovery
| neighbor-liveness } ]
```

## Syntax Description

| Syntax Description        |            |                                      |
|---------------------------|------------|--------------------------------------|
| no                        |            | Negate a command or set its defaults |
| graceful-restart          |            | Configure LDP Graceful Restart       |
| timers                    | (Optional) | Configure Graceful Restart timers    |
| forwarding-holding        | (Optional) | Forwarding State Holding time        |
| <i>fwdg-holdtime</i>      | (Optional) | seconds                              |
| max-recovery              | (Optional) | Max-Recovery time                    |
| <i>recovery-time</i>      | (Optional) | seconds                              |
| neighbor-liveness         | (Optional) | Neighbor-Liveness time               |
| <i>peer-liveness-time</i> | (Optional) | seconds                              |

## Command Mode

- /exec/configure/ldp

# graceful-restart

[no] graceful-restart

## Syntax Description

|                           |                  |   |
|---------------------------|------------------|---|
| <b>Syntax Description</b> | no               | (Optional) Negate a command or set its defaults |
|                           | graceful-restart | Enable graceful restart for IS-IS               |

## Command Mode

- /exec/configure/router-isis/router-isis-vrf-common



# graceful-restart

[no] graceful-restart [ planned-only ]

## Syntax Description

|                           |                  |   |
|---------------------------|------------------|---|
| <b>Syntax Description</b> | no               | (Optional) Negate a command or set its defaults               |
|                           | graceful-restart | Configure graceful restart                                    |
|                           | planned-only     | (Optional) Enable graceful restart only for a planned restart |

## Command Mode

- /exec/configure/router-ospf3 /exec/configure/router-ospf3/vrf

# graceful-restart

```
{ { [ no ] [ eigrp ] graceful-restart } | { [ no ] nsf } }
```

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| eigrp              | (Optional) | EIGRP router configuration commands  |
| graceful-restart   |            | Peer resync without adjacency reset  |
| nsf                |            | Non-stop forwarding                  |

## Command Mode

- /exec/configure/router-eigrp/router-eigrp-vrf-common /exec/configure/router-eigrp/router-eigrp-af-common

# graceful-restart grace-period

[no] graceful-restart grace-period <grace-period>

## Syntax Description

|                           |                     |  |
|---------------------------|---------------------|--|
| <b>Syntax Description</b> | no                  | (Optional) Negate a command or set its defaults  |
|                           | graceful-restart    | Configure graceful restart                       |
|                           | grace-period        | Configure maximum interval to restart gracefully |
|                           | <i>grace-period</i> | Grace period in seconds                          |

## Command Mode

- /exec/configure/router-ospf /exec/configure/router-ospf/vrf

# graceful-restart grace-period

[no] graceful-restart grace-period <grace-period>

## Syntax Description

|                           |                     |  |
|---------------------------|---------------------|--|
| <b>Syntax Description</b> | no                  | (Optional) Negate a command or set its defaults  |
|                           | graceful-restart    | Configure graceful restart                       |
|                           | grace-period        | Configure maximum interval to restart gracefully |
|                           | <i>grace-period</i> | Grace period in seconds                          |

## Command Mode

- /exec/configure/router-ospf3 /exec/configure/router-ospf3/vrf

# graceful-restart helper-disable

[no] graceful-restart helper-disable

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| graceful-restart   | Configure graceful restart                      |
| helper-disable     | Disable helper mode                             |

## Command Mode

- /exec/configure/router-ospf /exec/configure/router-ospf/vrf

# graceful-restart helper-disable

[no] graceful-restart helper-disable

## Syntax Description

|                           |                  |   |
|---------------------------|------------------|---|
| <b>Syntax Description</b> | no               | (Optional) Negate a command or set its defaults |
|                           | graceful-restart | Configure graceful restart                      |
|                           | helper-disable   | Disable helper mode                             |

## Command Mode

- /exec/configure/router-ospf3 /exec/configure/router-ospf3/vrf

# graceful-restart restart-time

graceful-restart restart-time <restart-time> | no graceful-restart restart-time [ <restart-time> ]

## Syntax Description

| Syntax Description  |  |
|---------------------|--|
| no                  | Negate a command or set its defaults         |
| graceful-restart    | Configure Graceful Restart functionality     |
| restart-time        | Maximum time for restart advertised to peers |
| <i>restart-time</i> | Restart time (seconds)                       |

## Command Mode

- /exec/configure/router-bgp/vrf-cmds

# graceful-restart stalepath-time

graceful-restart stalepath-time <stalepath-time> | no graceful-restart stalepath-time [ <stalepath-time> ]

## Syntax Description

| Syntax Description    |   |
|-----------------------|---|
| no                    | Negate a command or set its defaults                  |
| graceful-restart      | Configure Graceful Restart functionality              |
| stalepath-time        | Maximum time to keep a restarting peer's stale routes |
| <i>stalepath-time</i> | Stalepath time (seconds)                              |

## Command Mode

- /exec/configure/router-bgp/vrf-cmds



# graceful-restart t3 manual

graceful-restart t3 manual <sec> | no graceful-restart t3 manual [ <sec> ]

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults         |
| graceful-restart   |  | Enable graceful restart for IS-IS            |
| t3                 |  | Set the T3 (RFC 3847) graceful restart timer |
| manual             |  | Change manually T3 default value             |
| sec                |  | Specify T3 value (secs)                      |

## Command Mode

- /exec/configure/otv-isis/otv-isis-vrf-common

# graceful-restart t3 manual

graceful-restart t3 manual <sec> | no graceful-restart t3 manual [ <sec> ]

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults         |
| graceful-restart   |  | Enable graceful restart for IS-IS            |
| t3                 |  | Set the T3 (RFC 3847) graceful restart timer |
| manual             |  | Change manually T3 default value             |
| <i>sec</i>         |  | Specify T3 value (secs)                      |

## Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

# graceful consistency-check

[no] graceful consistency-check

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| graceful           | Enable graceful features                        |
| consistency-check  | Enable graceful type-1 consistency check        |

## Command Mode

- /exec/configure/vpc-domain

# grep

| { grep | egrep } [ count | ignore-case | line-number | invert-match | word-exp | line-exp | <ctx> | next <num> | prev <num> ] + <expr>

## Syntax Description

### Syntax Description

|              |   |
|--------------|---|
|              | Pipe command output to filter                                       |
| grep         | Grep - print lines matching a pattern                               |
| egrep        | Egrep - print lines matching a pattern                              |
| count        | (Optional) Print a total count of matching lines only               |
| ignore-case  | (Optional) Ignore case difference when comparing strings            |
| line-number  | (Optional) Print each match preceded by its line number             |
| invert-match | (Optional) Print only lines that contain no matches for <expr>      |
| word-exp     | (Optional) Print only lines where the match is a complete word      |
| line-exp     | (Optional) Print only lines where the match is a whole line         |
| ctx          | (Optional) Print <num> lines of context on each side of every match |
| next         | (Optional) Print <num> lines of context after every matching line   |
| prev         | (Optional) Print <num> lines of context before every matching line  |
| num          | (Optional) Print <num> lines of context                             |
| expr         | Search for the expression   |

## Command Mode

- /output

# grep

| { grep | egrep } [ -c | -i | -n | -v | -w | -x | <ctx> | -A <num> | -B <num> ] + <expr>

## Syntax Description

### Syntax Description

| Pipe command output to filter

grep Grep - print lines matching a pattern

egrep Egrep - print lines matching a pattern

-c (Optional) Print a total count of matching lines only

-i (Optional) Ignore case difference when comparing strings

-n (Optional) Print each match preceded by its line number

-v (Optional) Print only lines that contain no matches for <expr>

-w (Optional) Print only lines where the match is a complete word

-x (Optional) Print only lines where the match is a whole line

ctx (Optional) Print <num> lines of context on each side of every match

-A (Optional) Print <num> lines of context after every matching line

-B (Optional) Print <num> lines of context before every matching line

num (Optional) Print <num> lines of context

expr Search for the expression

## Command Mode

- /output

# grep

| { grep | egrep } [ -c | -i | -n | -v | -w | -x | <ctx> | -A <num> | -B <num> ] + [ -- ] <expr>

## Syntax Description

### Syntax Description

|       |   |
|-------|---|
|       | Pipe command output to filter                                       |
| grep  | Grep  |
| egrep | Egrep   |
| -c    | (Optional) Print a total count of matching lines only               |
| -i    | (Optional) Ignore case difference when comparing strings            |
| -n    | (Optional) Print each match preceded by its line number             |
| -v    | (Optional) Print only lines that contain no matches for <expr>      |
| -w    | (Optional) Print only lines where the match is a complete word      |
| -x    | (Optional) Print only lines where the match is a whole line         |
| ctx   | (Optional) Print <num> lines of context on each side of every match |
| -A    | (Optional) Print <num> lines of context after every matching line   |
| -B    | (Optional) Print <num> lines of context before every matching line  |
| num   | (Optional) Print <num> lines of context                             |
| --    | (Optional) --   |
| expr  | Search for the expression   |

## Command Mode

- /output

# guestshell

```
guestshell [ { enable [ { package <enable_uri> } ] } | { upgrade [ { package <upgrade_uri> } ] } | { disable }
| { destroy } | { reboot } | <sync_cmd_name> | { resize { rootfs <gsh_rootfs> | cpu <gsh_cpu> | memory
<gsh_memory> } } | { run { <cmd_args> } } ]
```

## Syntax Description

### Syntax Description

|                      |  |
|----------------------|--|
| guestshell           | Request a guest shell  |
| enable               | (Optional) Enable the guest shell service                                    |
| upgrade              | (Optional) Upgrade the guest shell service package to a different version    |
| disable              | (Optional) Disable the guest shell service package                           |
| destroy              | (Optional) Disable and uninstall the guest shell service package             |
| <i>sync_cmd_name</i> | (Optional) Synchronize the contents of the guest shell to standby supervisor |
| reboot               | (Optional) Deactivate and reactivate the guest shell service                 |
| resize               | (Optional) Resize the existing/default guest shell parameters                |
| rootfs               | (Optional) Resize the guest shell root filesystem to a larger value          |
| <i>gsh_rootfs</i>    | (Optional) New root filesystem size (in MB)                                  |
| cpu                  | (Optional) Resize the system CPU share allocated to guest shell              |
| <i>gsh_cpu</i>       | (Optional) New CPU share allocation (as % of system CPU)                     |
| memory               | (Optional) Resize the system memory allocated to guest shell                 |
| <i>gsh_memory</i>    | (Optional) New memory size (in MB)   |
| package              | (Optional) Package location  |
| <i>enable_uri</i>    | (Optional) File name (with .ova extension) for the virtual service           |
| <i>upgrade_uri</i>   | (Optional) File name (with .ova extension) for the virtual service           |
| run                  | (Optional) Execute/run program in the guest shell                            |
| <i>cmd_args</i>      | (Optional) Executable with optional arguments                                |

## Command Mode

- /exec

# gunzip

gunzip <uri0>

## Syntax Description

---

### Syntax Description

---

*gunzip* Uncompresses LZ77 coded files

---

*uri0* Enter filename (filename must have .gz extension)

---

## Command Mode

- /exec



# gzip

gzip <uri0>

## Syntax Description

---

### Syntax Description

---

gzip Compresses file using LZ77 coding

---

*uri0* Enter filename

---

## Command Mode

- /exec





## H Commands

---

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- [human](#), on page 1605
- [human](#), on page 1606
- [hw-module logging onboard](#), on page 1607
- [hw-module logging onboard](#), on page 1608

## ha-policy single

ha-policy { single-sup <hap-change> | dual-sup <sw-change> } +

### Syntax Description

#### Syntax Description

---

ha-policy    Change HA policy for this VDC

---

*hap-change*    Change HA policy for this VDC

---

single-sup    Change HA policy for this VDC for single-sup situations

---

dual-sup    Change HA policy for this VDC for dual-sup situations

---

*sw-change*    Set hap policy

---

### Command Mode

- /exec/configure/vdc

# ha-stateful

[no] ha-stateful

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ha-stateful        | Enable stateful OSPF HA                         |

## Command Mode

- /exec/configure/router-ospf

# hardware access-list lou resource threshold

[no] hardware access-list lou resource threshold <threshold>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| hardware           | Hardware Internal Information                   |
| access-list        | Access Control List                             |
| lou                | LOU   |
| resource           | hardware resource                               |
| threshold          | port expansion threshold                        |
| <i>threshold</i>   | value of threshold                              |

## Command Mode

- /exec/configure



# hardware access-list match inner-header

[no] hardware access-list match inner-header

## Syntax Description

|                           |              |   |
|---------------------------|--------------|---|
| <b>Syntax Description</b> | no           | (Optional) Negate the command or set its defaults |
|                           | hardware     | Change hardware usage settings                    |
|                           | access-list  | Access Control List                               |
|                           | match        | Match criteria in ACL                             |
|                           | inner-header | Match inner header fields in IPinIP/GRE packets   |

## Command Mode

- /exec/configure

## hardware access-list module

[no] hardware access-list { resource-pooling | resource pooling } module <module-number>

### Syntax Description

| Syntax Description   |   |  |
|----------------------|---|--|
| no                   | (Optional) Negate a command or set its defaults |  |
| hardware             | Show hardware information                       |  |
| access-list          | Access Control List                             |  |
| resource-pooling     | Enable ACL programming across TCAM banks        |  |
| resource             | hardware resource                               |  |
| pooling              | Enable ACL programming across TCAM banks        |  |
| module               | module number                                   |  |
| <i>module-number</i> | specify module number                           |  |

### Command Mode

- /exec/configure

# hardware access-list tcam region

[no] hardware access-list tcam region <type> <tcam\_size>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| hardware           | Hardware Internal Information                   |
| access-list        | Access Control List                             |
| tcam               | Configure tcam parameters                       |
| region             | Configure tcam region                           |
| <i>type</i>        | Region type                                     |
| <i>tcam_size</i>   | Enter tcam size                                 |

## Command Mode

- /exec/configure

# hardware access-list tcam region double-wide

[no] hardware access-list tcam region <double-wide-region> <tcam\_size> double-wide

## Syntax Description

| Syntax Description        |            |                                      |
|---------------------------|------------|--------------------------------------|
| no                        | (Optional) | Negate a command or set its defaults |
| hardware                  |            | Hardware Internal Information        |
| access-list               |            | Access Control List                  |
| tcam                      |            | Configure tcam parameters            |
| region                    |            | Configure tcam region                |
| <i>double-wide-region</i> |            | Region type                          |
| <i>tcam_size</i>          |            | Enter tcam size                      |
| double-wide               |            | Double Width                         |

## Command Mode

- /exec/configure

# hardware access-list tcam region double-wide

[no] hardware access-list tcam region <arp-ether> <arpether\_tcam\_size> double-wide

## Syntax Description

| Syntax Description        |   |  |
|---------------------------|---|--|
| no                        | (Optional) Negate a command or set its defaults |  |
| hardware                  | Hardware Internal Information                   |  |
| access-list               | Access Control List                             |  |
| tcam                      | Configure tcam parameters                       |  |
| region                    | Configure tcam region                           |  |
| <i>arp-ether</i>          | Region type                                     |  |
| <i>arpether_tcam_size</i> | Enter tcam size                                 |  |
| double-wide               | Double Width                                    |  |

## Command Mode

- /exec/configure

## hardware access-list tcam region qualify udf

[no] hardware access-list tcam region <udf\_tcam\_type> qualify { udf | v6udf } { <udf\_name> } +

### Syntax Description

| Syntax Description   |  |  |
|----------------------|--|--|
| no                   | (Optional) Negate the command                  |  |
| hardware             | Change hardware usage settings                 |  |
| access-list          | Access Control List                            |  |
| tcam                 | Configure tcam parameters                      |  |
| region               | Configure tcam region                          |  |
| <i>udf_tcam_type</i> | Region type                                    |  |
| qualify              | Configure UDFs to be qualified for span region |  |
| udf                  | Configure UDF names                            |  |
| v6udf                | Configure IPv6 UDF names                       |  |
| <i>udf_name</i>      | UDF name                                       |  |

### Command Mode

- /exec/configure

# hardware ecmp hash-offset

[no] hardware ecmp hash-offset <value> [ concatenation ]

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults                         |
| hardware           |            | Change hardware usage settings                               |
| ecmp               |            | ECMP configuration   |
| hash-offset        |            | Configure hash offset  |
| <i>value</i>       |            | Hash offset 0-15 non-concatenate mode, 0-63 concatenate mode |
| concatenation      | (Optional) | Configure hash concatenation                                 |

## Command Mode

- /exec/configure

# hardware ecmp hash-polynomial

hardware ecmp hash-polynomial <poly-type> | no hardware ecmp hash-polynomial

## Syntax Description

| Syntax Description |                  |                                      |
|--------------------|------------------|--------------------------------------|
|                    | no               | Negate a command or set its defaults |
|                    | hardware         | Change hardware usage settings       |
|                    | ecmp             | ECMP configuration                   |
|                    | hash-polynomial  | Configure hash polynomial            |
|                    | <i>poly-type</i> | Polynomial type                      |

## Command Mode

- /exec/configure



# hardware ejector enable

[no] hardware ejector enable

## Syntax Description

|                           |          |   |
|---------------------------|----------|---|
| <b>Syntax Description</b> | no       | (Optional) Negate a command or set its defaults                 |
|                           | hardware | Hardware Internal Information                                   |
|                           | ejector  | Card ejector functionality                                      |
|                           | enable   | enabled means when both ejectors are open, card is powered down |

## Command Mode

- /exec/configure

# hardware fan-zone raise-speed

[no] hardware fan-zone <fan\_zone\_id> raise-speed <speed-to-raise>

## Syntax Description

| Syntax Description    |  |  |
|-----------------------|--|--|
| no                    | (Optional) Negate a command or set its defaults            |  |
| hardware              | Hardware Internal Information                              |  |
| fan-zone              | Fan Zone supported in the switch                           |  |
| <i>fan_zone_id</i>    | please enter fan zone id whose speed needs to be increased |  |
| raise-speed           | Speed to be added for current fan zone speed               |  |
| <i>speed-to-raise</i> | please enter additional fan speed                          |  |

## Command Mode

- /exec/configure

# hardware forwarding funcstats clear

hardware forwarding funcstats clear

## Syntax Description

|                           |            |                                    |
|---------------------------|------------|------------------------------------|
| <b>Syntax Description</b> | hardware   | Change hardware usage settings     |
|                           | forwarding | Change forwarding related settings |
|                           | funcstats  | Enable/disable funcstats           |
|                           | clear      | Clear funcstats information        |

## Command Mode

- /exec

# hardware forwarding funcstats disable

hardware forwarding funcstats disable

## Syntax Description

|                           |            |  |
|---------------------------|------------|--|
| <b>Syntax Description</b> | hardware   | Change hardware usage settings         |
|                           | forwarding | Change forwarding related settings     |
|                           | funcstats  | Enable/disable funcstats               |
|                           | disable    | Disable funcstats recording and output |

## Command Mode

- /exec

# hardware forwarding funcstats enable

hardware forwarding funcstats enable

## Syntax Description

|                           |            |                                       |
|---------------------------|------------|---------------------------------------|
| <b>Syntax Description</b> | hardware   | Change hardware usage settings        |
|                           | forwarding | Change forwarding related settings    |
|                           | funcstats  | Enable/disable funcstats              |
|                           | enable     | Enable funcstats recording and output |

## Command Mode

- /exec

# hardware forwarding l3 resource route non-deterministic

[no] hardware forwarding l3 resource route non-deterministic

## Syntax Description

| Syntax Description |             |                                      |
|--------------------|-------------|--------------------------------------|
| no                 | (Optional)  | Negate a command or set its defaults |
| hardware           |             | hardware information                 |
| forwarding         |             | forwarding information               |
| l3                 |             | Layer-3                              |
| resource           |             | hardware resources                   |
| route              |             | TCAM capacity to hold prefixes       |
| non-deterministic  | extend upto | 1M                                   |

## Command Mode

- /exec/configure

# hardware forwarding unicast trace

[no] hardware forwarding unicast trace

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| hardware           | Hardware Internal Information                   |
| forwarding         | Hardware forwarding                             |
| unicast            | Hardware Unicast forwarding                     |
| trace              | Debug traces                                    |

## Command Mode

- /exec/configure

# hardware ip glean throttle

[no] hardware ip glean throttle

## Syntax Description

|                           |          |   |
|---------------------------|----------|---|
| <b>Syntax Description</b> | no       | (Optional) Negate a command or set its defaults |
|                           | hardware | Hardware information                            |
|                           | ip       | IP  |
|                           | glean    | Glean   |
|                           | throttle | Throttle  |

## Command Mode

- /exec/configure



# hardware ip glean throttle maximum

{ hardware ip glean throttle maximum <count> } | { no hardware ip glean throttle maximum }

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| hardware           |  | Hardware information                 |
| ip                 |  | IP                                   |
| glean              |  | Glean                                |
| throttle           |  | Throttle                             |
| maximum            |  | Maximum number of entries            |
| <i>count</i>       |  | Count                                |

## Command Mode

- /exec/configure

# hardware ip glean throttle syslog

{ hardware ip glean throttle syslog <pkt-count> } | { no hardware ip glean throttle syslog }

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults                         |
| hardware           |  | Hardware information   |
| ip                 |  | IP   |
| glean              |  | Glean  |
| throttle           |  | Throttle   |
| syslog             |  | Threshold for syslog for number of packets hitting the entry |
| <i>pkt-count</i>   |  | Packet count   |

## Command Mode

- /exec/configure

# hardware ip glean throttle timeout

{ hardware ip glean throttle timeout <timeout-in-sec> } | { no hardware ip glean throttle timeout }

## Syntax Description

### Syntax Description

|                       |   |
|-----------------------|---|
| no                    | Negate a command or set its defaults  |
| hardware              | Hardware information  |
| ip                    | IP  |
| glean                 | Glean   |
| throttle              | Throttle  |
| timeout               | Timeout   |
| <i>timeout-in-sec</i> | Timeout value in seconds (should be multiple of 30, else will be rounded off to nearest boundary) |

### Command Mode

- /exec/configure

# hardware ipv6 glean throttle

[no] hardware ipv6 glean throttle

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| hardware           | Hardware information                            |
| ipv6               | IPv6  |
| glean              | Glean   |
| throttle           | Throttle  |

## Command Mode

- /exec/configure

# hardware ipv6 glean throttle maximum

{ hardware ipv6 glean throttle maximum <count> } | { no hardware ipv6 glean throttle maximum }

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| hardware           |  | Hardware information                 |
| ipv6               |  | IPv6                                 |
| glean              |  | Glean                                |
| throttle           |  | Throttle                             |
| maximum            |  | Maximum number of entries            |
| <i>count</i>       |  | Count                                |

## Command Mode

- /exec/configure

# hardware ipv6 glean throttle syslog

```
{ hardware ipv6 glean throttle syslog <pkt-count> } | { no hardware ipv6 glean throttle syslog }
```

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults                         |
| hardware           |  | Hardware information   |
| ipv6               |  | IPv6   |
| glean              |  | Glean  |
| throttle           |  | Throttle   |
| syslog             |  | Threshold for syslog for number of packets hitting the entry |
| <i>pkt-count</i>   |  | Packet count   |

## Command Mode

- /exec/configure

# hardware ipv6 glean throttle timeout

{ hardware ipv6 glean throttle timeout <timeout-in-sec> } | { no hardware ipv6 glean throttle timeout }

## Syntax Description

### Syntax Description

|                       |   |
|-----------------------|---|
| no                    | Negate a command or set its defaults  |
| hardware              | Hardware information  |
| ipv6                  | IPv6  |
| glean                 | Glean   |
| throttle              | Throttle  |
| timeout               | Timeout   |
| <i>timeout-in-sec</i> | Timeout value in seconds (should be multiple of 30, else will be rounded off to nearest boundary) |

### Command Mode

- /exec/configure

# hardware module boot-order reverse

[no] hardware module boot-order reverse

## Syntax Description

|                           |            |   |
|---------------------------|------------|---|
| <b>Syntax Description</b> | no         | (Optional) Negate a command or set its defaults |
|                           | hardware   | Hardware Internal Information                   |
|                           | module     | applies on all the modules                      |
|                           | boot-order | Configure order of module power-up              |
|                           | reverse    | reverse order of module power-up                |

## Command Mode

- /exec/configure



# hardware profile buffer info poll-interval timer

[no] hardware profile buffer info poll-interval [ module <module> ] timer <msec>

## Syntax Description

| Syntax Description |            |                                       |
|--------------------|------------|---------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults  |
| hardware           |            | Change hardware usage settings        |
| profile            |            | profile settings                      |
| buffer             |            | System buffer                         |
| info               |            | Information                           |
| poll-interval      |            | System buffer status polling interval |
| module             | (Optional) | Slot/module                           |
| <i>module</i>      | (Optional) | Slot/module number                    |
| timer              |            | Polling timer                         |
| <i>msec</i>        |            | Polling timer value in msec           |

## Command Mode

- /exec/configure

# hardware profile buffer info port-threshold threshold

[no] hardware profile buffer info port-threshold [ module <module> ] threshold <value>

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults   |
| hardware           |            | Change hardware usage settings         |
| profile            |            | profile settings                       |
| buffer             |            | System buffer                          |
| info               |            | Information                            |
| port-threshold     |            | Set port egress buffer usage threshold |
| module             | (Optional) | Slot/module                            |
| <i>module</i>      | (Optional) | Slot/module number                     |
| threshold          |            | threshold value                        |
| <i>value</i>       |            | percentage of maximum usage            |

## Command Mode

- /exec/configure

# hardware profile ecmp auto-recovery threshold

hardware profile ecmp auto-recovery threshold <percentage> | no hardware profile ecmp auto-recovery threshold

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults                   |
| hardware           |  | Change hardware usage settings                         |
| profile            |  | profile settings                                       |
| ecmp               |  | ECMP settings  |
| auto-recovery      |  | ECMP auto-recovery settings                            |
| threshold          |  | ECMP table free percentage threshold for auto-recovery |
| <i>percentage</i>  |  | Percentage   |

## Command Mode

- /exec/configure

# hardware profile ecmp resilient

[no] hardware profile ecmp resilient

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| hardware           | Change hardware usage settings                  |
| profile            | profile settings                                |
| ecmp               | ECMP settings                                   |
| resilient          | Configure ECMP resilient mode                   |

## Command Mode

- /exec/configure

# hardware profile front portmode

hardware profile front portmode <port-mode> | no hardware profile front portmode

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| hardware           |  | Change hardware usage settings       |
| profile            |  | profile settings                     |
| front              |  | port 1 QSFP/SFP+ settings            |
| portmode           |  | QSFP or SFP+                         |
| <i>port-mode</i>   |  | Configure QSFP/sfp+ port mode        |

## Command Mode

- /exec/configure

## hardware profile ipv6 alpm carve-value

[no] hardware profile ipv6 alpm carve-value <ipv6\_alpm\_carve\_value>

### Syntax Description

| Syntax Description           |            |                                |
|------------------------------|------------|--------------------------------|
| no                           | (Optional) | Negate the command             |
| hardware                     |            | Change hardware usage settings |
| profile                      |            | profile settings               |
| ipv6                         |            | ipv6                           |
| alpm                         |            | alpm mode                      |
| carve-value                  |            | carve value                    |
| <i>ipv6_alpm_carve_value</i> |            | maximum entries                |

### Command Mode

- /exec/configure

# hardware profile ipv6 lpm-entries maximum

[no] hardware profile ipv6 lpm-entries maximum <ipv6\_lpm\_max\_entry>

## Syntax Description

| Syntax Description        |            |                                |
|---------------------------|------------|--------------------------------|
| no                        | (Optional) | Negate the command             |
| hardware                  |            | Change hardware usage settings |
| profile                   |            | profile settings               |
| ipv6                      |            | ipv6                           |
| lpm-entries               |            | lpm(non-host) entries          |
| maximum                   |            | maximum limit                  |
| <i>ipv6_lpm_max_entry</i> |            | maximum entries                |

## Command Mode

- /exec/configure

## hardware profile multicast max-limit

{ hardware profile multicast max-limit <mcast-ent> } | { no hardware profile multicast max-limit }

### Syntax Description

| Syntax Description |  |                                     |
|--------------------|--|-------------------------------------|
| no                 |  | Negate the command                  |
| hardware           |  | Change hardware usage settings      |
| profile            |  | profile settings                    |
| multicast          |  | Multicast settings                  |
| max-limit          |  | maximum limit for multicast entries |
| <i>mcast-ent</i>   |  | Mcast Table Entries                 |

### Command Mode

- /exec/configure



## hardware profile multicast max-limit lpm-entries

[no] hardware profile multicast max-limit lpm-entries <ipv4\_mcast\_lpm\_max\_entry>

### Syntax Description

| Syntax Description              |                                     |  |
|---------------------------------|-------------------------------------|--|
| no                              | (Optional) Negate the command       |  |
| hardware                        | Change hardware usage settings      |  |
| profile                         | profile settings                    |  |
| multicast                       | Multicast settings                  |  |
| max-limit                       | maximum limit for multicast entries |  |
| lpm-entries                     | lpm(non-host) entries               |  |
| <i>ipv4_mcast_lpm_max_entry</i> | maximum entries                     |  |

### Command Mode

- /exec/configure

# hardware profile multicast prefer-source-tree

[no] hardware profile multicast prefer-source-tree [ eternity [ limit <max-limit> ] ]

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate the command   |
| hardware           |            | Change hardware usage settings                             |
| profile            |            | profile settings   |
| multicast          |            | Multicast settings   |
| prefer-source-tree |            | prefer the source tree                                     |
| eternity           | (Optional) | prefer source tree for eternity and not for just 2 minutes |
| limit              | (Optional) | Configure a limit for the number of hardware entries used  |
| <i>max-limit</i>   | (Optional) | Number of (S,G) for which source tree is preferred         |

## Command Mode

- /exec/configure

# hardware profile multicast syslog-threshold

[no] hardware profile multicast syslog-threshold <percentage>

## Syntax Description

| Syntax Description |            |                                |
|--------------------|------------|--------------------------------|
| no                 | (Optional) | Negate the command             |
| hardware           |            | Change hardware usage settings |
| profile            |            | profile settings               |
| multicast          |            | Multicast settings             |
| syslog-threshold   |            | MROUTE table syslog threshold  |
| <i>percentage</i>  |            | Percentage (Default is 90)     |

## Command Mode

- /exec/configure

# hardware profile openflow

```
[no] hardware profile { openflow [ agent default { drop | normal } ] | { tap-aggregation [ l2drop ] } }
```

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate the command   |
| hardware           |            | Hardware Internal Information                                |
| profile            |            | Profile  |
| openflow           |            | Openflow   |
| tap-aggregation    |            | Tap Aggregation  |
| l2drop             | (Optional) | Drop non IP traffic ingress on mode tap interfaces           |
| agent              | (Optional) | Act as Openflow Agent  |
| default            | (Optional) | Specify default action for frames which don't match any flow |
| drop               | (Optional) | Drop all frames that miss MAC                                |
| normal             | (Optional) | [default]Flood unknown traffic                               |

## Command Mode

- /exec/configure

# hardware profile pfc mmu buffer-reservation

[no] hardware profile pfc mmu buffer-reservation <percentage>

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 | (Optional) Negate the command                    |  |
| hardware           | Hardware Internal Information                    |  |
| profile            | profile settings                                 |  |
| pfc                | System level priority-flow-control settings      |  |
| mmu                | Hardware memory management unit configuration    |  |
| buffer-reservation | Shared pool buffer reservation                   |  |
| <i>percentage</i>  | Percentage of shared pool buffers to be reserved |  |

## Command Mode

- /exec/configure

# hardware profile portmode

{ hardware profile portmode <port-mode> [ 2-tuple ] } | no hardware profile portmode

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults                               |
| hardware           |  | Change hardware usage settings                                     |
| profile            |  | profile settings   |
| portmode           |  | QSFP port mode setting   |
| <i>port-mode</i>   |  | Configure QSFP port mode   |
| 2-tuple            |  | (Optional) Display QSFP portnames in 2-tuple mode even in 10G mode |

## Command Mode

- /exec/configure

## hardware profile tcam ipv6-sup-tcam match-inner

```
{ hardware profile tcam ipv6-sup-tcam match-inner } | { no hardware profile tcam ipv6-sup-tcam match-inner }
}
```

### Syntax Description

#### Syntax Description

|               |  |
|---------------|--|
| no            | Negate a command or set its defaults   |
| hardware      | Change hardware usage settings         |
| profile       | Profile settings                       |
| tcam          | Configure tcam parameters              |
| ipv6-sup-tcam | IPv6 SUP TCAM parameters               |
| match-inner   | match inner payload for tunnel packets |

### Command Mode

- /exec/configure

## hardware profile tcam region

```
[no] hardware profile tcam region { <tcam_compat_type> <tcam_compat_size> | ifacl <tcam_compat_size>
[ double-wide ] }
```

### Syntax Description

| Syntax Description      |            |                                      |
|-------------------------|------------|--------------------------------------|
| no                      | (Optional) | Negate a command or set its defaults |
| hardware                |            | Hardware Internal Information        |
| profile                 |            | profile                              |
| tcam                    |            | Configure tcam parameters            |
| region                  |            | Configure tcam region                |
| ifacl                   |            | IPV4 PAACL size                      |
| double-wide             | (Optional) | Configure tcam as double wide        |
| <i>tcam_compat_type</i> |            |                                      |
| <i>tcam_compat_size</i> |            | Enter tcam size                      |

### Command Mode

- /exec/configure



# hardware profile tcam region span qualify udf

[no] hardware profile tcam region span qualify udf { <udf\_name> } +

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate the command                  |
| hardware           | Change hardware usage settings                 |
| profile            | Profile settings                               |
| tcam               | Configure tcam parameters                      |
| region             | Configure tcam region                          |
| span               | Configure for span region                      |
| qualify            | Configure UDFs to be qualified for span region |
| udf                | Configure UDF names                            |
| <i>udf_name</i>    | UDF name                                       |

## Command Mode

- /exec/configure

# hardware profile tcam region spanv6-l2 qualify udf

[no] hardware profile tcam region spanv6-l2 qualify udf { <udf\_name> } +

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate the command                  |
| hardware           | Change hardware usage settings                 |
| profile            | Profile settings                               |
| tcam               | Configure tcam parameters                      |
| region             | Configure tcam region                          |
| spanv6-l2          | Configure for span region                      |
| qualify            | Configure UDFs to be qualified for span region |
| udf                | Configure UDF names                            |
| <i>udf_name</i>    | UDF name                                       |

## Command Mode

- /exec/configure

# hardware profile tcam region spanv6 qualify udf

[no] hardware profile tcam region spanv6 qualify udf { <udf\_name> } +

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate the command                  |
| hardware           | Change hardware usage settings                 |
| profile            | Profile settings                               |
| tcam               | Configure tcam parameters                      |
| region             | Configure tcam region                          |
| spanv6             | Configure for span region                      |
| qualify            | Configure UDFs to be qualified for span region |
| udf                | Configure UDF names                            |
| <i>udf_name</i>    | UDF name                                       |

## Command Mode

- /exec/configure

# hardware profile tcam resource service-template

[no] hardware profile tcam resource service-template { <name> } [ module { <lc> | <fm> } ]

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| hardware           | Change hardware usage settings                  |  |
| profile            | Profile settings                                |  |
| tcam               | Configure tcam parameters                       |  |
| resource           | Configure tcam hardware resources               |  |
| service-template   | Commit template                                 |  |
| <i>name</i>        | Select name of template                         |  |
| module             | (Optional) Specify a module number              |  |
| <i>lc</i>          | (Optional) line card number                     |  |
| <i>fm</i>          | (Optional) fabric module number                 |  |

## Command Mode

- /exec/configure handle auto 424

# hardware profile tcam resource template

```
[no] hardware profile tcam resource template { <name> { ref-template <temp-nontahoe> | ref-template-tahoe
<temp-tahoe> } }
```

## Syntax Description

| Syntax Description   |  |  |
|----------------------|--|--|
| no                   | (Optional) Negate a command or set its defaults  |  |
| hardware             | Change hardware usage settings                   |  |
| profile              | Profile settings                                 |  |
| tcam                 | Configure tcam parameters                        |  |
| resource             | Configure tcam hardware resources                |  |
| template             | Configure template based tcam carving parameters |  |
| ref-template         | Select a default template as reference           |  |
| <i>temp-nontahoe</i> |  |  |
| ref-template-tahoe   | Select a default template as reference           |  |
| <i>temp-tahoe</i>    |  |  |
| <i>name</i>          | Create/Select name of custom template            |  |

## Command Mode

- /exec/configure

## hardware profile ucast6 lpm-65-to-127-max-limit

```
{ hardware profile ucast6 lpm-65-to-127-max-limit <unicast-ent> } | { no hardware profile ucast6 lpm-65-to-127-max-limit }
```

### Syntax Description

| Syntax Description      |  |  |
|-------------------------|--|--|
| no                      |  | Negate the command   |
| hardware                |  | Change hardware usage settings                                       |
| profile                 |  | profile settings   |
| ucast6                  |  | unicast ipv6 settings  |
| lpm-65-to-127-max-limit |  | maximum limit for unicast ipv6 lpm-65-to-127 entries, default is 256 |
| <i>unicast-ent</i>      |  | Unicast ipv6 lpm-65-to-127 Table Entries                             |

### Command Mode

- /exec/configure

# hardware profile ucast6 max-limit

{ hardware profile ucast6 max-limit <unicast-ent> } | { no hardware profile ucast6 max-limit }

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate the command                     |
| hardware           |  | Change hardware usage settings         |
| profile            |  | profile settings                       |
| ucast6             |  | unicast ipv6 settings                  |
| max-limit          |  | maximum limit for unicast ipv6 entries |
| <i>unicast-ent</i> |  | Unicast ipv6 Table Entries             |

## Command Mode

- /exec/configure

# hardware profile unicast enable-host-ecmp

[no] hardware profile unicast enable-host-ecmp [ arp-nd | [ ipv4 [ arp ] ] | [ ipv6 [ nd ] ] ]

## Syntax Description

| Syntax Description |            |   |
|--------------------|------------|---|
| no                 | (Optional) | Negate the command  |
| hardware           |            | Change hardware usage settings                            |
| profile            |            | profile settings  |
| unicast            |            | Unicast settings  |
| enable-host-ecmp   |            | Enable ECMP support for /32 (IPv4) and /128 (IPv6) routes |
| ipv4               | (Optional) | Enable ECMP support for /32 (IPv4 Only) Routes            |
| ipv6               | (Optional) | Enable ECMP support for /128 (IPv6 Only) Routes           |
| arp-nd             | (Optional) | Retain ARP (IPv4) and ND (IPv6) Routes in Host-Table      |
| arp                | (Optional) | Retain ARP Entries in Host-Table                          |
| nd                 | (Optional) | Retain ND Entries in Host-Table                           |

## Command Mode

- /exec/configure



# hardware profile unicast syslog-threshold

```
{ hardware profile unicast syslog-threshold <percentage> } | { no hardware profile unicast syslog-threshold }  
}
```

## Syntax Description

| Syntax Description |                   |                                      |
|--------------------|-------------------|--------------------------------------|
|                    | no                | Negate the command                   |
|                    | hardware          | Change hardware usage settings       |
|                    | profile           | profile settings                     |
|                    | unicast           | Unicast settings                     |
|                    | syslog-threshold  | Unicast Route table syslog threshold |
|                    | <i>percentage</i> | Percentage                           |

## Command Mode

- /exec/configure

# hardware sample-redirect module redirect-interface

hardware sample-redirect module <num> redirect-interface <interface>

## Syntax Description

| Syntax Description |                                       |  |
|--------------------|---------------------------------------|--|
| hardware           | Change hardware usage settings        |  |
| sample-redirect    | Redirect netflow sampled data         |  |
| module             | Line card module                      |  |
| <i>num</i>         | slot number                           |  |
| redirect-interface | Interface for redirecting the traffic |  |
| <i>interface</i>   | Interface Name                        |  |

## Command Mode

- /exec

# head

| head [ -n <lines> ]

## Syntax Description

---

### Syntax Description

---

| Pipe command output to filter

---

head Display first lines

---

-n (Optional) modify number of lines (default 10)

---

*lines* (Optional) number of lines to print

---

## Command Mode

- /output

# hello-interval

```
{ { hello-interval <interval> } | { no hello-interval [ <interval> ] } }
```

## Syntax Description

|                           |                 |                                      |
|---------------------------|-----------------|--------------------------------------|
| <b>Syntax Description</b> | no              | Negate a command or set its defaults |
|                           | hello-interval  | Hello interval                       |
|                           | <i>interval</i> | (seconds)                            |

## Command Mode

- /exec/configure/router-ospf/router-ospf-vlink /exec/configure/router-ospf/vrf/router-ospf-vlink

# hello-interval

```
{ { hello-interval <interval> } | { no hello-interval [ <interval> ] } }
```

## Syntax Description

|                           |                 |                                      |
|---------------------------|-----------------|--------------------------------------|
| <b>Syntax Description</b> | no              | Negate a command or set its defaults |
|                           | hello-interval  | Hello interval                       |
|                           | <i>interval</i> | (seconds)                            |

## Command Mode

- /exec/configure/router-ospf/vrf/router-ospf-slink

# hello-interval

```
{ { hello-interval <interval> } | { no hello-interval [ <interval> ] } }
```

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| hello-interval     |  | Hello interval                       |
| <i>interval</i>    |  | (seconds)                            |

## Command Mode

- /exec/configure/router-ospf3/router-ospf3-vlink /exec/configure/router-ospf3/vrf/router-ospf3-vlink

# hex

hex <expr>

## Syntax Description

---

### Syntax Description

---

hex calculator with results in decimal format

---

*expr* the expression to compute (integer arithmetics)

---

## Command Mode

- /exec

# history

```
{ no | default } history { { buckets-kept } | { distributions-of-statistics-kept } | { enhanced [ interval [
<interval-seconds> [ buckets [ <num-buckets> ] ] ] ] } | { filter } | { hours-of-statistics-kept } | { lives-kept }
| { statistics-distribution-interval } }
```

## Syntax Description

### Syntax Description

|                                  |  |
|----------------------------------|--|
| no                               |  |
| <i>interval</i>                  | (Optional) buckets   |
| default                          | Set a command to its defaults                                |
| history                          | History and Distribution Data                                |
| buckets-kept                     | Maximum number of history buckets to collect                 |
| distributions-of-statistics-kept | Maximum number of statistics distribution buckets to capture |
| enhanced                         | Enable enhanced history collection                           |
| <i>interval-seconds</i>          | (Optional) Interval in seconds                               |
| buckets                          | (Optional) Number of buckets to collect data                 |
| <i>num-buckets</i>               | (Optional) Number of buckets                                 |
| filter                           | Add operation to History when...                             |
| hours-of-statistics-kept         | Maximum number of statistics hour groups to capture          |
| lives-kept                       | Maximum number of history lives to collect                   |
| statistics-distribution-interval | Statistics distribution interval size                        |

## Command Mode

- /exec/configure/ip-sla/udp /exec/configure/ip-sla/tcp /exec/configure/ip-sla/icmpEcho



# history

```
history { { buckets-kept <num-buckets-kept> } | { distributions-of-statistics-kept <num-dist-stats> } | {
enhanced [ interval [ <interval-seconds> [ buckets [ <num-buckets> ] ] ] ] | { filter { all | failures | none |
overThreshold } } } | { hours-of-statistics-kept <num-hours-of-stats> } | { lives-kept <life-size-value> } | {
statistics-distribution-interval <dist-interval> } }
```

## Syntax Description

| Syntax Description               |  |  |
|----------------------------------|--|--|
| <i>interval</i>                  | (Optional) buckets   |  |
| <i>interval-seconds</i>          | (Optional) <num-buckets>                                     |  |
| <i>life-size-value</i>           | <dist-interval>  |  |
| history                          | History and Distribution Data                                |  |
| buckets-kept                     | Maximum number of history buckets to collect                 |  |
| <i>num-buckets-kept</i>          | Bucket size value (default 15)                               |  |
| distributions-of-statistics-kept | Maximum number of statistics distribution buckets to capture |  |
| <i>num-dist-stats</i>            | Distribution bucket size value (default 1)                   |  |
| enhanced                         | Enable enhanced history collection                           |  |
| buckets                          | (Optional) Number of buckets to collect data                 |  |
| <i>num-buckets</i>               | (Optional) Number of buckets                                 |  |
| filter                           | Add operation to History when...                             |  |
| all                              | Collect every operation in History                           |  |
| failures                         | Collect operations that fail in History                      |  |
| none                             | Shutoff History collection                                   |  |
| overThreshold                    | Collect operations that are over threshold in History        |  |
| hours-of-statistics-kept         | Maximum number of statistics hour groups to capture          |  |
| <i>num-hours-of-stats</i>        | Hour groups size value (default 2)                           |  |
| lives-kept                       | Maximum number of history lives to collect                   |  |
| statistics-distribution-interval | Statistics distribution interval size                        |  |
| <i>dist-interval</i>             | Distribution interval value in msec (default 20)             |  |

## Command Mode

- /exec/configure/ip-sla/udp /exec/configure/ip-sla/tcp /exec/configure/ip-sla/icmpEcho

# history

```
{ no | default } history { { buckets-kept } | { distributions-of-statistics-kept } | { filter } | {
hours-of-statistics-kept } | { lives-kept } | { statistics-distribution-interval } }
```

## Syntax Description

### Syntax Description

|                                  |  |
|----------------------------------|--|
| no                               |  |
| default                          | Set a command to its defaults                                |
| history                          | History and Distribution Data                                |
| buckets-kept                     | Maximum number of history buckets to collect                 |
| distributions-of-statistics-kept | Maximum number of statistics distribution buckets to capture |
| filter                           | Add operation to History when...                             |
| hours-of-statistics-kept         | Maximum number of statistics hour groups to capture          |
| lives-kept                       | Maximum number of history lives to collect                   |
| statistics-distribution-interval | Statistics distribution interval size                        |

## Command Mode

- /exec/configure/ip-sla/dns /exec/configure/ip-sla/fabricPathEcho /exec/configure/ip-sla/http

# history

```
history { { buckets-kept <num-buckets-kept> } | { distributions-of-statistics-kept <num-dist-stats> } | { filter
{ all | failures | none | overThreshold } } | { hours-of-statistics-kept <num-hours-of-stats> } | { lives-kept
<life-size-value> } | { statistics-distribution-interval <dist-interval> } }
```

## Syntax Description

| Syntax Description                      |   |
|---|---|
| <i>dist-interval</i>                    | <num-buckets-kept>                                    |
| <i>num-hours-of-stats</i>               | <life-size-value>                                     |
| <i>distributions-of-statistics-kept</i> | hours-of-statistics-kept                              |
| <i>statistics-distribution-interval</i> |   |
| history                                 | History and Distribution Data                         |
| buckets-kept                            | Maximum number of history buckets to collect          |
| <i>num-buckets-kept</i>                 | Bucket size value (default 15)                        |
| <i>num-dist-stats</i>                   | Distribution bucket size value (default 1)            |
| filter                                  | Add operation to History when...                      |
| all                                     | Collect every operation in History                    |
| failures                                | Collect operations that fail in History               |
| none                                    | Shutoff History collection                            |
| overThreshold                           | Collect operations that are over threshold in History |
| hours-of-statistics-kept                | Maximum number of statistics hour groups to capture   |
| lives-kept                              | Maximum number of history lives to collect            |
| <i>life-size-value</i>                  | Life size value (default 0)                           |

## Command Mode

- /exec/configure/ip-sla/dns /exec/configure/ip-sla/fabricPathEcho /exec/configure/ip-sla/http

# history

```
{ no | default } history { { distributions-of-statistics-kept } | { enhanced [ interval [ <interval-seconds> [ buckets [ <num-buckets> ] ] ] ] } | { hours-of-statistics-kept } | { statistics-distribution-interval } }
```

## Syntax Description

### Syntax Description

|   |   |
|---|---|
| no                                      |   |
| <i>interval</i>                         | (Optional) buckets                                  |
| <i>distributions-of-statistics-kept</i> | hours-of-statistics-kept                            |
| <i>statistics-distribution-interval</i> |   |
| default                                 | Set a command to its defaults                       |
| history                                 | History and Distribution Data                       |
| enhanced                                | Enable enhanced history collection                  |
| <i>interval-seconds</i>                 | (Optional) Interval in seconds                      |
| buckets                                 | (Optional) Number of buckets to collect data        |
| <i>num-buckets</i>                      | (Optional) Number of buckets                        |
| hours-of-statistics-kept                | Maximum number of statistics hour groups to capture |

## Command Mode

- /exec/configure/ip-sla/jitter

# history

```
history { { distributions-of-statistics-kept <num-dist-stats> } | { enhanced [ interval [ <interval-seconds> [
buckets [ <num-buckets> ] ] ] ] } | { hours-of-statistics-kept <num-hours-of-stats> } | {
statistics-distribution-interval <dist-interval> } }
```

## Syntax Description

| Syntax Description               |  |  |
|----------------------------------|--|--|
| <i>interval</i>                  | (Optional) buckets   |  |
| <i>num-buckets</i>               | (Optional) <num-hours-of-stats>                              |  |
| <i>enhanced</i>                  | hours-of-statistics-kept                                     |  |
| history                          | History and Distribution Data                                |  |
| distributions-of-statistics-kept | Maximum number of statistics distribution buckets to capture |  |
| <i>num-dist-stats</i>            | Distribution bucket size value (default 1)                   |  |
| <i>interval-seconds</i>          | (Optional) Interval in seconds                               |  |
| buckets                          | (Optional) Number of buckets to collect data                 |  |
| hours-of-statistics-kept         | Maximum number of statistics hour groups to capture          |  |
| <i>num-hours-of-stats</i>        | Hour groups size value (default 2)                           |  |
| statistics-distribution-interval | Statistics distribution interval size                        |  |
| <i>dist-interval</i>             | Distribution interval value in msec (default 20)             |  |

## Command Mode

- /exec/configure/ip-sla/jitter

# history buffer

```
[no] history buffer [ { size [ <onep-historysize> [ purge <historypurge> ] ] } | { purge <historypurge> [ size <onep-historysize> ] } | { session [ <appname-str> ] } ]
```

## Syntax Description

| Syntax Description      |            |  |
|-------------------------|------------|--|
| no                      | (Optional) | Negate a command or set its defaults       |
| history                 |            | One Platform history trails                |
| buffer                  |            | In memory buffering of API history trails  |
| session                 | (Optional) | Session history filter                     |
| <i>appname-str</i>      | (Optional) | Full or partial session name               |
| size                    | (Optional) | History buffer size in bytes               |
| <i>onep-historysize</i> | (Optional) | Bytes (default: 32768)                     |
| purge                   | (Optional) | Purge the oldest or newest session history |
| <i>historypurge</i>     | (Optional) | Purge session history                      |

## Command Mode

- /exec/configure/onep

# history syslog

[no] history syslog

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | no (Optional) Negate a command or set its defaults |
|                           | history One Platform history trails                |
|                           | syslog Enable the API history trails to syslog     |

## Command Mode

- /exec/configure/onep

# hold adjacency

hold adjacency <all>

## Syntax Description

| Syntax Description | hold      | Hold                    |
|--------------------|-----------|-------------------------|
|                    | adjacency | Display adjacency table |
|                    | all       | Hold all adjcencies     |

## Command Mode

- /exec



# hold ip route

```
hold ip { route | rnh } [ vrf { <vrf-name> | <vrf-known-name> | <vrf-all> } ] <all>
```

## Syntax Description

| Syntax Description | hold                  | Hold  |
|--------------------|-----------------------|---|
|                    | ip                    | IPv4  |
|                    | route                 | Hold routing information                    |
|                    | rnh                   | Hold only RNH information                   |
|                    | vrf                   | (Optional) VRF                              |
|                    | <i>vrf-name</i>       | (Optional) VRF name                         |
|                    | <i>vrf-known-name</i> | (Optional) Known VRF name                   |
|                    | vrf-all               | (Optional) Display information for all VRFs |
|                    | all                   | Hold all routes                             |

## Command Mode

- /exec

# hold ipv6 route

```
hold ipv6 route [ vrf { <vrf-name> | <vrf-known-name> | <vrf-all> } ] <all>
```

## Syntax Description

| Syntax Description | hold                  | Hold  |
|--------------------|-----------------------|---|
|                    | ipv6                  | IPv6  |
|                    | route                 | Hold routing information                    |
|                    | vrf                   | (Optional) VRF                              |
|                    | <i>vrf-name</i>       | (Optional) VRF name                         |
|                    | <i>vrf-known-name</i> | (Optional) Known VRF name                   |
|                    | vrf-all               | (Optional) Display information for all VRFs |
|                    | all                   | Hold all routes                             |

## Command Mode

- /exec

# hold timeout

hold timeout <timeout\_val>

## Syntax Description

| Syntax Description |       |                             |
|--------------------|-------|-----------------------------|
| hold               |       | Hold timer                  |
| timeout            | timer | timeout                     |
| <i>timeout_val</i> |       | timeout duration in seconds |

## Command Mode

- /exec/configure/vpc-domain

# holdtime

holdtime { infinite | <secs> } | no holdtime

## Syntax Description

|                           |          |                                      |
|---------------------------|----------|--------------------------------------|
| <b>Syntax Description</b> | no       | Negate a command or set its defaults |
|                           | holdtime | LDP session holdtime                 |
|                           | infinite | Ignore LDP session holdtime          |
|                           | secs     | Holdtime in seconds                  |

## Command Mode

- /exec/configure/ldp

# hop

{ hop <val> } | { no hop }

## Syntax Description

---

### Syntax Description

---

*no* Negate a command or set its defaults

---

*hop* Configure ngoam hop count

---

*val* Configure ngoam service hop count value

---

## Command Mode

- /exec/configure/configngoamprofile

# host-reachability protocol

[no] host-reachability protocol [ bgp | openflow | openflow-ir ]

## Syntax Description

| Syntax Description |            |   |
|--------------------|------------|---|
| no                 | (Optional) | Negate a command or set its defaults      |
| host-reachability  |            | Configure host reachability advertisement |
| protocol           |            | Control protocol to use                   |
| bgp                | (Optional) | Border Gateway Protocol                   |
| openflow           | (Optional) | OpenFlow                                  |
| openflow-ir        | (Optional) | OpenFlow-IR                               |

## Command Mode

- /exec/configure/if-nve

# host-reachability protocol controller

[no] host-reachability protocol controller <controller-id>

## Syntax Description

| Syntax Description   |   |
|----------------------|---|
| no                   | (Optional) Negate a command or set its defaults |
| host-reachability    | Configure host reachability advertisement       |
| protocol             | Control protocol to use                         |
| controller           | Controller                                      |
| <i>controller-id</i> | Controller id value                             |

## Command Mode

- /exec/configure/if-nve

# hostname

{ hostname | switchname } <name> | no { hostname | switchname }

## Syntax Description

| Syntax Description |                                      |
|--------------------|--------------------------------------|
| no                 | Negate a command or set its defaults |
| hostname           | Configure system's host name         |
| switchname         | Configure system's host name         |
| <i>name</i>        | Enter switchname                     |

## Command Mode

- /exec/configure



# hostname dynamic

[no] hostname dynamic

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | no (Optional) Negate a command or set its defaults |
|                           | hostname Set dynamic hostname for IS-IS            |
|                           | dynamic Dynamic hostname                           |

## Command Mode

- /exec/configure/otv-isis/otv-isis-vrf-common

# hostname dynamic

[no] hostname dynamic

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| hostname           | Set dynamic hostname for IS-IS                  |
| dynamic            | Dynamic hostname                                |

## Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

# hsrp

[no] hsrp <group-id> [ ipv4 ]

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| hsrp               | HSRP interface configuration commands           |
| <i>group-id</i>    | Group number (0-255 for HSRPv1)                 |
| ipv4               | (Optional) Configure IP Version 4 group         |

## Command Mode

- /exec/configure/if-eth-any /exec/configure/if-vlan-common /exec/configure/if-port-channel /exec/configure/if-sub /exec/configure/if-ethernet-all

# hsrp anycast

```
[no] hsrp anycast <id> { ipv4 | ipv6 | both }
```

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| hsrp               | HSRP configuration commands                     |
| anycast            | Anycast related commands                        |
| <i>id</i>          | Bundle number                                   |
| ipv4               | Associate IP Version 4 for the bundle           |
| ipv6               | Associate IP Version 6 for the bundle           |
| both               | Associate IP Version 4 and 6 for the bundle     |

## Command Mode

- /exec/configure

# hsrp bfd

[no] hsrp bfd

## Syntax Description

---

**Syntax Description**

---

no (Optional) Negate a command or set its defaults

---

hsrp HSRP interface configuration commands

---

bfd BFD protocol

---

## Command Mode

- /exec/configure/if-eth-any /exec/configure/if-vlan-common /exec/configure/if-port-channel /exec/configure/if-sub /exec/configure/if-ethernet-all

# hsrp bfd all-interfaces

[no] hsrp bfd all-interfaces

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| hsrp               | HSRP interface configuration commands           |
| bfd                | BFD protocol                                    |
| all-interfaces     | On all interfaces                               |

## Command Mode

- /exec/configure

## hsrp delay minimum

hsrp delay { minimum <min-delay> | reload <reload-delay> } + | no hsrp delay [ minimum | reload ]

### Syntax Description

| Syntax Description  |           |                                       |
|---------------------|-----------|---------------------------------------|
| no                  |           | Negate a command or set its defaults  |
| hsrp                |           | HSRP interface configuration commands |
| delay               |           | HSRP initialisation delay             |
| minimum             |           | Minimum delay                         |
| reload              |           | Delay after reload                    |
| <i>min-delay</i>    | <0-10000> | Delay in seconds                      |
| <i>reload-delay</i> | <0-10000> | Delay in seconds                      |
| <i>minimum</i>      |           | (Optional) reload                     |

### Command Mode

- /exec/configure/if-eth-any /exec/configure/if-vlan-common /exec/configure/if-port-channel /exec/configure/if-sub /exec/configure/if-ethernet-all

# hsrp force state vlan

```
hsrp force state vlan { <vlans> | all }
```

## Syntax Description

---

**Syntax Description**

---

hsrp Hot Standby Router Protocol (HSRP) information

---

force Move the HSRP state

---

state HSRP state

---

vlan HSRP state changes for these vlans

---

all Include all HSRP configured VLANs

---

*vlans* VLAN IDs of the VLAN for which state change will affect

---

## Command Mode

- /exec



# hsrp internal

[no] hsrp internal [ debug-level <level> ]

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| hsrp               | HSRP commands                                   |
| internal           | HSRP internal information                       |
| debug-level        | (Optional) enable debug level                   |
| level              | (Optional) trace level                          |

## Command Mode

- /exec

# hsrp internal

[no] hsrp internal [ sequence-number ] [ [ command <id> ] ] [ <data1> ] [ <data2> ] [ <data3> ]

## Syntax Description

| Syntax Description |            |   |
|--------------------|------------|---|
| no                 | (Optional) | Negate a command or set its defaults          |
| hsrp               |            | HSRP commands                                 |
| internal           |            | enable HSRP internals                         |
| sequence-number    | (Optional) | enable the sequence number transmit in Hellos |
| command            | (Optional) | Internal command specified through number     |
| <i>id</i>          | (Optional) | Internal command value                        |
| <i>data1</i>       | (Optional) | Internal data 1                               |
| <i>data2</i>       | (Optional) | Internal data 2                               |
| <i>data3</i>       | (Optional) | Internal data 3                               |

## Command Mode

- /exec

# hsrp ipv6

[no] hsrp <group-id> ipv6

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| hsrp               | HSRP interface configuration commands           |
| <i>group-id</i>    | Group number                                    |
| ipv6               | Configure IP Version 6 group                    |

## Command Mode

- /exec/configure/if-eth-any /exec/configure/if-vlan-common /exec/configure/if-port-channel /exec/configure/if-sub /exec/configure/if-ethernet-all

# hsrp mac-refresh

hsrp mac-refresh [ <time> ] | no hsrp mac-refresh

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults      |
| hsrp               |  | HSRP interface configuration commands     |
| mac-refresh        |  | Interface mac-refresh time                |
| <i>time</i>        |  | (Optional) Timeout value (0-10000) in sec |

## Command Mode

- /exec/configure/if-eth-any /exec/configure/if-vlan-common /exec/configure/if-port-channel /exec/configure/if-sub /exec/configure/if-ethernet-all

# hsrp timers extended-hold

[no] hsrp timers extended-hold [ <extended-hold> ]

## Syntax Description

| Syntax Description   |   |
|----------------------|---|
| no                   | (Optional) Negate a command or set its defaults |
| hsrp                 | HSRP interface configuration commands           |
| timers               | Global Timers                                   |
| extended-hold        | Extended Hold                                   |
| <i>extended-hold</i> | (Optional) Time in seconds                      |

## Command Mode

- /exec/configure

# hsrp use-bia

[no] hsrp use-bia [ scope interface ]

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults                             |
| hsrp               | HSRP interface configuration commands                                       |
| use-bia            | HSRP uses interface's burned in address                                     |
| scope              | (Optional) Specify the scope of use-bia                                     |
| interface          | (Optional) Use-bia applies to all groups on this interface or sub-interface |

## Command Mode

- /exec/configure/if-eth-any /exec/configure/if-vlan-common /exec/configure/if-port-channel /exec/configure/if-sub /exec/configure/if-ethernet-all

# hsrp version 1

hsrp version { 1 | 2 } | no hsrp version

## Syntax Description

| Syntax Description |                                       |
|--------------------|---------------------------------------|
| no                 | Negate a command or set its defaults  |
| hsrp               | HSRP interface configuration commands |
| version            | HSRP version                          |
| 1                  | Version 1                             |
| 2                  | Version 2                             |

## Command Mode

- /exec/configure/if-eth-any /exec/configure/if-vlan-common /exec/configure/if-port-channel /exec/configure/if-sub /exec/configure/if-ethernet-all

# http get

```
[no] http { get } <WORD> { [ cache { disable | enable } ] [ proxy <proxy-info> ] [ source-ip { <source-ip-hostname> | <source-ip-address> } ] [ source-port <src-port> ] [ version <http-version> ] } +
```

## Syntax Description

| Syntax Description        |  |
|---------------------------|--|
| <i>no</i>                 | (Optional)   |
| <i>cache</i>              | (Optional) enable  |
| <i>proxy</i>              | (Optional) <proxy-info>  |
| <i>source-ip</i>          | (Optional) <source-ip-hostname>                                    |
| <i>source-port</i>        | (Optional) <src-port>  |
| <i>version</i>            | (Optional) <http-version>  |
| http                      | HTTP Operation   |
| get                       | HTTP get operation   |
| <i>WORD</i>               | URL  |
| enable                    | (Optional) enable download of cached entries (default)             |
| disable                   | (Optional) disable download of cached entries (default)            |
| <i>proxy-info</i>         | (Optional) proxy information string                                |
| <i>source-ip-hostname</i> | (Optional) source IP hostname, broadcast disallowed                |
| <i>source-ip-address</i>  | (Optional) source IP address, broadcast disallowed                 |
| <i>src-port</i>           | (Optional) Port Number (Recommended port range between 1025-65534) |
| <i>http-version</i>       | (Optional) Supported HTTP versions are '1.0' and '1.1'.            |

## Command Mode

- /exec/configure/ip-sla



# human

| human

## Syntax Description

---

### Syntax Description

| Pipe command output to filter

---

**human** output in human format

---

## Command Mode

- /output

# human

| human

## Syntax Description

---

### Syntax Description

| Pipe command output to filter

---

**human** output in human format

---

## Command Mode

- /output

# hw-module logging onboard

[no] hw-module logging onboard [ { counter-stats | module <module> [ { counter-stats } ] } ]

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults       |
| hw-module          | Enable/Disable OBFL information                       |
| logging            | Enable/Disable OBFL information                       |
| onboard            | Enable/Disable OBFL information                       |
| counter-stats      | (Optional) Enable/Disable OBFL counter statistics     |
| module             | (Optional) Enable/Disable OBFL information for Module |
| <i>module</i>      | (Optional) Enter module number                        |

## Command Mode

- /exec/configure

# hw-module logging onboard

[no] hw-module logging onboard [ { environmental-history | error-stats | interrupt-stats | module <module> } [ { environmental-history | error-stats | interrupt-stats | obfl-logs | cpuhog } ] | obfl-logs | cpuhog } ]

## Syntax Description

| Syntax Description    |            |   |
|-----------------------|------------|---|
| no                    | (Optional) | Negate a command or set its defaults                          |
| hw-module             |            | Enable/Disable OBFL information                               |
| logging               |            | Enable/Disable OBFL information                               |
| onboard               |            | Enable/Disable OBFL information                               |
| environmental-history | (Optional) | Enable/Disable OBFL environmental history                     |
| error-stats           | (Optional) | Enable/Disable OBFL error statistics                          |
| interrupt-stats       | (Optional) | Enable/Disable OBFL interrupt statistics                      |
| cpuhog                | (Optional) | Enable/Disable OBFL cpu hog events                            |
| module                | (Optional) | Enable/Disable OBFL information for Module                    |
| <i>module</i>         | (Optional) | Enter module number   |
| obfl-logs             | (Optional) | Enable/Disable OBFL (boot-uptime/device-version/obfl-history) |

## Command Mode

- /exec/configure



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# icmp-echo

```
[no] icmp-echo { <hostname> | <ip-address> | <ipv6-address> } { [ source-ip { <source-ip-hostname> | <source-ip-address> | <source-ipv6-address> } ] | [ source-interface <if_index> ] }
```

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional)  |
| source-ip          | (Optional) source-interface                                 |
| icmp-echo          | ICMP Echo Operation   |
| hostname           | Destination hostname, broadcast disallowed                  |
| ip-address         | Destination IP address, broadcast disallowed                |
| source-interface   | (Optional) Source Interface (ingress icmp packet interface) |
| if_index           | (Optional) Source Interface                                 |
| source-ip-hostname | (Optional) source IP hostname, broadcast disallowed         |
| source-ip-address  | (Optional) source IP address, broadcast disallowed          |

## Command Mode

- /exec/configure/ip-sla

# icmpv6 cache disable

[no] icmpv6 cache disable

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| icmpv6             | ICMPv6 Commands                                 |
| cache              | Disable cache                                   |
| disable            | Disable cache                                   |

## Command Mode

- /exec/configure

# icmpv6 cfs-queue

```
{ icmpv6 cfs-queue <size> } | { no icmpv6 cfs-queue }
```

## Syntax Description

|                           |                  |  |
|---------------------------|------------------|--|
| <b>Syntax Description</b> | <b>no</b>        | Negate a command or set its defaults             |
|                           | <b>icmpv6</b>    | ICMPv6 Commands                                  |
|                           | <b>cfs-queue</b> | cfs-queue  |
|                           | <b>size</b>      | Size for adjacencies to be sent in CFSOE payload |

## Command Mode

- /exec/configure

## icmpv6 library mts-queue

```
{ icmpv6 library mts-queue <size> } | { no icmpv6 library mts-queue }
```

### Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| icmpv6             |  | ICMPv6 Commands                      |
| library            |  | library data queue                   |
| mts-queue          |  | mts-queue                            |
| <i>size</i>        |  | Size for icmpv6 data sap qlimit      |

### Command Mode

- /exec/configure



# icmpv6 mts-queue

{ icmpv6 mts-queue <size> } | { no icmpv6 mts-queue }

## Syntax Description

|                           |                  |                                      |
|---------------------------|------------------|--------------------------------------|
| <b>Syntax Description</b> | <i>no</i>        | Negate a command or set its defaults |
|                           | <i>icmpv6</i>    | ICMPv6 Commands                      |
|                           | <i>mts-queue</i> | <i>mts-queue</i>                     |
|                           | <i>size</i>      | Size for icmpv6 data sap qlimit      |

## Command Mode

- /exec/configure

# import

import

## Syntax Description

---

### Syntax Description

---

import import

---

## Command Mode

- /exec/configure

# import interface

import interface <if0>

## Syntax Description

---

### Syntax Description

---

import import

---

interface Interface configuration

---

*if0* interface type and number in module/slot format

---

## Command Mode

- /exec/configure

# import map

[no] import map <rmap-name>

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| import             | VRF import                                      |  |
| map                | Route-map based VRF import                      |  |
| <i>rmap-name</i>   | Route-map name                                  |  |

## Command Mode

- /exec/configure/vrf-af-ipv4 /exec/configure/vrf-af-ipv6

# import running-config

import running-config [ exclude interface ethernet ]

## Syntax Description

| Syntax Description |                |  |
|--------------------|----------------|--|
| import             | import         |  |
| running-config     | running-config |  |
| exclude            | (Optional)     | Exclude                                      |
| interface          | (Optional)     | Exclude all interfaces of this type          |
| ethernet           | (Optional)     | running-config excluding physical interfaces |

## Command Mode

- /exec/configure

# import vrf default map

```
import vrf default [ <prefix-limit> ] map <rmap-name> | no import vrf default [ <prefix-limit> ] map
<rmap-name>
```

## Syntax Description

| Syntax Description  |            |                                      |
|---------------------|------------|--------------------------------------|
| no                  |            | Negate a command or set its defaults |
| import              |            | VRF import                           |
| vrf                 |            | Virtual Router Context               |
| default             |            | VRF name (default)                   |
| <i>prefix-limit</i> | (Optional) | Maximum prefix limit                 |
| map                 |            | Route-map based VRF import           |
| <i>rmap-name</i>    |            | Route-map name                       |

## Command Mode

- /exec/configure/vrf-af-ipv4 /exec/configure/vrf-af-ipv6

# in-label allocate

[no] in-label <static-inlabel> allocate [ policy { <prefix> <mask> | <prefix-mask> } ]

## Syntax Description

| Syntax Description    |            |   |
|-----------------------|------------|---|
| no                    | (Optional) | Negate a command or set its defaults                        |
| in-label              |            | Configure local label assignment and forwarding for the LSP |
| allocate              |            | Allocate this label   |
| policy                | (Optional) | Allocate policy-based IP prefix                             |
| <i>static-inlabel</i> |            | Label Value   |
| <i>prefix</i>         | (Optional) | Destination prefix  |
| <i>mask</i>           | (Optional) | Destination prefix mask                                     |
| <i>prefix-mask</i>    | (Optional) | Destination prefix/mask                                     |

## Command Mode

- /exec/configure/mpls\_static/ipv4/lsp

# in-order-guarantee

[no] in-order-guarantee

## Syntax Description

|                           |                    |   |
|---------------------------|--------------------|---|
| <b>Syntax Description</b> | no                 | (Optional) Negate a command or set its defaults |
|                           | in-order-guarantee | Enable IOD                                      |

## Command Mode

- /exec/configure/policy-map/type/uf/class



# include profile

[no] include profile { <all\_conf\_profile\_name> }

## Syntax Description

| Syntax Description |                              |   |
|--------------------|------------------------------|---|
|                    | no                           | (Optional) Negate a command or set its defaults |
|                    | include                      | Include a port-profile                          |
|                    | profile                      | config-profile                                  |
|                    | <i>all_conf_profile_name</i> | Enter the name of the profile                   |

## Command Mode

- /exec/configure

# include profile any

[no] include profile any

## Syntax Description

|                           |         |   |
|---------------------------|---------|---|
| <b>Syntax Description</b> | no      | (Optional) Negate a command or set its defaults |
|                           | include | Include a port-profile                          |
|                           | profile | config-profile                                  |
|                           | any     | dynamically include profile during apply        |

## Command Mode

- /exec/configure

# index next

```
{ { index <index> { next-address [ loose | strict ] <ipaddr> | exclude-address <ipaddr> } } | { no index <index> } }
```

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults                     |
| index              |  | Specify the next entry index to add, edit (or delete)    |
| <i>index</i>       |  | Previous index number                                    |
| next-address       |  | Specify the next address in the path                     |
| loose              |  | (Optional) Target address is loose                       |
| strict             |  | (Optional) Target address is strict                      |
| exclude-address    |  | Exclude an address from subsequent partial path segments |
| <i>ipaddr</i>      |  | Enter IP address (A.B.C.D)                               |

## Command Mode

- /exec/configure/te/expl-path

# ingress-replication

ingress-replication <addr>

## Syntax Description

---

### Syntax Description

---

|                     |                               |
|---------------------|-------------------------------|
| ingress-replication | Configure ingress replication |
|---------------------|-------------------------------|

---

|             |                        |
|-------------|------------------------|
| <i>addr</i> | Remote Peer IP Address |
|-------------|------------------------|

---

## Command Mode

- /exec/configure/if-nve/vni

# ingress-replication protocol bgp

[no] ingress-replication protocol bgp

## Syntax Description

| Syntax Description  |   |
|---------------------|---|
| no                  | (Optional) Negate a command or set its defaults |
| ingress-replication | Configure ingress replication                   |
| protocol            | Control protocol to use                         |
| bgp                 | Border Gateway Protocol                         |

## Command Mode

- /exec/configure/if-nve/vni

# ingress-replication protocol static

[no] ingress-replication protocol static

## Syntax Description

| Syntax Description  |   |
|---------------------|---|
| no                  | (Optional) Negate a command or set its defaults |
| ingress-replication | Configure ingress replication                   |
| protocol            | Control protocol to use                         |
| static              | Static End-point Configuration                  |

## Command Mode

- /exec/configure/if-nve/vni

# ingress

{ ingress <ifh> | no ingress }

## Syntax Description

---

### Syntax Description

---

**no** Negate a command or set its defaults

---

**ingress** Ingress interface to determine enhanced forwarding enabled

---

**ifh** Name of the interface for ngoam on which fabric forwarding is configured

---

## Command Mode

- /exec/configure/configngoamprofile

# ingress interface

[no] ingress interface <interface-ref>

## Syntax Description

| Syntax Description   |   |  |
|----------------------|---|--|
| no                   | (Optional) Negate a command or set its defaults |  |
| ingress              | ITD ingress interface                           |  |
| interface            | ITD ingress interface                           |  |
| <i>interface-ref</i> |   |  |

## Command Mode

- /exec/configure/itd /exec/configure/itd-inout



# ingress interface

[no] ingress interface <interface-ref> [ next-hop <ip-addr> ]

## Syntax Description

| Syntax Description   |            |   |
|----------------------|------------|---|
| no                   | (Optional) | Negate a command or set its defaults                  |
| ingress              | ITD        | ingress interface                                     |
| interface            | ITD        | ingress interface                                     |
| <i>interface-ref</i> |            |   |
| next-hop             | (Optional) | next hop ip address                                   |
| <i>ip-addr</i>       | (Optional) | Next hop IPv4 address connected to ingress intrerface |

## Command Mode

- /exec/configure/itd /exec/configure/itd-inout

# ingress interface

[no] ingress interface <interface-ref> [ next-hop <ip-addr> ]

## Syntax Description

| Syntax Description   |            |   |
|----------------------|------------|---|
| no                   | (Optional) | Negate a command or set its defaults                  |
| ingress              |            | PLB ingress interface                                 |
| interface            |            | PLB ingress interface                                 |
| <i>interface-ref</i> |            |   |
| next-hop             | (Optional) | next hop ip address                                   |
| <i>ip-addr</i>       | (Optional) | Next hop IPv4 address connected to ingress intrerface |

## Command Mode

- /exec/configure/plb /exec/configure/plb-inout

# inherit peer-policy

[no] inherit peer-policy <peer-policy-template-name> <policy-preference>

## Syntax Description

| Syntax Description               |            |                                      |
|----------------------------------|------------|--------------------------------------|
| no                               | (Optional) | Negate a command or set its defaults |
| inherit                          |            | Inherit a template                   |
| peer-policy                      |            | Inherit a peer-policy template       |
| <i>peer-policy-template-name</i> |            | Template name                        |
| <i>policy-preference</i>         |            | Sequence number                      |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af  
 /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-l2vpn-evpn  
 /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-vpnv4  
 /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-vpnv6  
 /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv4-mvpn  
 /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv6-mvpn  
 /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-link-state  
 /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv4-label  
 /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv6-label

# inherit peer-policy

[no] inherit peer-policy <peer-policy-template-name> <policy-preference>

## Syntax Description

| Syntax Description               |            |                                      |
|----------------------------------|------------|--------------------------------------|
| no                               | (Optional) | Negate a command or set its defaults |
| inherit                          |            | Inherit a template                   |
| peer-policy                      |            | Inherit a peer-policy template       |
| <i>peer-policy-template-name</i> |            | Template name                        |
| <i>policy-preference</i>         |            | Sequence number                      |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv4-mdt  
/exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-l2vpn-vpls

# inherit peer-session

[no] inherit peer-session <peer-session-template-name>

## Syntax Description

| Syntax Description                |            |                                      |
|-----------------------------------|------------|--------------------------------------|
| no                                | (Optional) | Negate a command or set its defaults |
| inherit                           |            | Inherit a template                   |
| peer-session                      |            | Inherit a peer-session template      |
| <i>peer-session-template-name</i> |            | Template name                        |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor-sess

# inherit peer

[no] inherit peer <peer-template-name>

## Syntax Description

| Syntax Description        |            |                                      |
|---------------------------|------------|--------------------------------------|
| no                        | (Optional) | Negate a command or set its defaults |
| inherit                   |            | Inherit a template                   |
| peer                      |            | Inherit a peer template              |
| <i>peer-template-name</i> |            | Peer template name                   |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor /exec/configure/router-bgp/router-bgp-vrf-neighbor  
/exec/configure/router-bgp/router-bgp-prefixneighbor  
/exec/configure/router-bgp/router-bgp-vrf-prefixneighbor

# inherit port-profile

[no] inherit port-profile { <s0> | <s1> }

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| inherit            | Inherit a port-profile                          |
| port-profile       | Inherit a port-profile                          |
| <i>s0</i>          | Enter the name of the profile                   |
| <i>s1</i>          | Enter the name of the profile                   |

## Command Mode

- /exec/configure/if-any /exec/configure/if-port-channel exec/configure/if-port-channel-range /exec/configure/if-ethernet-m /exec/configure/if-ethernet-switch-m /exec/configure/if-te /exec/configure/if-pseudowire

# initial-delay

[no] initial-delay <time-in-sec>

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

initial-delay Configure delay interval to connect to the BMP server

---

*time-in-sec* Delay value

---

## Command Mode

- /exec/configure/router-bgp/router-bgp-bmp-server



# initial-refresh skip

[no] initial-refresh { skip | delay <time-in-sec> }

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults                      |
| initial-refresh    | Configure initial-refresh for the BMP server                         |
| skip               | Skip sending the initial route update to the BMP server              |
| delay              | Delay after which the initial route update is sent to the BMP server |
| <i>time-in-sec</i> | Delay value  |

## Command Mode

- /exec/configure/router-bgp/router-bgp-bmp-server

## inject-map exist-map

[no] inject-map <inject-map-name> exist-map <exist-map-name> [ copy-attributes ]

### Syntax Description

| Syntax Description     |            |   |
|------------------------|------------|---|
| no                     | (Optional) | Negate a command or set its defaults        |
| inject-map             |            | Routemap which specifies prefixes to inject |
| <i>inject-map-name</i> |            | Route-map name                              |
| exist-map              |            | Routemap which specifies exist condition    |
| <i>exist-map-name</i>  |            | Route-map name                              |
| copy-attributes        | (Optional) | Copy attributes from aggregate              |

### Command Mode

- /exec/configure/router-bgp/router-bgp-af

# install activate

install activate <patch> + [ forced ]

## Syntax Description

| Syntax Description | Description                   |
|--------------------|-------------------------------|
| install            | Install package               |
| activate           | Activate package              |
| <i>patch</i>       | Package Name                  |
| forced             | (Optional)<br>non-interactive |

## Command Mode

- /exec

# install add

```
install add { <package-name> | <uri1> } [ vrf <vrf-known-name> ] [ [ activate [ upgrade | downgrade ] ] [ forced ] ]
```

## Syntax Description

### Syntax Description

|                       |  |
|-----------------------|--|
| install               | Install package                        |
| add                   | Add package                            |
| <i>package-name</i>   | Package name                           |
| <i>uri1</i>           | Enter package uri                      |
| vrf                   | (Optional) Display per-VRF information |
| <i>vrf-known-name</i> | (Optional) Known VRF name              |
| activate              | (Optional) Activate package            |
| forced                | (Optional) non-interactive             |
| upgrade               | (Optional) Upgrade package             |
| downgrade             | (Optional) Downgrade package           |

## Command Mode

- /exec

# install all

```
install { all [ nxos <uri> | kickstart <uri1> | system <uri3> | serial ] + [ force ] [ non-disruptive | no-reload | noswitchover ] [ bios | no-save ] [ bios-force ] [ non-interruptive ] [ compact ] | force-all [ nxos <uri> | serial ] + [ non-disruptive ] [ force ] }
```

## Syntax Description

### Syntax Description

|                  |   |
|------------------|---|
| install          | upgrade software  |
| all              | Upgrade the system  |
| kickstart        | (Optional) boot-variable name   |
| <i>uri1</i>      | (Optional) Enter image uri  |
| system           | (Optional) boot-variable name   |
| <i>uri3</i>      | (Optional) Enter image uri  |
| no-reload        | (Optional) Exit right before reload during install.                           |
| noswitchover     | (Optional) Exit right before reload during install.                           |
| non-interruptive | (Optional) Non-Interruptive install.  |
| no-save          | (Optional) Config not saved. Manually save config before starting install all |
| bios             | (Optional) BIOS Only  |
| bios-force       | (Optional) Forcefully upgrade bios.   |
| force            | (Optional) Forcefully allow ISSU with target image .                          |
| non-disruptive   | (Optional) Non-Disruptive install.  |
| compact          | (Optional) Compact image to make it nexus 3k only                             |
| nxos             | (Optional) boot-variable name   |
| <i>uri</i>       | (Optional) Enter image uri  |
| serial           | (Optional) Upgrade linecards in serial  |
| force-all        | Force upgrade the system  |

## Command Mode

- /exec

# install commit

install commit [ <patch> ]

## Syntax Description

---

### Syntax Description

---

install Install package

---

commit Commit software patch

---

*patch* (Optional) Package  
Name

---

## Command Mode

- /exec

# install deactivate

install deactivate <patch> + [ forced ]

## Syntax Description

### Syntax Description

---

install    Install package

---

deactivate    Deactivate package

---

*patch*    Package Name

---

forced    (Optional)  
          non-interactive

---

## Command Mode

- /exec

# install epld

```
install epld <uri1> { { module { <module> } [ force ] } }
```

## Syntax Description

### Syntax Description

---

`install` upgrade software

---

`epld` Install EPLD from EPLD image

---

`uri1` Local URI containing EPLD Image

---

`module` Upgrade the modules

---

`module` Enter the module number to be upgraded

---

`force` (Optional) Force Install EPLD from EPLD image

---

## Command Mode

- /exec



# install epld

```
install epld <uri1> { { module { all } [ force ] } }
```

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | install upgrade software                            |
|                           | epld Install EPLD from EPLD image                   |
|                           | <i>uri1</i> Local URI containing EPLD Image         |
|                           | module Upgrade the modules                          |
|                           | all Install all the modules                         |
|                           | force (Optional) Force Install EPLD from EPLD image |

## Command Mode

- /exec

# install epld

```
install epld <uri1> { { module { <module> } { primary | golden } [ force ] } }
```

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| install            | upgrade software                              |
| epld               | Install EPLD from EPLD image                  |
| <i>uri1</i>        | Local URI containing EPLD Image               |
| module             | Upgrade the modules                           |
| <i>module</i>      | Enter the module number to be upgraded        |
| primary            | Upgrade primary fpga image                    |
| golden             | Upgrade golden fpga image                     |
| force              | (Optional) Force Install EPLD from EPLD image |

## Command Mode

- /exec

# install epld

```
install epld <uri1> { { module { all } { primary | golden } [ force ] } }
```

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| install            | upgrade software                              |
| epld               | Install EPLD from EPLD image                  |
| <i>uri1</i>        | Local URI containing EPLD Image               |
| module             | Upgrade the modules                           |
| all                | Install all the modules                       |
| primary            | Upgrade primary fpga image                    |
| golden             | Upgrade golden fpga image                     |
| force              | (Optional) Force Install EPLD from EPLD image |

## Command Mode

- /exec

# install epld psu

install epld <uri1> psu

## Syntax Description

---

### Syntax Description

---

install upgrade software

---

epld Install EPLD from EPLD image

---

*uri1* Local URI containing EPLD Image

---

psu Upgrade PSU firmware

---

## Command Mode

- /exec

# install feature-set fcoe-npv

[no] install feature-set fcoe-npv

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| install            | install a feature-set                           |
| feature-set        | install feature-set                             |
| fcoe-npv           | FCOE-NPV  |

## Command Mode

- /exec/configure

# install feature-set fex

[no] install feature-set fex

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| install            | install a feature-set                           |
| feature-set        | install feature-set                             |
| fex                | FEX   |

## Command Mode

- /exec/configure

# install feature-set mpls

[no] install feature-set mpls

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| install            | install a feature-set                           |
| feature-set        | install feature-set                             |
| mpls               | MPLS  |

## Command Mode

- /exec/configure

# install license

install license <uri0> [ <s0> ]

## Syntax Description

---

### Syntax Description

---

install upgrade software

---

license install license

---

*uri0* Specify URL for license file

---

*s0* (Optional) Specify a target name for the license file

---

## Command Mode

- /exec



# install module

```
install module <module> { bios [ [ system <uri0> ] [ forced2 ] ] | bios [ primary | golden ] [ forced ] | image
[ { forced1 | system1 <uri1> } ] }
```

## Syntax Description

### Syntax Description

|               |  |
|---------------|--|
| install       | upgrade software                                 |
| module        | Upgrade for module                               |
| <i>module</i> | Enter module index                               |
| bios          | Upgrade module bios                              |
| system        | (Optional) System Image                          |
| <i>uri0</i>   | (Optional) Local URI containing the system Image |
| forced2       | (Optional) Force install bios                    |
| primary       | (Optional) Upgrade the Primary bios              |
| golden        | (Optional) Upgrade the Golden bios               |
| forced        | (Optional) Force install bios                    |
| image         | Upgrade module image                             |
| forced1       | (Optional) Bypass SRG check                      |
| system1       | (Optional) System Image                          |
| <i>uri1</i>   | (Optional) Local URI containing the system Image |

## Command Mode

- /exec

# install remove

install remove { <patch> | inactive } [ forced ]

## Syntax Description

---

### Syntax Description

---

install Install package

---

remove Remove package

---

*patch* Package Name

---

inactive All inactive except non-committed packages

---

forced (Optional) Remove package

---

## Command Mode

- /exec

# install reset

install reset

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| install            | Install package                                     |
| reset              | Reset software patches and packages to base version |

## Command Mode

- /exec

## Usage Guidelines

Use this command to remove all application persistency files such as patch rpms, third party rpms, and application configuration in the /etc directory other than configuration.

# instance-id

[no] instance-id <iid>

## Syntax Description

|                           |                    |   |
|---------------------------|--------------------|---|
| <b>Syntax Description</b> | <i>no</i>          | (Optional) Negate a command or set its defaults |
|                           | <i>instance-id</i> | Configures Instance-ID for global data-mappings |
|                           | <i>iid</i>         | 24-bit instance-ID value                        |

## Command Mode

- /exec/configure/lisp-dynamic-eid /exec/configure/vrf/lisp-dynamic-eid

# instance

[no] instance <plistinst> [ cross-check ] | instance <plistinst>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | Negate a command or set its defaults                        |
| instance           | Configure a parameter list instance                         |
| <i>plistinst</i>   | Enter the name of the parameter list instance               |
| cross-check        | (Optional) Explicitly search for referencing config profile |

## Command Mode

- /exec/configure/param-list

# instance

[no] instance <instance-id> [ vlan <vlan-list> ]

## Syntax Description

---

### Syntax Description

---

|                    |  |
|--------------------|--|
| no                 | Negate a command or set its defaults                     |
| instance           | Map vlans to an MST instance                             |
| <i>instance-id</i> | MST instance id  |
| vlan               | (Optional) Range of vlans to add to the instance mapping |
| <i>vlan-list</i>   | (Optional) vlan range ex: 1-65, 72, 200 - 300            |

---

## Command Mode

- /exec/configure/spanning-tree/mst/configuration

# instance vlan

instance <instance-id> vlan <vlan-list>

## Syntax Description

|                           |                    |   |
|---------------------------|--------------------|---|
| <b>Syntax Description</b> | instance           | Map vlans to an MST instance                  |
|                           | <i>instance-id</i> | MST instance id                               |
|                           | vlan               | Range of vlans to add to the instance mapping |
|                           | <i>vlan-list</i>   | vlan range ex: 1-65, 72, 200 - 300            |

## Command Mode

- /exec/configure/spanning-tree/mst/configuration

# interface-vlan reset credits

```
interface-vlan reset credits [ <count> ]
```

## Syntax Description

| Syntax Description |                                 |
|--------------------|---------------------------------|
| interface-vlan     | Vlan Interface                  |
| reset              | Reset SVI Credits               |
| credits            | SVI Credits                     |
| <i>count</i>       | (Optional) Set SVI Credit Count |

## Command Mode

- /exec/configure



# interface-vlan reset fsm

interface-vlan <vlan-id> reset fsm

## Syntax Description

| Syntax Description |                   |
|--------------------|-------------------|
| interface-vlan     | Vlan Interface    |
| <i>vlan-id</i>     | VLAN Id           |
| reset              | Reset SVI Credits |
| fsm                | SVI FSM           |

## Command Mode

- /exec/configure

# interface

{ interface <interface-range> } | { no interface }

## Syntax Description

| Syntax Description     |  |                                      |
|------------------------|--|--------------------------------------|
| no                     |  | Negate a command or set its defaults |
| interface              |  | Configure ngoam egress interface     |
| <i>interface-range</i> |  | Configure ngoam egress interface     |

## Command Mode

- /exec/configure/configngoamprofile

# interface

[no] interface <interface-ref>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| interface          | egress interface                                |
|                    | <i>interface-ref</i>                            |

## Command Mode

- /exec/configure/itd-port-grp

# interface

[no] interface <interface>

## Syntax Description

---

|                           |    |   |
|---------------------------|----|---|
| <b>Syntax Description</b> | no | (Optional) Negate a command or set its defaults |
|---------------------------|----|---|

---

|  |           |                      |
|--|-----------|----------------------|
|  | interface | Configure interfaces |
|--|-----------|----------------------|

---

|  |                  |                |
|--|------------------|----------------|
|  | <i>interface</i> | Interface Name |
|--|------------------|----------------|

---

## Command Mode

- /exec/configure

# interface

[no] interface <interface>

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | no (Optional) Negate a command or set its defaults |
|                           | interface Configure interfaces                     |
|                           | <i>interface</i> Interface Name                    |

## Command Mode

- /exec/configure

# interface

[no] interface <interface>

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

interface Configure interfaces

---

*interface* Interface Name

---

## Command Mode

- /exec/configure

# interface

[no] interface <interface>

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

interface Configure interfaces

---

*interface* Interface Name

---

## Command Mode

- /exec/configure

# interface

[no] interface <interface>

## Syntax Description

---

|                           |    |   |
|---------------------------|----|---|
| <b>Syntax Description</b> | no | (Optional) Negate a command or set its defaults |
|---------------------------|----|---|

---

|  |           |                      |
|--|-----------|----------------------|
|  | interface | Configure interfaces |
|--|-----------|----------------------|

---

|  |                  |                |
|--|------------------|----------------|
|  | <i>interface</i> | Interface Name |
|--|------------------|----------------|

---

## Command Mode

- /exec/configure



# interface

[no] interface <interface>

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | no (Optional) Negate a command or set its defaults |
|                           | interface Configure interfaces                     |
|                           | <i>interface</i> Interface Name                    |

## Command Mode

- /exec/configure

# interface

[no] interface <interface>

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

interface Configure interfaces

---

*interface* Interface Name

---

## Command Mode

- /exec/configure

# interface

[no] interface <interface>

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | no (Optional) Negate a command or set its defaults |
|                           | interface Configure interfaces                     |
|                           | <i>interface</i> Interface Name                    |

## Command Mode

- /exec/configure

# interface

interface <interface>

## Syntax Description

---

### Syntax Description

---

interface Configure  
interfaces

---

*interface* Interface Name

---

## Command Mode

- /exec/configure

# interface

[no] interface <interface>

## Syntax Description

| Syntax Description |                                      |
|--------------------|--------------------------------------|
| no                 | Negate a command or set its defaults |
| interface          | Configure interfaces                 |
| <i>interface</i>   | Interface Name                       |

## Command Mode

- /exec/configure

# interface

[no] interface <interface>

## Syntax Description

---

|                           |    |   |
|---------------------------|----|---|
| <b>Syntax Description</b> | no | (Optional) Negate a command or set its defaults |
|---------------------------|----|---|

---

|  |           |                      |
|--|-----------|----------------------|
|  | interface | Configure interfaces |
|--|-----------|----------------------|

---

|  |                  |                |
|--|------------------|----------------|
|  | <i>interface</i> | Interface Name |
|--|------------------|----------------|

---

## Command Mode

- /exec/configure

# interface

[no] interface <interface-ref>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| interface          | egress interface                                |
|                    | <i>interface-ref</i>                            |

## Command Mode

- /exec/configure/itd-port-grp

# interface breakout module

interface breakout module <module>

## Syntax Description

---

### Syntax Description

---

*interface* Configure interfaces

---

*breakout* Configuring the breakout for a module

---

*module* High Bandwidth Module

---

*module* High Bandwidth Module number

---

## Command Mode

- /exec/configure



# interface breakout module

[no] interface breakout module <module>

## Syntax Description

| Syntax Description |                                       |
|--------------------|---------------------------------------|
| no                 | Negate a command or set its defaults  |
| interface          | Configure interfaces                  |
| breakout           | Configuring the breakout for a module |
| module             | High Bandwidth Module                 |
| <i>module</i>      | High Bandwidth Module number          |

## Command Mode

- /exec/configure

# interface breakout module port map

```
interface breakout module <module> port <port_num> map <breakout_map>
```

## Syntax Description

| Syntax Description  |  |   |
|---------------------|--|---|
| interface           |  | Configure interfaces                            |
| breakout            |  | Configuring the breakout for an interface       |
| module              |  | High Bandwidth Module                           |
| <i>module</i>       |  | High Bandwidth Module number                    |
| port                |  | High Bandwidth Port(HBP)                        |
| <i>port_num</i>     |  | Parent(HBP / Front-panel) port to be broken out |
| map                 |  | Breakout Map                                    |
| <i>breakout_map</i> |  | Breakout Map to be applied to the parent port   |

## Command Mode

- /exec/configure

# interface breakout module port map

[no] interface breakout module <module> port <port\_num> map <breakout\_map>

## Syntax Description

| Syntax Description  |  |   |
|---------------------|--|---|
| no                  |  | Negate a command or set its defaults            |
| interface           |  | Configure interfaces                            |
| breakout            |  | Configuring the breakout for an interface       |
| module              |  | High Bandwidth Module                           |
| <i>module</i>       |  | High Bandwidth Module number                    |
| port                |  | High Bandwidth Port(HBP)                        |
| <i>port_num</i>     |  | Parent(HBP / Front-panel) port to be broken out |
| map                 |  | Breakout Map                                    |
| <i>breakout_map</i> |  | Breakout Map to be applied to the parent port   |

## Command Mode

- /exec/configure

# interface down delay

[no] interface down delay |

## Syntax Description

| Syntax Description |                                      |
|--------------------|--------------------------------------|
| <i>down</i>        | delay                                |
| no                 | Negate a command or set its defaults |
| interface          | Add tunnel interface config          |
| delay              | Tunnel interface down delay config   |

## Command Mode

- /exec/configure/if-te

# interop-enable

[no] interop-enable

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults          |
| interop-enable     | Enable interoperability with IOS XR boxes in the network |

## Command Mode

- /exec/configure/otv-isis

# ip

```
[no] ip { { group <gaddr> } | { group-range <gaddr_start> to <gaddr_end> } }
```

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| ip                 | IP Address                                      |  |
| group              | Multicast group                                 |  |
| <i>gaddr</i>       | IPv4 group address                              |  |
| group-range        | Multicast Group address range                   |  |
| <i>gaddr_start</i> | First Group address                             |  |
| to                 | Range   |  |
| <i>gaddr_end</i>   | Last Group address                              |  |

## Command Mode

- /exec/configure/nbm-flow/policy

# ip

ip [ <ipaddress> | <ipprefix> ] | no ip [ <ipaddress> | <ipprefix> ]

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | Negate a command or set its defaults            |
| ip                 | Enable HSRP IPv4 and set the virtual IP address |
| <i>ipaddress</i>   | (Optional) Virtual IP address                   |
| <i>ipprefix</i>    | (Optional) Virtual IP address and mask length   |

## Command Mode

- /exec/configure/if-eth-any/hsrp\_ipv4

# ip

ip { <ipv6address> | autoconfig } | no ip [ { <ipv6address> | autoconfig } ]

## Syntax Description

---

**Syntax Description**

---

|            |   |
|------------|---|
| no         | Negate a command or set its defaults            |
| ip         | Enable HSRP IPv6 and set the virtual IP address |
| autoconfig | Obtain address using autoconfiguration          |

---

## Command Mode

- /exec/configure/if-eth-any/hsrp\_ipv6



# ip

[no] ip <ipaddr>

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

ip ip address of redundancy group member

---

*ipaddr* Redundancy-group node IP address

---

## Command Mode

- /exec/configure/if-nve/rgrp

# ip

[no] ip [ <ipaddress> [ secondary ] ]

## Syntax Description

|                           |                  |   |
|---------------------------|------------------|---|
| <b>Syntax Description</b> | no               | (Optional) Negate a command or set its defaults |
|                           | ip               | Set Virtual IP address                          |
|                           | <i>ipaddress</i> | (Optional) Virtual IP address                   |
|                           | secondary        | (Optional) Make this a secondary IP address     |

## Command Mode

- /exec/configure/if-eth-any/glbp

# ip access-class

[no] ip access-class <name> <inout>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ip                 | Configure IP features                           |
| access-class       | Specify IPv4 access control for packets         |
| <i>name</i>        | List name                                       |
| <i>inout</i>       | Traffic direction                               |

## Command Mode

- /exec/configure/line

# ip access-group

[no] ip access-group <name> <inout>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ip                 | Configure IP features                           |
| access-group       | Specify access control for packets              |
| <i>name</i>        | List name                                       |
| <i>inout</i>       | Traffic direction                               |

## Command Mode

- /exec/configure/if-set-acl-l3

# ip access-list

[no] ip access-list <name> [ client <clienttype> <clientID> ]

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ip                 | Configure IP features                           |
| access-list        | Configure access list                           |
| <i>name</i>        | List name                                       |
| client             | (Optional) set client type                      |
| <i>clienttype</i>  | (Optional) CLI/ONEP                             |
| <i>clientID</i>    | (Optional) client appID                         |

## Command Mode

- /exec/configure

# ip access-list match-local-traffic

[no] ip access-list match-local-traffic | ip access-list match-local-traffic

## Syntax Description

| Syntax Description |                     |   |
|--------------------|---------------------|---|
|                    | no                  | Negate a command or set its defaults                      |
|                    | ip                  | Configure IP features                                     |
|                    | access-list         | Configure access list                                     |
|                    | match-local-traffic | Enable access-list matching for locally generated traffic |

## Command Mode

- /exec/configure

# ip address

[no] ip address [ { <ip-addr> <ip-mask> | <ip-prefix> } [ route-preference <pref> ] [ tag <tag> ] ] | ip address { <ip-addr> <ip-mask> | <ip-prefix> } [ route-preference <pref> ] [ tag <tag> ]

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults                             |
| ip                 |  | Configure IP features  |
| address            |  | Configure IP address on interface                                |
| <i>ip-addr</i>     |  | (Optional) IP address in format i.i.i.i                          |
| <i>ip-mask</i>     |  | (Optional) IP network mask in format m.m.m.m                     |
| <i>ip-prefix</i>   |  | (Optional) IP prefix and network mask length in format x.x.x.x/m |
| route-preference   |  | (Optional) URIB route preference for local/direct routes         |
| <i>pref</i>        |  | (Optional) Local/direct route preference                         |
| tag                |  | (Optional) URIB route tag value for local/direct routes          |
| <i>tag</i>         |  | (Optional) Local/direct tag value                                |

## Command Mode

- /exec/configure/if-igp /exec/configure/if-mgmt-config /exec/configure/if-mpls-tunnel /exec/configure/if-gre-tunnel /exec/configure/if-vsan /exec/configure/if-cpp

# ip address dhcp

[no] ip address dhcp

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ip                 | Configure IP features                           |
| address            | Configure IP address on interface               |
| dhcp               | Configure IP address from a dhcp server         |

## Command Mode

- /exec/configure/if-vlan /exec/configure/if-ethernet /exec/configure/if-mgmt-config /exec/configure/if-ethernet-all /exec/configure/if-sub



# ip address secondary

[no] ip address { <ip-addr> <ip-mask> | <ip-prefix> } secondary [ route-preference <pref> ] [ tag <tag> ] | ip address { <ip-addr> <ip-mask> | <ip-prefix> } secondary [ route-preference <pref> ] [ tag <tag> ]

## Syntax Description

### Syntax Description

|                  |  |
|------------------|--|
| no               | Negate a command or set its defaults                     |
| ip               | Configure IP features                                    |
| address          | Configure IP address on interface                        |
| <i>ip-addr</i>   | IP address in format i.i.i.i                             |
| <i>ip-mask</i>   | IP network mask in format m.m.m.m                        |
| <i>ip-prefix</i> | IP prefix and network mask length in format x.x.x.x/m    |
| secondary        | Configure additional IP addresses on interface           |
| route-preference | (Optional) URIB route preference for local/direct routes |
| <i>pref</i>      | (Optional) Local/direct route preference                 |
| tag              | (Optional) URIB route tag value for local/direct routes  |
| <i>tag</i>       | (Optional) Local/direct tag value                        |

## Command Mode

- /exec/configure/if-igmp /exec/configure/if-mpls-tunnel /exec/configure/if-mgmt-config /exec/configure/if-gre-tunnel /exec/configure/if-6to4-tunnel /exec/configure/if-vsan /exec/configure/if-cpp

# ip adjacency cache disable

[no] ip adjacency cache disable

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| ip                 | Configure IP features                           |  |
| adjacency          | Configure Adjmgr                                |  |
| cache              | Disable cache                                   |  |
| disable            | Disable cache                                   |  |

## Command Mode

- /exec/configure

# ip adjacency forcedownload

ip adjacency [ vrf { <vrf-name> | <vrf-known-name> } ] { <interface> { \* | <ip-addr> } | \* } forcedownload

## Syntax Description

| Syntax Description    |  |   |
|-----------------------|--|---|
| ip                    |  | Configure IP features                       |
| adjacency             |  | Configure Adjmgr                            |
| vrf                   |  | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       |  | (Optional) VRF name                         |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name                   |
| <i>interface</i>      |  | Display specific interface adjacencies only |
| <i>ip-addr</i>        |  | IPV4 source address                         |
| *                     |  | for all adjacencies in this context         |
| forcedownload         |  | Create consistency in UFD                   |

## Command Mode

- /exec/configure

## ip adjacency l2fm-reg

```
[no] ip adjacency l2fm-reg { [ vrf <vrf-known-name> ] | <interface> }
```

### Syntax Description

| Syntax Description    |            |                                      |
|-----------------------|------------|--------------------------------------|
| no                    | (Optional) | Negate a command or set its defaults |
| ip                    |            | Configure IP features                |
| adjacency             |            | Configure Adjmgr                     |
| l2fm-reg              |            | Register with l2fm                   |
| vrf                   | (Optional) | vrf name                             |
| <i>vrf-known-name</i> | (Optional) | Known VRF name                       |
| <i>interface</i>      |            | Interface name                       |

### Command Mode

- /exec/configure

# ip adjacency notify interval

{ ip adjacency notify interval <time> } | { no ip adjacency notify interval }

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| ip                 |  | Configure IP features                |
| adjacency          |  | Configure Adjmgr                     |
| notify             |  | Notify URIB/FIB                      |
| interval           |  | Time interval                        |
| <i>time</i>        |  | value in milli seconds               |

## Command Mode

- /exec/configure

# ip adjacency peer-gmac

[no] ip adjacency [ vrf { <vrf-name> | <vrf-known-name> } ] { <interface> { \* | <ip-addr> } | \* } peer-gmac

## Syntax Description

| Syntax Description    |            |   |
|-----------------------|------------|---|
| no                    | (Optional) | Negate a command or set its defaults        |
| ip                    |            | Configure IP features                       |
| adjacency             |            | Configure Adjmgr                            |
| vrf                   | (Optional) | Display per-VRF information                 |
| <i>vrf-name</i>       | (Optional) | VRF name                                    |
| <i>vrf-known-name</i> | (Optional) | Known VRF name                              |
| <i>interface</i>      |            | Display specific interface adjacencies only |
| <i>ip-addr</i>        |            | IPv4 source address                         |
| *                     |            | for all adjacencies in this context         |
| peer-gmac             |            | Set/clear the peer-gmac bit                 |

## Command Mode

- /exec/configure

# ip adjacency remote-adj

[no] ip adjacency [ vrf { <vrf-name> | <vrf-known-name> } ] { <interface> { \* | <ip-addr> } | \* } remote-adj

## Syntax Description

| Syntax Description    |            |   |
|-----------------------|------------|---|
| no                    | (Optional) | Negate a command or set its defaults        |
| ip                    |            | Configure IP features                       |
| adjacency             |            | Configure Adjmgr                            |
| vrf                   | (Optional) | Display per-VRF information                 |
| <i>vrf-name</i>       | (Optional) | VRF name                                    |
| <i>vrf-known-name</i> | (Optional) | Known VRF name                              |
| <i>interface</i>      |            | Display specific interface adjacencies only |
| <i>ip-addr</i>        |            | IPv4 source address                         |
| *                     |            | for all adjacencies in this context         |
| remote-adj            |            | Set/clear the remote-adj bit                |

## Command Mode

- /exec/configure

# ip adjacency route distance

{ ip adjacency route distance <pref> } | { no ip adjacency route distance }

## Syntax Description

| Syntax Description |                |                                      |
|--------------------|----------------|--------------------------------------|
| no                 |                | Negate a command or set its defaults |
| ip                 |                | Configure IP features                |
| adjacency          |                | Configure Adjmgr                     |
| route              | route          |                                      |
| distance           | admin-distance |                                      |
| <i>pref</i>        | preference     |                                      |

## Command Mode

- /exec/configure



# ip adjacency statistics collect

{ ip adjacency statistics collect } | { no ip adjacency statistics collect }

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| ip                 |  | Configure IP features                |
| adjacency          |  | Configure Adjmgr                     |
| statistics         |  | Statistics                           |
| collect            |  | Collection                           |

## Command Mode

- /exec/configure

# ip adjacency statistics interval

{ ip adjacency statistics interval <time> } | { no ip adjacency statistics interval }

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| ip                 |  | Configure IP features                |
| adjacency          |  | Configure Adjmgr                     |
| statistics         |  | Statistics                           |
| interval           |  | Interval                             |
| <i>time</i>        |  | Timer timeout value                  |

## Command Mode

- /exec/configure

# ip adjmgr internal event-history size

```
[no] ip adjmgr internal event-history { control | errors | ipc | stats | ha | cli | sdb | snmp | nb | dme-event | event } size { <size_in_text> }
```

## Syntax Description

| Syntax Description  |   |  |
|---------------------|---|--|
| no                  | (Optional) Negate a command or set its defaults |  |
| ip                  | Configure IP features                           |  |
| adjmgr              | AM information                                  |  |
| internal            | Commands for internal use                       |  |
| event-history       | various event logs of Adjmgr                    |  |
| control             | Control logs of Adjmgr                          |  |
| errors              | error logs of Adjmgr                            |  |
| ipc                 | ipc debug message logs of Adjmgr                |  |
| stats               | stats debug message logs of Adjmgr              |  |
| ha                  | ha debug message logs of Adjmgr                 |  |
| cli                 | cli related events of Adjmgr                    |  |
| sdb                 | sdb debug message logs of Adjmgr                |  |
| snmp                | snmp debug message logs of Adjmgr               |  |
| nb                  | netbroker debug message logs of Adjmgr          |  |
| dme-event           | dme event logs of Adjmgr                        |  |
| event               | events debug message logs of Adjmgr             |  |
| size                | Configure the size of the event-hist buffer     |  |
| <i>size_in_text</i> | Buffer size                                     |  |

## Command Mode

- /exec/configure

## ip adjmgr internal event-history size

```
[no] ip adjmgr internal event-history { control | errors | ipc | stats | ha | cli | sdb | snmp | nb | dme-event | event
} size { <size_in_Kbytes> }
```

### Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| ip                    | Configure IP features                           |  |
| adjmgr                | AM information                                  |  |
| internal              | Commands for internal use                       |  |
| event-history         | various event logs of Adjmgr                    |  |
| control               | Control logs of Adjmgr                          |  |
| errors                | error logs of Adjmgr                            |  |
| ipc                   | ipc debug message logs of Adjmgr                |  |
| stats                 | stats debug message logs of Adjmgr              |  |
| ha                    | ha debug message logs of Adjmgr                 |  |
| cli                   | cli related events of Adjmgr                    |  |
| sdb                   | sdb debug message logs of Adjmgr                |  |
| snmp                  | snmp debug message logs of Adjmgr               |  |
| nb                    | netbroker debug message logs of Adjmgr          |  |
| dme-event             | dme event logs of Adjmgr                        |  |
| event                 | events debug message logs of Adjmgr             |  |
| size                  | Configure the size of the event-hist buffer     |  |
| <i>size_in_Kbytes</i> | Size of the file in kbytes                      |  |

### Command Mode

- /exec/configure

# ip allow address-overlap

[no] ip allow address-overlap

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| ip                 |            | Configure IP features                |
| allow              |            | Allow interface IP address overlap   |
| address-overlap    |            | Allow interface IP address overlap   |

## Command Mode

- /exec/configure

# ip allow port

{ ip allow port { <allow\_ports> | none } | no ip allow port [ <allow\_ports> | none ] }

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults    |
| ip                 |  | IP protocol                             |
| port               |  | Well known UDP/TCP ports                |
| allow              |  | Restrict the set of allowed ports       |
| <i>allow_ports</i> |  | Comma separated list of ports or ranges |
| none               |  | Disallow binding to any ports           |

## Command Mode

- /exec/configure/virt-serv

# ip amt anycast-gateway-address

```
{ { ip amt anycast-gateway-address <address> } | { no ip amt anycast-gateway-address [ <address> ] } } | {
ipv6 amt anycast-gateway-address <address6> } | { no ipv6 amt anycast-gateway-address [ <address6> ] } }
```

## Syntax Description

| Syntax Description      |  |   |
|-------------------------|--|---|
| no                      |  | Negate a command or set its defaults      |
| ip                      |  | Configure IP features                     |
| ipv6                    |  | Configure IPv6 features                   |
| amt                     |  | AMT global configuration commands         |
| anycast-gateway-address |  | Configure anycast address for AMT gateway |
| <i>address</i>          |  | IP anycast address of AMT gateway         |

## Command Mode

- /exec/configure /exec/configure/vrf

# ip amt anycast-relay-prefix

```
{ { ip amt anycast-relay-prefix <prefix> } | { no ip amt anycast-relay-prefix [ <prefix> ] } | { ipv6 amt anycast-relay-prefix <prefix6> } | { no ipv6 amt anycast-relay-prefix [ <prefix6> ] } }
```

## Syntax Description

| Syntax Description   |  |  |
|----------------------|--|--|
| no                   |  | Negate a command or set its defaults   |
| ip                   |  | Configure IP features                  |
| ipv6                 |  | Configure IPv6 features                |
| amt                  |  | AMT global configuration commands      |
| anycast-relay-prefix |  | Configure anycast prefix for AMT relay |
| <i>prefix</i>        |  | IP anycast prefix for AMT relay        |

## Command Mode

- /exec/configure /exec/configure/vrf



# ip amt gateway

[no] ip amt gateway

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ip                 | Configure IP features                           |
| amt                | AMT global configuration commands               |
| gateway            | Configures IPv4 AMT gateway functionality       |

## Command Mode

- /exec/configure /exec/configure/vrf

# ip amt gateway send-discovery

[no] ip amt gateway send-discovery

## Syntax Description

| Syntax Description |                |  |
|--------------------|----------------|--|
|                    | no             | (Optional) Negate a command or set its defaults    |
|                    | ip             | Configure IP features                              |
|                    | amt            | AMT global configuration commands                  |
|                    | gateway        | Configures IP AMT gateway functionality            |
|                    | send-discovery | Trigger a Discovery message to the Anycast address |

## Command Mode

- /exec/configure /exec/configure/vrf

# ip amt join-policy

```
{ [ no ] { ip | ipv6 } amt join-policy <jroute-map> [ gateway <groute-map> ] }
```

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults             |
| ip                 |            | Configure IP features                            |
| ipv6               |            | Configure IPv6 features                          |
| amt                |            | AMT global configuration commands                |
| join-policy        |            | Configures what (S,G) are allowed to be joined   |
| <i>jroute-map</i>  |            | Route-map describing (S,G) entries allowed       |
| gateway            | (Optional) | Configure join-policy per gateway                |
| <i>groute-map</i>  | (Optional) | Route-map describing gateway or sets of gateways |

## Command Mode

- /exec/configure /exec/configure/vrf

# ip amt qqic

[no] { ip | ipv6 } amt qqic <qqic-value>

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| ip                 | Configure IP features                           |  |
| ipv6               | Configure IPv6 features                         |  |
| amt                | AMT global configuration commands               |  |
| qqic               | Configure Querier's Query Interval Code         |  |
| <i>qqic-value</i>  | QQIC value                                      |  |

## Command Mode

- /exec/configure /exec/configure/vrf

# ip amt relay-advertisement-address

```
{ { ip amt relay-advertisement-address <address> } | { no ip amt relay-advertisement-address [ <address> ] } } | { ipv6 amt relay-advertisement-address <address6> } | { no ipv6 amt relay-advertisement-address [ <address6> ] } }
```

## Syntax Description

| Syntax Description          |  |   |
|-----------------------------|--|---|
| no                          |  | Negate a command or set its defaults    |
| ip                          |  | Configure IP features                   |
| ipv6                        |  | Configure IPv6 features                 |
| amt                         |  | AMT global configuration commands       |
| relay-advertisement-address |  | Address to use by AMT relay             |
| <i>address</i>              |  | IP unicast address for AMT relay to use |

## Command Mode

- /exec/configure /exec/configure/vrf

# ip amt relay

[no] ip amt relay

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | no (Optional) Negate a command or set its defaults |
|                           | ip Configure IP features                           |
|                           | amt AMT global configuration commands              |
|                           | relay Configures IPv4 AMT relay functionality      |

## Command Mode

- /exec/configure /exec/configure/vrf

# ip amt state-limit

{ [ no ] { ip | ipv6 } amt state-limit <limit> [ gateway <route-map> ] }

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults             |
| ip                 | Configure IP features                                       |
| ipv6               | Configure IPv6 features                                     |
| amt                | AMT global configuration commands                           |
| state-limit        | Configure the maximum number of (S,G) entries allowed       |
| <i>limit</i>       | Number of entries total or per AMT gateway                  |
| gateway            | (Optional) Configure state limit per gateway                |
| <i>route-map</i>   | (Optional) Route-map describing gateway or sets of gateways |

## Command Mode

- /exec/configure /exec/configure/vrf

## ip amt tunnel-limit

```
{ { { ip | ipv6 } amt tunnel-limit <limit> } | { no { ip | ipv6 } amt tunnel-limit [ <limit> ] } }
```

### Syntax Description

| Syntax Description |  |                                       |
|--------------------|--|---------------------------------------|
| no                 |  | Negate a command or set its defaults  |
| ip                 |  | Configure IP features                 |
| ipv6               |  | Configure IPv6 features               |
| amt                |  | AMT global configuration commands     |
| tunnel-limit       |  | Configure the maximum tunnels allowed |
| <i>limit</i>       |  | Number of tunnels                     |

### Command Mode

- /exec/configure /exec/configure/vrf



# ip arp

```
{ ip arp { [ am mts-batch <batch-timer> ] [ lookup_timeout <l2rib-timer> ] } }
```

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| ip                 |  | Configure IP features                       |
| arp                |  | Configure ARP parameters                    |
| am                 |  | (Optional) Adjacency Manager                |
| mts-batch          |  | (Optional) Configure ARP-AM mts batch count |
| lookup_timeout     |  | (Optional) arp_l2rib_lookup_timeout         |
| <i>batch-timer</i> |  | (Optional) Interval in milliseconds         |
| <i>l2rib-timer</i> |  | (Optional) Interval in seconds              |

## Command Mode

- /exec/configure

# ip arp

```
{ ip arp <ip-address> <mac-address> | no ip arp <ip-address> [ <mac-address> ] }
```

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| ip                 |  | Configure IP features                |
| arp                |  | Configure ARP parameters             |
| <i>ip-address</i>  |  | IP address                           |
| <i>mac-address</i> |  | MAC address                          |

## Command Mode

- /exec/configure/if-igp /exec/configure/if-mgmt-config /exec/configure/if-vlan-common

# ip arp allow-static-arp-outside-subnet

[no] ip arp allow-static-arp-outside-subnet

## Syntax Description

| Syntax Description              |   |  |
|---------------------------------|---|--|
| no                              | (Optional) Negate a command or set its defaults |  |
| ip                              | Configure IP features                           |  |
| arp                             | Configure ARP parameters                        |  |
| allow-static-arp-outside-subnet | Allow static ARP outside interface subnet       |  |

## Command Mode

- /exec/configure

# ip arp broadcast mac-mismatch

{ ip arp broadcast mac-mismatch } | { no ip arp broadcast mac-mismatch }

## Syntax Description

| Syntax Description |              |                                      |
|--------------------|--------------|--------------------------------------|
|                    | no           | Negate a command or set its defaults |
|                    | ip           | Configure IP features                |
|                    | arp          | Configure ARP parameters             |
|                    | broadcast    | Enable/disable arp broadcast         |
|                    | mac-mismatch | when there is a smac mismatch        |

## Command Mode

- /exec/configure

# ip arp cache disable

[no] ip arp cache disable

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ip                 | Configure IP features                           |
| arp                | Configure ARP parameters                        |
| cache              | Disable cache                                   |
| disable            | Disable cache                                   |

## Command Mode

- /exec/configure

## ip arp cache limit

```
{ { ip arp cache limit <max> } | { no ip arp cache limit } } [ syslog <rate> ]
```

### Syntax Description

| Syntax Description |                                      |
|--------------------|--------------------------------------|
| no                 | Negate a command or set its defaults |
| ip                 | Configure IP features                |
| arp                | Configure ARP parameters             |
| cache              | ARP cache parameters                 |
| limit              | Limit size of ARP adjacencies cache  |
| max                | Maximum number of ARP entries        |
| syslog             | (Optional) Syslog messages           |
| rate               | (Optional) Syslogs per second        |

### Command Mode

- /exec/configure

# ip arp cfs-queue

{ ip arp cfs-queue <size> } | { no ip arp cfs-queue }

## Syntax Description

| Syntax Description |           |  |
|--------------------|-----------|--|
| no                 |           | Negate a command or set its defaults             |
| ip                 |           | Configure IP features                            |
| arp                |           | ARP  |
| cfs-queue          | cfs-queue |  |
| size               |           | Size for adjacencies to be sent in CFSOE payload |

## Command Mode

- /exec/configure

# ip arp cos

{ ip arp cos <cosval> } | { no ip arp cos }

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| ip                 |  | Configure IP features                |
| arp                |  | Configure ARP parameters             |
| cos                |  | COS for ARP packet                   |
| <i>cosval</i>      |  | COS value                            |

## Command Mode

- /exec/configure



# ip arp delete-adj-on-mac-delete

[no] ip arp delete-adj-on-mac-delete

## Syntax Description

| Syntax Description       |   |  |
|--------------------------|---|--|
| no                       | (Optional) Negate a command or set its defaults |  |
| ip                       | Configure IP features                           |  |
| arp                      | Configure ARP parameters                        |  |
| delete-adj-on-mac-delete | Delete the adjacency on MAC delete              |  |

## Command Mode

- /exec/configure/if-vlan-common

# ip arp event-history size

```
[no] ip arp event-history { packet | event | sync-event | ip-sync-event | control | ha | errors | lcache | lcache-errors | client-event | client-errors | snmp | cli | suppression-event | suppression-errors | controller-errors | dme-event } size { <size_in_text> }
```

## Syntax Description

### Syntax Description

|                     |   |
|---------------------|---|
| no                  | (Optional) Negate a command or set its defaults |
| ip                  | IP events                                       |
| arp                 | Configure ARP parameters                        |
| event-history       | log debug events into event history buffer      |
| packet              | inst packet logs                                |
| event               | Internal event logs                             |
| sync-event          | CFS and MCECM related event logs                |
| ip-sync-event       | L3 over vpc events                              |
| control             | ARP control event logs                          |
| ha                  | HA and GR logs                                  |
| errors              | inst error logs                                 |
| lcache              | lcache logs                                     |
| lcache-errors       | lcache_error logs                               |
| client-event        | Client_event logs                               |
| client-errors       | Client_error logs                               |
| cli                 | cli logs  |
| snmp                | SNMP logs                                       |
| suppression-event   | ARP suppression event logs                      |
| suppression-errors  | ARP suppression error logs                      |
| controller-errors   | Controller MAC-IP route error logs              |
| dme-event           | ARP DME event logs                              |
| size                | Configure the size of the event-hist buffer     |
| <i>size_in_text</i> | Buffer size                                     |

**Command Mode**

- /exec/configure

# ip arp event-history size

```
[no] ip arp event-history { packet | event | sync-event | ip-sync-event | control | ha | errors | lcache | lcache-errors | client-event | client-errors | snmp | cli | suppression-event | suppression-errors | dme-event } size { <size_in_Kbytes> }
```

## Syntax Description

| Syntax Description | no                    | (Optional) Negate a command or set its defaults |
|--------------------|-----------------------|---|
|                    | ip                    | IP events                                       |
|                    | arp                   | Configure ARP parameters                        |
|                    | event-history         | log debug events into event history buffer      |
|                    | packet                | inst packet logs                                |
|                    | event                 | Internal event logs                             |
|                    | sync-event            | CFS and MCECM related event logs                |
|                    | ip-sync-event         | L3 over vpc events                              |
|                    | control               | ARP control event logs                          |
|                    | ha                    | HA and GR logs                                  |
|                    | errors                | inst error logs                                 |
|                    | lcache                | lcache logs                                     |
|                    | lcache-errors         | lcache_error logs                               |
|                    | client-event          | Client_event logs                               |
|                    | client-errors         | Client_error logs                               |
|                    | cli                   | cli logs  |
|                    | snmp                  | SNMP logs                                       |
|                    | suppression-event     | ARP suppression event logs                      |
|                    | suppression-errors    | ARP suppression error logs                      |
|                    | dme-event             | ARP DME event logs                              |
|                    | size                  | Configure the size of the event-hist buffer     |
|                    | <i>size_in_Kbytes</i> | Size of the file in kbytes                      |

## Command Mode

- /exec/configure

# ip arp garp-storm

{ ip arp garp-storm } | { no ip arp garp-storm }

## Syntax Description

| Syntax Description |  |                                       |
|--------------------|--|---------------------------------------|
| no                 |  | Negate a command or set its defaults  |
| ip                 |  | Configure IP features                 |
| arp                |  | Configure ARP parameters              |
| garp-storm         |  | Configure timer values for garp-storm |

## Command Mode

- /exec/configure

# ip arp garp-storm timer count

{ ip arp garp-storm timer <garp-timer> count <garp-count> } | { no ip arp garp-storm timer <garp-timer> count <garp-count> }

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults      |
| ip                 |  | Configure IP features                     |
| arp                |  | Configure ARP parameters                  |
| garp-storm         |  | Configure timer values for garp-storm     |
| timer              |  | Set the garp-storm timer value in seconds |
| <i>garp-timer</i>  |  | Timer value in seconds                    |
| count              |  | Set the garp count value                  |
| <i>garp-count</i>  |  | Timer value in seconds                    |

## Command Mode

- /exec/configure

# ip arp gratuitous hsrp duplicate

{ ip arp gratuitous hsrp duplicate | no ip arp gratuitous hsrp duplicate }

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 |            | Negate a command or set its defaults |
| ip                 |            | Configure IP features                |
| arp                |            | Configure ARP parameters             |
| gratuitous         | gratuitous |                                      |
| hsrp               | hsrp       |                                      |
| duplicate          | duplicate  | address detection                    |

## Command Mode

- /exec/configure/if-igmp /exec/configure/if-mgmt-config /exec/configure/if-vlan-common

# ip arp gratuitous request

{ ip arp gratuitous request | no ip arp gratuitous request }

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 |            | Negate a command or set its defaults                                     |
| ip                 |            | Configure IP features  |
| arp                |            | Configure ARP parameters   |
| gratuitous         | gratuitous |  |
| request            |            | Enable/Disable sending grat. arp request when duplicate address detected |

## Command Mode

- /exec/configure/if-igp /exec/configure/if-mgmt-config /exec/configure/if-vlan



# ip arp gratuitous update

{ ip arp gratuitous update | no ip arp gratuitous update }

## Syntax Description

| Syntax Description |            |   |
|--------------------|------------|---|
| no                 |            | Negate a command or set its defaults                |
| ip                 |            | Configure IP features                               |
| arp                |            | Configure ARP parameters                            |
| gratuitous         | gratuitous |   |
| update             |            | Enable/Disable arp cache updates for gratuitous arp |

## Command Mode

- /exec/configure/if-igmp /exec/configure/if-mgmt-config /exec/configure/if-vlan-common

## ip arp inspection filter vlan

[no] ip arp inspection filter <arp-acl-name> vlan <vlan-range>

### Syntax Description

| Syntax Description  |            |   |
|---------------------|------------|---|
| no                  | (Optional) | Negate a command or set its defaults            |
| ip                  |            | Configure IP features                           |
| arp                 |            | Configure ARP parameters                        |
| inspection          |            | Arp Inspection configuration                    |
| filter              |            | Filter  |
| <i>arp-acl-name</i> |            | Access list name                                |
| vlan                |            | Vlan range                                      |
| <i>vlan-range</i>   |            | VLAN ID 1-4094 or range(s): 1-5, 10 or 2-5,7-19 |

### Command Mode

- /exec/configure

# ip arp inspection log-buffer entries

[no] ip arp inspection log-buffer { entries <number1> }

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ip                 | Configure IP features                           |
| arp                | Configure ARP parameters                        |
| inspection         | Arp Inspection configuration                    |
| log-buffer         | Log Buffer Configuration                        |
| entries            | Number of entries for log buffer                |
| <i>number1</i>     | Number of entries for log buffer                |

## Command Mode

- /exec/configure

# ip arp inspection trust

[no] ip arp inspection trust

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ip                 | Configure IP features                           |
| arp                | Configure ARP parameters                        |
| inspection         | Arp Inspection configuration                    |
| trust              | Configure trust state                           |

## Command Mode

- /exec/configure/if-switching

# ip arp inspection validate

[no] ip arp inspection validate { src-mac | dst-mac | ip1 } +

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| ip                 | Configure IP features                           |  |
| arp                | Configure ARP parameters                        |  |
| inspection         | Arp Inspection configuration                    |  |
| validate           | Validate addresses                              |  |
| src-mac            | Validate source MAC address                     |  |
| dst-mac            | Validate destination MAC address                |  |
| ip1                | Validate IP addresses                           |  |

## Command Mode

- /exec/configure

# ip arp inspection vlan

[no] ip arp inspection vlan <vlan-id> [ logging { dhcp-bindings { permit | all | inone } } ]

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| <i>logging</i>     | (Optional) dhcp-bindings                              |  |
| no                 | (Optional) Negate a command or set its defaults       |  |
| ip                 | Configure IP features                                 |  |
| arp                | Configure ARP parameters                              |  |
| inspection         | Arp Inspection configuration                          |  |
| vlan               | Enable/Disable ARP Inspection on vlans                |  |
| <i>vlan-id</i>     | VLAN ID 1-4094 or range(s): 1-5, 10 or 2-5,7-19       |  |
| dhcp-bindings      | (Optional) Logging of packet that match DHCP bindings |  |
| permit             | (Optional) Log DHCP Binding Permitted packets         |  |
| all                | (Optional) Log all packets that match DHCP bindings   |  |
| inone              | (Optional) Do not log packets                         |  |

## Command Mode

- /exec/configure

# ip arp mts-queue

{ ip arp mts-queue <size> } | { no ip arp mts-queue }

## Syntax Description

| Syntax Description |           |                                      |
|--------------------|-----------|--------------------------------------|
| no                 |           | Negate a command or set its defaults |
| ip                 |           | Configure IP features                |
| arp                |           | ARP                                  |
| mts-queue          | mts-queue |                                      |
| size               |           | Size for arp data sap qlimit         |

## Command Mode

- /exec/configure

# ip arp off-list timeout

{ ip arp off-list timeout <time> } | { no ip arp off-list timeout }

## Syntax Description

| Syntax Description |          |                                      |
|--------------------|----------|--------------------------------------|
| no                 |          | Negate a command or set its defaults |
| ip                 |          | Configure IP features                |
| arp                |          | Configure ARP parameters             |
| off-list           | off-list |                                      |
| timeout            |          | Expire time                          |
| <i>time</i>        |          | Expire time value in seconds         |

## Command Mode

- /exec/configure



# ip arp rarp fabric-forwarding

[no] ip arp rarp fabric-forwarding

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults                 |
| ip                 |            | Configure IP features                                |
| arp                |            | Configure ARP parameters                             |
| rarp               |            | Enable/Disable forwarding of RARP messages on fabric |
| fabric-forwarding  |            | Forward RARP requests to the fabric                  |

## Command Mode

- /exec/configure

## ip arp rarp fabric-forwarding rate-limit

[no] ip arp rarp fabric-forwarding rate-limit <rate>

### Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults                 |
| ip                 |            | Configure IP features                                |
| arp                |            | Configure ARP parameters                             |
| rarp               |            | Enable/Disable forwarding of RARP messages on fabric |
| fabric-forwarding  |            | Forward RARP requests to the fabric                  |
| rate-limit         |            | Forwarding rate of the RARP frames                   |
| <i>rate</i>        |            | RARP frames-per-second                               |

### Command Mode

- /exec/configure

# ip arp request

ip arp request <ip-address>

## Syntax Description

| Syntax Description |                   |                          |
|--------------------|-------------------|--------------------------|
|                    | ip                | Configure IP features    |
|                    | arp               | Configure ARP parameters |
|                    | request           | Trigger ARP request      |
|                    | <i>ip-address</i> | IP address               |

## Command Mode

- /exec/configure/if-igp

# ip arp suppression-cache

```
ip arp suppression-cache { [ clear { local | remote } vlan <vlan-id> [ <ip-address> ] ] | [ download remote
vlan <vlan-id> [ <ip-address> ] ] }
```

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| clear              | (Optional) | Clear ARP suppression cache entries                      |
| ip                 |            | Clear IP commands  |
| download           | (Optional) | download local entries from ARP cache, remote from l2rib |
| arp                |            | Clear ARP table and statistics                           |
| suppression-cache  |            | ARP-suppression cache                                    |
| local              | (Optional) | Local entries  |
| remote             | (Optional) | Remote entries   |
| vlan               | (Optional) | Vlan id  |
| <i>vlan-id</i>     | (Optional) | Vlan   |
| <i>ip-address</i>  | (Optional) | IP address   |

## Command Mode

- /exec

# ip arp suppression testnum

```
ip arp suppression testnum <testnum> [ { <ip-address> <mac-address> <vlan_id> <interface> <phy-interface>
} <count> ]
```

## Syntax Description

| Syntax Description   |  |                                     |
|----------------------|--|-------------------------------------|
| ip                   |  | Configure IP features               |
| arp                  |  | Configure ARP parameters            |
| suppression          |  | ARP-suppression based event         |
| testnum              |  | test case number                    |
| <i>testnum</i>       |  | id of test (1-100)                  |
| <i>ip-address</i>    |  | (Optional) IP address               |
| <i>mac-address</i>   |  | (Optional) MAC address              |
| <i>vlan_id</i>       |  | (Optional) Vlan                     |
| <i>interface</i>     |  | (Optional) ARP interface            |
| <i>phy-interface</i> |  | (Optional) ARP interface            |
| <i>count</i>         |  | (Optional) no of adjacencies needed |

## Command Mode

- /exec/configure

# ip arp suppression timeout

{ ip arp suppression timeout <time-out> } | { no ip arp suppression timeout }

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults                       |
| ip                 |  | Configure IP features                                      |
| arp                |  | Configure ARP parameters                                   |
| suppression        |  | ARP-suppression based event                                |
| timeout            |  | ARP timeout  |
| <i>time-out</i>    |  | Time-out value in seconds. Time-out = 0 indicates disabled |

## Command Mode

- /exec/configure

# ip arp synchronize

[no] ip arp synchronize

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| ip                 |            | Configure IP features                |
| arp                |            | ARP                                  |
| synchronize        | CFS        | synchronize                          |

## Command Mode

- /exec/configure/vpc-domain

# ip arp synchronize pull

ip arp synchronize pull

## Syntax Description

| Syntax Description |             |                           |
|--------------------|-------------|---------------------------|
|                    | ip          | Configure IP features     |
|                    | arp         | ARP                       |
|                    | synchronize | CFS synchronize           |
|                    | pull        | Initiate CFS pull request |

## Command Mode

- /exec



# ip arp synchronize push

ip arp synchronize push

## Syntax Description

| Syntax Description |  |                           |
|--------------------|--|---------------------------|
| ip                 |  | Configure IP features     |
| arp                |  | ARP                       |
| synchronize        |  | CFS synchronize           |
| push               |  | Initiate CFS push message |

## Command Mode

- /exec

# ip arp test

```
{ ip arp test <ip-address> <mac-address> <mode> | no ip arp test <ip-address> [ <mac-address> ] <mode> }
```

## Syntax Description

### Syntax Description

|                    |  |
|--------------------|--|
| no                 | Negate a command or set its defaults                   |
| ip                 | Configure IP features                                  |
| arp                | Configure ARP parameters                               |
| test               | test command   |
| <i>ip-address</i>  | IP address   |
| <i>mac-address</i> | MAC address  |
| <i>mode</i>        | Mode: 1 - Data plane, 2 - Control plane, 3 - Peer Sync |

## Command Mode

- /exec/configure/if-vlan-common

# ip arp timeout

{ ip arp timeout <time-out> } | { no ip arp timeout }

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| ip                 |  | Configure IP features                |
| arp                |  | Configure ARP parameters             |
| timeout            |  | ARP timeout                          |
| <i>time-out</i>    |  | Time-out value in seconds            |

## Command Mode

- /exec/configure

# ip arp timeout

```
{ ip arp timeout <time-out> } | { no ip arp timeout }
```

## Syntax Description

| Syntax Description |                           |                                      |
|--------------------|---------------------------|--------------------------------------|
| no                 |                           | Negate a command or set its defaults |
| ip                 |                           | Configure IP features                |
| arp                |                           | Configure ARP parameters             |
| timeout            | ARP timeout               |                                      |
| <i>time-out</i>    | Time-out value in seconds |                                      |

## Command Mode

- /exec/configure/config-mgmt /exec/configure/if-igp

# ip as-path access-list deny

```
{ ip as-path access-list <aspl-name> [ timeout <sec> ] [ { deny | permit } <line> ] } | { no ip as-path access-list <aspl-name> [ timeout <sec> ] [ { deny | permit } <line> ] }
```

## Syntax Description

| Syntax Description |            |   |
|--------------------|------------|---|
| no                 |            | Negate a command or set its defaults          |
| ip                 |            | Configure IP features                         |
| as-path            |            | BGP autonomous system path filter             |
| access-list        |            | Specify an access list name                   |
| <i>aspl-name</i>   |            | AS path access list name                      |
| <i>aspl-name</i>   |            | Known as-path access-list name                |
| timeout            | (Optional) | Timeout to be used for checking regex cpu hog |
| <i>sec</i>         | (Optional) | No. of seconds used as timeout                |
| deny               |            | Specify packets to reject                     |
| permit             |            | Specify packets to forward                    |
| <i>line</i>        |            | A   |

## Command Mode

- /exec/configure

# ip as-path access-list deny

```
{ ip as-path access-list <aspl-name> [ timeout <sec> ] [ { deny | permit } <line> ] } | { no ip as-path access-list <aspl-name> [ timeout <sec> ] [ { deny | permit } <line> ] }
```

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 | Negate a command or set its defaults                     |  |
| ip                 | Configure IP features                                    |  |
| as-path            | BGP autonomous system path filter                        |  |
| access-list        | Specify an access list name                              |  |
| <i>aspl-name</i>   | AS path access list name                                 |  |
| <i>aspl-name</i>   | Known as-path access-list name                           |  |
| timeout            | (Optional) Timeout to be used for checking regex cpu hog |  |
| <i>sec</i>         | (Optional) No. of seconds used as timeout                |  |
| deny               | Specify packets to reject                                |  |
| permit             | Specify packets to forward                               |  |
| <i>line</i>        | A  |  |

## Command Mode

- /exec/configure

# ip as-path access-list seq deny

{ ip as-path access-list <aspl-name> seq <seq> [ timeout <sec> ] { { deny | permit } <line> } } | { no ip as-path access-list <aspl-name> seq <seq> [ timeout <sec> ] [ { deny | permit } <line> ] }

## Syntax Description

| Syntax Description |            |   |
|--------------------|------------|---|
| no                 |            | Negate a command or set its defaults          |
| ip                 |            | Configure IP features                         |
| as-path            |            | BGP autonomous system path filter             |
| access-list        |            | Specify an access list name                   |
| <i>aspl-name</i>   |            | AS path access list name                      |
| <i>aspl-name</i>   |            | Known as-path access-list name                |
| seq                |            | Sequence number of an entry                   |
| <i>seq</i>         |            | Sequence number                               |
| timeout            | (Optional) | Timeout to be used for checking regex cpu hog |
| <i>sec</i>         | (Optional) | No. of seconds used as timeout                |
| deny               |            | Specify packets to reject                     |
| permit             |            | Specify packets to forward                    |
| <i>line</i>        |            | A   |

## Command Mode

- /exec/configure

## ip authentication

```
[no] { ip | ipv6 } authentication { { key-chain eigrp <eigrp-ptag> <chain> } | { mode eigrp <eigrp-ptag> md5 } }
```

### Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| ip                 | Configure IP features                           |  |
| ipv6               | Configure IPv6 features                         |  |
| authentication     | Configures EIGRP authentication subcommands     |  |
| key-chain          | key-chain                                       |  |
| <i>eigrp-ptag</i>  | Process tag                                     |  |
| <i>chain</i>       | name of key-chain                               |  |
| mode               | mode  |  |
| eigrp              | EIGRP interface configuration commands          |  |
| md5                | Keyed message digest                            |  |
| <i>eigrp-ptag</i>  |   |  |

### Command Mode

- /exec/configure/if-igp



# ip auto-discard

[no] ip auto-discard

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ip                 | Configure IP features                           |
| auto-discard       | Auto 0.0.0.0/0 discard route                    |

## Command Mode

- /exec/configure /exec/configure/vrf

# ip bandwidth-percent eigrp

```
{ { { ip | ipv6 } bandwidth-percent eigrp <eigrp-ptag> <percent> } | { no { ip | ipv6 } bandwidth-percent eigrp <eigrp-ptag> [ <percent> ] } }
```

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults            |
| ip                 |  | Configure IP features                           |
| ipv6               |  | Configure IPv6 features                         |
| bandwidth-percent  |  | Configures IP-EIGRP bandwidth limit             |
| eigrp              |  | EIGRP interface configuration commands          |
| <i>eigrp-ptag</i>  |  | Process tag                                     |
| <i>percent</i>     |  | Maximum bandwidth percentage that EIGRP may use |
| <i>eigrp-ptag</i>  |  |   |

## Command Mode

- /exec/configure/if-igp

# ip bandwidth eigrp

{ { { ip | ipv6 } bandwidth eigrp <eigrp-ptag> <bw> } | { no { ip | ipv6 } bandwidth eigrp <eigrp-ptag> [ <bw> ] } }

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults                         |
| ip                 |  | Configure IP features  |
| ipv6               |  | Configure IPv6 features                                      |
| bandwidth          |  | Set bandwidth for interface used in EIGRP metric calculation |
| eigrp              |  | EIGRP interface configuration commands                       |
| <i>eigrp-ptag</i>  |  | Process tag  |
| <i>bw</i>          |  | Bandwidth in kilobits  |
| <i>eigrp-ptag</i>  |  |  |

## Command Mode

- /exec/configure/if-igp

# ip cache disable

[no] ip cache disable

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ip                 | Configure IP features                           |
| cache              | Disable cache                                   |
| disable            | Disable cache                                   |

## Command Mode

- /exec/configure

# ip community-list expanded deny

```
{ ip community-list expanded <name> [ timeout <sec> ] { deny | permit } <line> } | { no ip community-list
expanded <name> [ timeout <sec> ] [ { deny | permit } <line> ] }
```

## Syntax Description

### Syntax Description

|                |  |
|----------------|--|
| no             | Negate a command or set its defaults                     |
| ip             | Configure IP features                                    |
| community-list | Add a community list entry                               |
| expanded       | Add an expanded community list entry                     |
| <i>name</i>    | Name of expanded community list                          |
| timeout        | (Optional) Timeout to be used for checking regex cpu hog |
| <i>sec</i>     | (Optional) No. of seconds used as timeout                |
| deny           | Specify community to reject                              |
| permit         | Specify community to accept                              |
| <i>line</i>    | Regular-expression(must                                  |

## Command Mode

- /exec/configure

# ip community-list expanded deny

```
{ ip community-list expanded <name> [ timeout <sec> ] { deny | permit } <line> } | { no ip community-list
expanded <name> [ timeout <sec> ] [ { deny | permit } <line> ] }
```

## Syntax Description

### Syntax Description

|                |  |
|----------------|--|
| no             | Negate a command or set its defaults                     |
| ip             | Configure IP features                                    |
| community-list | Add a community list entry                               |
| expanded       | Add an expanded community list entry                     |
| <i>name</i>    | Name of expanded community list                          |
| timeout        | (Optional) Timeout to be used for checking regex cpu hog |
| <i>sec</i>     | (Optional) No. of seconds used as timeout                |
| deny           | Specify community to reject                              |
| permit         | Specify community to accept                              |
| <i>line</i>    | Regular-expression(must                                  |

## Command Mode

- /exec/configure

# ip community-list expanded seq deny

```
{ ip community-list expanded <name> seq <seq> [ timeout <sec> ] { deny | permit } <line> } | { no ip
community-list expanded <name> seq <seq> [ timeout <sec> ] [ { deny | permit } <line> ] }
```

## Syntax Description

| Syntax Description |            |   |
|--------------------|------------|---|
| no                 |            | Negate a command or set its defaults          |
| ip                 |            | Configure IP features                         |
| community-list     |            | Add a community list entry                    |
| expanded           |            | Add an expanded community list entry          |
| <i>name</i>        |            | Name of expanded community list               |
| seq                |            | Sequence number of an entry                   |
| <i>seq</i>         |            | Sequence number                               |
| timeout            | (Optional) | Timeout to be used for checking regex cpu hog |
| <i>sec</i>         | (Optional) | No. of seconds used as timeout                |
| deny               |            | Specify community to reject                   |
| permit             |            | Specify community to accept                   |
| <i>line</i>        |            | Regular-expression(must                       |

## Command Mode

- /exec/configure

## ip community-list standard permit internet local-AS

```
{ ip community-list standard <name> { permit | deny } { internet | local-AS | no-advertise | no-export | <aann>
| <number> | <hex_num> } + } | { no ip community-list standard <name> [ permit | deny ] [ { internet | local-AS
| no-advertise | no-export | <aann> | <number> | <hex_num> } + ] }
```

### Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults                |
| ip                 |  | Configure IP features                               |
| community-list     |  | Add a community list entry                          |
| standard           |  | Add a standard Community list entry                 |
| <i>name</i>        |  | Standard community list name                        |
| permit             |  | Specify community to accept                         |
| deny               |  | Specify community to reject                         |
| internet           |  | Internet (well-known community)                     |
| local-AS           |  | Do not send outside local AS (well-known community) |
| no-advertise       |  | Do not advertise to any peer (well-known community) |
| no-export          |  | Do not export to next AS (well-known community)     |
| <i>aann</i>        |  | Community number aa:nn format                       |
| <i>number</i>      |  | Community number                                    |
| <i>hex_num</i>     |  | Community number in hex                             |
| <i>internet</i>    |  | (Optional) local-AS                                 |

### Command Mode

- /exec/configure



# ip community-list standard permit internet local-AS

```
{ ip community-list standard <name> { permit | deny } { internet | local-AS | no-advertise | no-export | <aann> | <number> | <hex_num> } + } | { no ip community-list standard <name> [ permit | deny ] [ { internet | local-AS | no-advertise | no-export | <aann> | <number> | <hex_num> } + ] }
```

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults                |
| ip                 |  | Configure IP features                               |
| community-list     |  | Add a community list entry                          |
| standard           |  | Add a standard Community list entry                 |
| <i>name</i>        |  | Standard community list name                        |
| permit             |  | Specify community to accept                         |
| deny               |  | Specify community to reject                         |
| internet           |  | Internet (well-known community)                     |
| local-AS           |  | Do not send outside local AS (well-known community) |
| no-advertise       |  | Do not advertise to any peer (well-known community) |
| no-export          |  | Do not export to next AS (well-known community)     |
| <i>aann</i>        |  | Community number aa:nn format                       |
| <i>number</i>      |  | Community number                                    |
| <i>hex_num</i>     |  | Community number in hex                             |
| <i>internet</i>    |  | (Optional) local-AS                                 |

## Command Mode

- /exec/configure

# ip community-list standard seq permit internet local-AS

```
{ ip community-list standard <name> seq <seq> { permit | deny } { internet | local-AS | no-advertise | no-export
| <aann> | <number> | <hex_num> } + } | { no ip community-list standard <name> seq <seq> [ permit | deny
] [ { internet | local-AS | no-advertise | no-export | <aann> | <number> | <hex_num> } + ] }
```

## Syntax Description

### Syntax Description

|                 |   |
|-----------------|---|
| no              | Negate a command or set its defaults                |
| ip              | Configure IP features                               |
| community-list  | Add a community list entry                          |
| standard        | Add a standard Community list entry                 |
| <i>name</i>     | Standard community list name                        |
| seq             | Sequence number of an entry                         |
| <i>seq</i>      | Sequence number                                     |
| permit          | Specify community to accept                         |
| deny            | Specify community to reject                         |
| internet        | Internet (well-known community)                     |
| local-AS        | Do not send outside local AS (well-known community) |
| no-advertise    | Do not advertise to any peer (well-known community) |
| no-export       | Do not export to next AS (well-known community)     |
| <i>aann</i>     | Community number aa:nn format                       |
| <i>number</i>   | Community number                                    |
| <i>hex_num</i>  | Community number in hex                             |
| <i>internet</i> | (Optional) local-AS                                 |

## Command Mode

- /exec/configure

# ip default-gateway

[no] ip default-gateway <ip-addr> [ vrf { <vrf-name> | <vrf-known-name> } ]

## Syntax Description

| Syntax Description    |            |                                      |
|-----------------------|------------|--------------------------------------|
| no                    | (Optional) | Negate a command or set its defaults |
| ip                    |            | Configure IP features                |
| default-gateway       |            | Configure default gateway            |
| <i>ip-addr</i>        |            | IP prefix in format i.i.i.i          |
| vrf                   | (Optional) | Display per-VRF information          |
| <i>vrf-name</i>       | (Optional) | VRF name                             |
| <i>vrf-known-name</i> | (Optional) | Known VRF name                       |

## Command Mode

- /exec/configure /exec/configure/config-mgmt /exec/configure/vrf /exec/configure/if-gre-tunnel

# ip delay eigrp

```
{ { { ip | ipv6 } delay eigrp <eigrp-ptag> <delay> [ picoseconds ] } | { no { ip | ipv6 } delay eigrp <eigrp-ptag> [ <delay> ] [ picoseconds ] } }
```

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 |            | Negate a command or set its defaults                     |
| ip                 |            | Configure IP features                                    |
| ipv6               |            | Configure IPv6 features                                  |
| delay              |            | Set delay for interface used in EIGRP metric calculation |
| eigrp              |            | EIGRP interface configuration commands                   |
| <i>eigrp-ptag</i>  |            | Process tag  |
| <i>delay</i>       |            | Throughput delay   |
| picoseconds        | (Optional) | Delay units in picoseconds                               |
| <i>eigrp-ptag</i>  |            |  |

## Command Mode

- /exec/configure/if-igp

# ip destination

{ ip { destination | source } <addr> } | { no ip { destination | source } }

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| ip                 |  | specify flow ipv4 address            |
| source             |  | specify flow source ipv4 address     |
| destination        |  | specify flow destination ip address  |
| <i>addr</i>        |  | ipv4 address                         |

## Command Mode

- /exec/configure/configngoamprofileflow

# ip dhcp packet strict-validation

[no] ip dhcp packet strict-validation

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| ip                 | Configure IP features                           |  |
| dhcp               | Configure DHCP snooping or relay                |  |
| packet             | DHCP packet                                     |  |
| strict-validation  | DHCP packet strict validation                   |  |

## Command Mode

- /exec/configure/

# ip dhcp relay

[no] ip dhcp relay

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <b>no</b> (Optional) Negate a command or set its defaults |
|                           | <b>ip</b> Configure IP features                           |
|                           | <b>dhcp</b> Configure DHCP snooping or relay              |
|                           | <b>relay</b> Enable DHCP relay agent                      |

## Command Mode

- /exec/configure

## ip dhcp relay address

[no] ip dhcp relay address [ <ip-addr-val> [ use-vrf <vrf-name> ] ]

### Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| ip                 |            | Configure IP features                |
| dhcp               |            | Configure DHCP snooping or relay     |
| relay              |            | Configure relay agent                |
| address            |            | Configure DHCP server to refer to    |
| <i>ip-addr-val</i> | (Optional) | IP address                           |
| use-vrf            | (Optional) | helper address VRF membership        |
| <i>vrf-name</i>    | (Optional) | VRF name                             |

### Command Mode

- /exec/configure/if-igp /exec/configure/ppm-ethernet-switch /exec/configure/ppm-port-channel-switch



# ip dhcp relay information option

[no] ip dhcp relay information option

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| ip                 | Configure IP features                           |  |
| dhcp               | Configure DHCP snooping or relay                |  |
| relay              | DHCP relay agent parameters                     |  |
| information        | Relay agent information option                  |  |
| option             | Insert relay information in BOOTREQUEST         |  |

## Command Mode

- /exec/configure

# ip dhcp relay information option trust

[no] ip dhcp relay information option trust

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults           |
| ip                 |            | Configure IP features                          |
| dhcp               |            | Configure DHCP snooping or relay               |
| relay              |            | DHCP relay agent parameters                    |
| information        |            | Relay agent information option                 |
| option             |            | Relay agent option                             |
| trust              |            | Enable relay trust functionality on the system |

## Command Mode

- /exec/configure

# ip dhcp relay information option vpn

[no] ip dhcp relay information option vpn

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| ip                 | Configure IP features                           |  |
| dhcp               | Configure DHCP snooping or relay                |  |
| relay              | DHCP relay agent parameters                     |  |
| information        | Relay agent information option                  |  |
| option             | Insert relay information in BOOTREQUEST         |  |
| vpn                | Enable relay support across VRFs                |  |

## Command Mode

- /exec/configure

# ip dhcp relay information trust-all

[no] ip dhcp relay information trust-all

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| ip                 | Configure IP features                           |  |
| dhcp               | Configure DHCP snooping or relay                |  |
| relay              | DHCP relay agent parameters                     |  |
| information        | Relay agent information option                  |  |
| trust-all          | Enable relay trust on all the interfaces        |  |

## Command Mode

- /exec/configure

# ip dhcp relay information trusted

[no] ip dhcp relay information trusted

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| ip                 | Configure IP features                           |  |
| dhcp               | Configure DHCP snooping or relay                |  |
| relay              | DHCP relay agent parameters                     |  |
| information        | Relay agent information option                  |  |
| trusted            | Enable relay trust on this interface            |  |

## Command Mode

- /exec/configure/if-igp

# ip dhcp relay source-interface

ip dhcp relay source-interface <interface-name>

## Syntax Description

| Syntax Description |                       |   |
|--------------------|-----------------------|---|
|                    | ip                    | Configure IP features                     |
|                    | dhcp                  | Configure DHCP snooping or relay          |
|                    | relay                 | Configure relay agent                     |
|                    | source-interface      | Configure source interface for DHCP relay |
|                    | <i>interface-name</i> | Source interface                          |

## Command Mode

- /exec/configure /exec/configure/if-igp

# ip dhcp relay source-interface

[no] ip dhcp relay source-interface

## Syntax Description

| Syntax Description |                  |   |
|--------------------|------------------|---|
|                    | no               | Negate a command or set its defaults      |
|                    | ip               | Configure IP features                     |
|                    | dhcp             | Configure DHCP snooping or relay          |
|                    | relay            | Configure relay agent                     |
|                    | source-interface | Configure source interface for DHCP relay |

## Command Mode

- /exec/configure /exec/configure/if-igp

## ip dhcp relay sub-option circuit-id customized

[no] ip dhcp relay sub-option circuit-id customized

### Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults                         |
| ip                 |            | Configure IP features  |
| dhcp               |            | Configure DHCP snooping or relay                             |
| relay              |            | DHCP relay agent parameters                                  |
| sub-option         |            | Relay agent information option sub-option                    |
| circuit-id         |            | sub-option of option82                                       |
| customized         |            | circuit id customized to include vlan id, slot and port info |

### Command Mode

- /exec/configure



# ip dhcp relay sub-option circuit-id format-type string

[no] ip dhcp relay sub-option circuit-id format-type string [ format <format-string> ]

## Syntax Description

| Syntax Description   |            |                                      |
|----------------------|------------|--------------------------------------|
| no                   | (Optional) | Negate a command or set its defaults |
| ip                   |            | Configure IP features                |
| dhcp                 |            | Configure DHCP snooping or relay     |
| relay                |            | DHCP relay agent parameters          |
| sub-option           |            | Relay agent suboption                |
| circuit-id           |            | Relay agent circuit-id suboption     |
| format-type          |            | Specify suboption format type        |
| string               |            | Use string format for suboption      |
| format               | (Optional) | Specify format string                |
| <i>format-string</i> | (Optional) | Format string                        |

## Command Mode

- /exec/configure

# ip dhcp relay sub-option type cisco

[no] ip dhcp relay sub-option type cisco

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| ip                 | Configure IP features                           |  |
| dhcp               | Configure DHCP snooping or relay                |  |
| relay              | DHCP relay agent parameters                     |  |
| sub-option         | Relay agent suboption                           |  |
| type               | Relay agent suboption type                      |  |
| cisco              | Use Cisco proprietary suboptions                |  |

## Command Mode

- /exec/configure

# ip dhcp relay subnet-broadcast

[no] ip dhcp relay subnet-broadcast

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults               |
| ip                 |            | Configure IP features                              |
| dhcp               |            | Configure DHCP snooping or relay                   |
| relay              |            | Configure DHCP relay                               |
| subnet-broadcast   |            | Configure DHCP relay subnet-broadcast on interface |

## Command Mode

- /exec/configure/if-igp

# ip dhcp smart-relay

[no] ip dhcp smart-relay

## Syntax Description

| Syntax Description |            |   |
|--------------------|------------|---|
| no                 | (Optional) | Negate a command or set its defaults    |
| ip                 |            | Configure IP features                   |
| dhcp               |            | Configure DHCP snooping or relay        |
| smart-relay        |            | Configure DHCP smart relay on interface |

## Command Mode

- /exec/configure/if-igp

# ip dhcp smart-relay global

[no] ip dhcp smart-relay global

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| ip                 |            | Configure IP features                |
| dhcp               |            | Configure DHCP snooping or relay     |
| smart-relay        |            | Configure DHCP smart relay           |
| global             |            | Configure DHCP smart relay globally  |

## Command Mode

- /exec/configure

# ip dhcp snooping

[no] ip dhcp snooping

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ip                 | Configure IP features                           |
| dhcp               | Configure DHCP snooping or relay                |
| snooping           | DHCP Snooping                                   |

## Command Mode

- /exec/configure/

# ip dhcp snooping information option

[no] ip dhcp snooping information option

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| ip                 | Configure IP features                           |  |
| dhcp               | Configure DHCP snooping or relay                |  |
| snooping           | DHCP Snooping                                   |  |
| information        | DHCP Snooping information                       |  |
| option             | DHCP Snooping information option                |  |

## Command Mode

- /exec/configure/

## ip dhcp snooping ipsg-excluded vlan

[no] ip dhcp snooping ipsg-excluded vlan <vlan-id10>

### Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| ip                 | Configure IP features                           |  |
| dhcp               | Configure DHCP snooping or relay                |  |
| snooping           | DHCP Snooping                                   |  |
| ipsg-excluded      | exclude ipsg                                    |  |
| vlan               | DHCP Snooping ipsg excluded vlan                |  |
| <i>vlan-id10</i>   | VLAN ID 1-4094 or range(s): 1-5, 10 or 2-5,7-19 |  |

### Command Mode

- /exec/configure



# ip dhcp snooping trust

[no] ip dhcp snooping trust

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ip                 | Configure IP features                           |
| dhcp               | Configure DHCP snooping or relay                |
| snooping           | DHCP Snooping                                   |
| trust              | DHCP Snooping trust config                      |

## Command Mode

- /exec/configure/if-switching

# ip dhcp snooping verify mac-address

[no] ip dhcp snooping verify mac-address

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| ip                 |            | Configure IP features                |
| dhcp               |            | Configure DHCP snooping or relay     |
| snooping           |            | DHCP Snooping                        |
| verify             |            | DHCP snooping verify                 |
| mac-address        |            | DHCP snooping verify mac-address     |

## Command Mode

- /exec/configure/

# ip dhcp snooping vlan

[no] ip dhcp snooping vlan <vlan-id10>

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| ip                 | Configure IP features                           |  |
| dhcp               | Configure DHCP snooping or relay                |  |
| snooping           | DHCP Snooping                                   |  |
| vlan               | DHCP Snooping vlan                              |  |
| <i>vlan-id10</i>   | VLAN ID 1-4094 or range(s): 1-5, 10 or 2-5,7-19 |  |

## Command Mode

- /exec/configure

# ip directed-broadcast

[no] ip directed-broadcast [ <acl-name> ]

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| ip                 |            | Configure IP features                |
| directed-broadcast |            | IP directed-broadcast                |
| <i>acl-name</i>    | (Optional) | ACL policy name                      |

## Command Mode

- /exec/configure/if-igp /exec/configure/if-mgmt-config

# ip distribute-list eigrp

```
[no] { ip | ipv6 } distribute-list eigrp <eigrp-ptag> { { route-map <map> } | { prefix-list <list> } } { in | out }
}
```

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| ip                 | Configure IP features                           |  |
| ipv6               | Configure IPv6 features                         |  |
| distribute-list    | Filter networks in routing updates              |  |
| eigrp              | EIGRP interface configuration commands          |  |
| <i>eigrp-ptag</i>  | Process tag                                     |  |
| route-map          | Use a route-map for route filtering             |  |
| <i>map</i>         | Route-map name                                  |  |
| prefix-list        | Use a prefix-list for route filtering           |  |
| <i>list</i>        | Reference to prefix-list name                   |  |
| in                 | Filter incoming routing updates                 |  |
| out                | Filter outgoing routing updates                 |  |

## Command Mode

- /exec/configure/if-igp

## ip dns source-interface

```
[no] ip dns source-interface <ifnum> [ vrf { <vrf-name> | <vrf-known-name> } ]
```

### Syntax Description

| Syntax Description    |            |  |
|-----------------------|------------|--|
| no                    | (Optional) | Negate a command or set its defaults                 |
| ip                    |            | Configure IP features                                |
| dns                   |            | Configure dns client                                 |
| source-interface      |            | Configure source interface feature for domain-lookup |
| <i>ifnum</i>          |            | Source interface                                     |
| vrf                   | (Optional) | Configure VRF  |
| <i>vrf-name</i>       | (Optional) | VRF name   |
| <i>vrf-known-name</i> | (Optional) | Known VRF name                                       |

### Command Mode

- /exec/configure

# ip domain-list

```
[no] ip domain-list { <s0> | <s1> [ use-vrf { <vrf-name> | <vrf-known-name> } ] }
```

## Syntax Description

| Syntax Description    |            |                                      |
|-----------------------|------------|--------------------------------------|
| no                    | (Optional) | Negate a command or set its defaults |
| ip                    |            | Configure IP features                |
| domain-list           |            | Add additional domain names          |
| <i>s0</i>             |            | Enter a domain                       |
| <i>s1</i>             |            | Enter a domain                       |
| use-vrf               | (Optional) | Display per-VRF information          |
| <i>vrf-name</i>       | (Optional) | VRF name                             |
| <i>vrf-known-name</i> | (Optional) | Known VRF name                       |

## Command Mode

- /exec/configure /exec/configure/vrf

# ip domain-lookup

[no] ip domain-lookup

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ip                 | Configure IP features                           |
| domain-lookup      | Enable/Disable DNS                              |

## Command Mode

- /exec/configure



# ip domain-name

[no] ip domain-name { <s0> | <s1> [ use-vrf { <vrf-name> | <vrf-known-name> } ] }

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| ip                 |            | Configure IP features                |
| domain-name        |            | Specify default domain name          |
| s0                 |            | Enter the default domain             |
| s1                 |            | Enter the default domain             |
| use-vrf            | (Optional) | Display per-VRF information          |
| vrf-name           | (Optional) | VRF name                             |
| vrf-known-name     | (Optional) | Known VRF name                       |

## Command Mode

- /exec/configure /exec/configure/vrf

# ip drop-glean

[no] ip drop-glean

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults     |
| ip                 | Configure IP features                               |
| drop-glean         | Installs the secondary subnet routes as Drop routes |

## Command Mode

- /exec/configure/if-vlan-common

# ip dscp-lop

[no] ip dscp-lop | ip dscp-lop { <dscp-val> | <dscp-enum> }

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults   |
| ip                 |  | Configure IP features  |
| dscp-lop           |  | Set DSCP to be used for locally originated packets for IPv4 and IPv6. Cos will not be set. |
| <i>dscp-val</i>    |  | Specify DSCP value for Locally Originated packets for IPv4 and IPv6                        |
| <i>dscp-enum</i>   |  |  |

## Command Mode

- /exec/configure

## ip eigrp bfd

[no] ip eigrp <eigrp-tag> bfd [ disable ]

### Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults   |
| ip                 |            | Configure IP features                  |
| eigrp              |            | EIGRP interface configuration commands |
| <i>eigrp-tag</i>   |            | Process tag                            |
| bfd                |            | Enable BFD on this interface           |
| disable            | (Optional) | Disable BFD on this interface          |

### Command Mode

- /exec/configure/if-igp

# ip eigrp event-history bfd size

[no] { ip | ipv6 } eigrp [ <eigrp-ptag> ] event-history bfd size { <size\_in\_text> | <size\_in\_Kbytes> }

## Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| ip                    | Clear IP commands                               |  |
| ipv6                  | Clear IPv6 commands                             |  |
| eigrp                 | EIGRP clear commands                            |  |
| <i>eigrp-ptag</i>     | (Optional) Process tag                          |  |
| event-history         | Event History of EIGRP                          |  |
| bfd                   | Show bfd log of EIGRP                           |  |
| size                  | Configure the size of the event-hist buffer     |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_Kbytes</i> | Size of the file in kbytes                      |  |

## Command Mode

- /exec/configure

## ip eigrp event-history errors

[no] { ip | ipv6 } eigrp [ <eigrp-ptag> ] event-history { errors | msgs }

### Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| ip                 | Clear IP commands                               |  |
| ipv6               | Clear IPv6 commands                             |  |
| eigrp              | EIGRP clear commands                            |  |
| <i>eigrp-ptag</i>  | (Optional) Process tag                          |  |
| event-history      | Event History of EIGRP                          |  |
| errors             | Show error log of EIGRP                         |  |
| msgs               | Show message log of EIGRP                       |  |

### Command Mode

- /exec/configure

# ip eigrp event-history size

[no] { ip | ipv6 } eigrp [ <eigrp-ptag> ] event-history { fsm | packet | rib } size { <size\_in\_text> | <size\_in\_Kbytes> }

## Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| ip                    | Clear IP commands                               |  |
| ipv6                  | Clear IPv6 commands                             |  |
| eigrp                 | EIGRP clear commands                            |  |
| <i>eigrp-ptag</i>     | (Optional) Process tag                          |  |
| event-history         | Event History of EIGRP                          |  |
| fsm                   | FSM log of EIGRP                                |  |
| packet                | Packet log of EIGRP                             |  |
| rib                   | RIB log of EIGRP                                |  |
| size                  | Configure the size of the event-hist buffer     |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_Kbytes</i> | Size of the file in kbytes                      |  |

## Command Mode

- /exec/configure

# ip eigrp internal syslog rate-limit

[no] { ip | ipv6 } eigrp [ <eigrp-ptag> ] internal syslog rate-limit

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults   |
| ip                 |            | IP events                              |
| ipv6               |            | IPv6 events                            |
| eigrp              |            | Display EIGRP status and configuration |
| <i>eigrp-ptag</i>  | (Optional) | Process tag                            |
| internal           |            | Commands for internal use              |
| syslog             |            | control syslog message                 |
| rate-limit         |            | rate-limiting                          |

## Command Mode

- /exec



# ip eigrp shutdown

[no] { ip | ipv6 } eigrp <eigrp-ptag> shutdown

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ip                 | Configure IP features                           |
| ipv6               | Configure IPv6 features                         |
| eigrp              | EIGRP interface configuration commands          |
| <i>eigrp-ptag</i>  | Process tag                                     |
| shutdown           | Shutdown EIGRP on this interface                |

## Command Mode

- /exec/configure/if-igp

## ip extcommunity-list expanded deny

```
{ ip extcommunity-list expanded <name> { deny | permit } <line> } | { no ip extcommunity-list expanded
<name> [ { deny | permit } <line> ] }
```

### Syntax Description

| Syntax Description | no                | Negate a command or set its defaults    |
|--------------------|-------------------|---|
|                    | ip                | Configure IP features                   |
|                    | extcommunity-list | Add a extcommunity list entry           |
|                    | expanded          | Add an expanded extcommunity list entry |
|                    | <i>name</i>       | Name of expanded extcommunity list      |
|                    | deny              | Specify extcommunity to reject          |
|                    | permit            | Specify extcommunity to accept          |
|                    | <i>line</i>       | Regular-expression(must                 |

### Command Mode

- /exec/configure

# ip extcommunity-list standard permit

```
{ ip extcommunity-list standard <name> { permit | deny } { { 4byteas-generic { transitive
<ext-comm-gen-trans> | non-transitive <ext-comm-gen-nontrans> } } | { rt { <ext-comm-rt-aa2nn4> |
<ext-comm-rt-aa4nn2> } } | { soo { <ext-comm-soo-aa2nn4> | <ext-comm-soo-aa4nn2> } } } + | { no ip
extcommunity-list standard <name> [ permit | deny ] [ { 4byteas-generic { transitive <ext-comm-gen-trans>
| non-transitive <ext-comm-gen-nontrans> } } | { rt { <ext-comm-rt-aa2nn4> | <ext-comm-rt-aa4nn2> } } |
{ soo { <ext-comm-soo-aa2nn4> | <ext-comm-soo-aa4nn2> } } ] + } }
```

## Syntax Description

### Syntax Description

|                              |  |
|------------------------------|--|
| no                           | Negate a command or set its defaults   |
| ip                           | Configure IP features                  |
| extcommunity-list            | Add a extcommunity list entry          |
| standard                     | Add a standard Extcommunity list entry |
| <i>name</i>                  | Standard extcommunity list name        |
| permit                       | Specify extcommunity to accept         |
| deny                         | Specify extcommunity to reject         |
| 4byteas-generic              | Generic extended community             |
| transitive                   | Transitive extcommunity                |
| non-transitive               | Non-Transitive extcommunity            |
| rt                           | Router-Target                          |
| soo                          | Site-Of-Origin                         |
| <i>ext-comm-gen-trans</i>    | Extcommunity number aa4:nn format      |
| <i>ext-comm-gen-nontrans</i> | Extcommunity number aa4:nn format      |
| <i>ext-comm-rt-aa2nn4</i>    | Extcommunity number                    |
| <i>ext-comm-rt-aa4nn2</i>    | Extcommunity number                    |
| <i>ext-comm-soo-aa2nn4</i>   | Extcommunity number                    |
| <i>ext-comm-soo-aa4nn2</i>   | Extcommunity number                    |

## Command Mode

- /exec/configure

## ip flow monitor input

[no] ip flow monitor <monitorname> { input | output } [ sampler <samplername> ]

### Syntax Description

| Syntax Description |                    |   |
|--------------------|--------------------|---|
|                    | ip                 | Configure IP features                                     |
|                    | flow               | NetFlow related commands                                  |
|                    | monitor            | Apply a Flow Monitor to this interface                    |
|                    | <i>monitorname</i> | Name of Flow Monitor                                      |
|                    | input              | Apply Flow Monitor on input traffic                       |
|                    | output             | Apply Flow Monitor on output traffic                      |
|                    | sampler            | (Optional) Optional Sampler to apply to this Flow Monitor |
|                    | <i>samplername</i> | (Optional) Name of Sampler                                |

### Command Mode

- /exec/configure/if-routing /exec/configure/if-mgmt-ether /exec/configure/if-any-tunnel /exec/configure/if-eth-port-channel /exec/configure/if-eth-port-channel-p2p

# ip flow monitor input

[no] ip flow monitor <monitorname> { input | output } [ sampler <samplername> ]

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| ip                 |            | Configure IP features                          |
| flow               |            | NetFlow related commands                       |
| monitor            |            | Apply a Flow Monitor to this interface         |
| <i>monitorname</i> |            | Name of Flow Monitor                           |
| input              |            | Apply Flow Monitor on input traffic            |
| output             |            | Apply Flow Monitor on output traffic           |
| sampler            | (Optional) | Optional Sampler to apply to this Flow Monitor |
| <i>samplername</i> | (Optional) | Name of Sampler                                |

## Command Mode

- /exec/configure/vlan

# ip flow monitor input

[no] ip flow monitor <monitorname> input [ sampler <samplername> ]

## Syntax Description

| Syntax Description |                    |   |
|--------------------|--------------------|---|
|                    | ip                 | Configure IP features                                     |
|                    | flow               | NetFlow related commands                                  |
|                    | monitor            | Apply a Flow Monitor to this interface                    |
|                    | <i>monitorname</i> | Name of Flow Monitor                                      |
|                    | input              | Apply Flow Monitor on input traffic                       |
|                    | sampler            | (Optional) Optional Sampler to apply to this Flow Monitor |
|                    | <i>samplername</i> | (Optional) Name of Sampler                                |

## Command Mode

- /exec/configure/vlan-config

# ip flow monitor input

[no] ip flow monitor <monitorname> { input | output } [ sampler <samplername> ]

## Syntax Description

| Syntax Description |                    |   |
|--------------------|--------------------|---|
|                    | ip                 | Configure IP features                                     |
|                    | flow               | NetFlow related commands                                  |
|                    | monitor            | Apply a Flow Monitor to this interface                    |
|                    | <i>monitorname</i> | Name of Flow Monitor                                      |
|                    | input              | Apply Flow Monitor on input traffic                       |
|                    | output             | Apply Flow Monitor on output traffic                      |
|                    | sampler            | (Optional) Optional Sampler to apply to this Flow Monitor |
|                    | <i>samplername</i> | (Optional) Name of Sampler                                |

## Command Mode

- /exec/configure/if-vlan-common

# ip flow monitor output

ip flow monitor <monitorname> output [ sampler <samplername> ]

## Syntax Description

| Syntax Description |                    |   |
|--------------------|--------------------|---|
|                    | ip                 | Configure IP features                                     |
|                    | flow               | NetFlow related commands                                  |
|                    | monitor            | Apply a Flow Monitor to this interface                    |
|                    | <i>monitorname</i> | Name of Flow Monitor                                      |
|                    | output             | Apply Flow Monitor on output traffic                      |
|                    | sampler            | (Optional) Optional Sampler to apply to this Flow Monitor |
|                    | <i>samplername</i> | (Optional) Name of Sampler                                |

## Command Mode

- /exec/configure/vlan-config



# ip flow monitor output

[no] ip flow monitor <monitorname> output [ sampler <samplername> ]

## Syntax Description

| Syntax Description |                    |   |
|--------------------|--------------------|---|
|                    | ip                 | Configure IP features                                     |
|                    | flow               | NetFlow related commands                                  |
|                    | monitor            | Apply a Flow Monitor to this interface                    |
|                    | <i>monitorname</i> | Name of Flow Monitor                                      |
|                    | output             | Apply Flow Monitor on output traffic                      |
|                    | sampler            | (Optional) Optional Sampler to apply to this Flow Monitor |
|                    | <i>samplername</i> | (Optional) Name of Sampler                                |

## Command Mode

- /exec/configure/vlan-config

# ip forward

ip forward | no ip forward

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| ip                 |  | Configure IP features                |
| forward            |  | Enable ip forwarding on interface    |

## Command Mode

- /exec/configure/if-vlan /exec/configure/if-vlan-range /exec/configure/if-igp

# ip ftp source-interface

[no] ip ftp source-interface <ifnum> [ vrf { <vrf-name> | <vrf-known-name> } ]

## Syntax Description

| Syntax Description    |            |   |
|-----------------------|------------|---|
| no                    | (Optional) | Negate a command or set its defaults              |
| ip                    |            | Configure IP features                             |
| ftp                   |            | Configure FTP client                              |
| source-interface      |            | Configure source interface feature for FTP client |
| <i>ifnum</i>          |            | Source interface                                  |
| vrf                   | (Optional) | Configure VRF                                     |
| <i>vrf-name</i>       | (Optional) | VRF name  |
| <i>vrf-known-name</i> | (Optional) | Known VRF name                                    |

## Command Mode

- /exec/configure

## ip hello-interval eigrp

```
{ { { ip | ipv6 } hello-interval eigrp <eigrp-ptag> <hello-interval> } | { no { ip | ipv6 } hello-interval eigrp <eigrp-ptag> [ <hello-interval> ] } }
```

### Syntax Description

| Syntax Description | no                    | Negate a command or set its defaults   |
|--------------------|-----------------------|--|
|                    | ip                    | Configure IP features                  |
|                    | ipv6                  | Configure IPv6 features                |
|                    | hello-interval        | Configures IP-EIGRP hello interval     |
|                    | eigrp                 | EIGRP interface configuration commands |
|                    | <i>eigrp-ptag</i>     | Process tag                            |
|                    | <i>hello-interval</i> | Seconds between hello transmissions    |
|                    | <i>eigrp-ptag</i>     |  |

### Command Mode

- /exec/configure/if-igp

# ip hold-time eigrp

```
{ { { ip | ipv6 } hold-time eigrp <eigrp-ptag> <holdtime> } | { no { ip | ipv6 } hold-time eigrp <eigrp-ptag> [ <holdtime> ] } }
```

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults       |
| ip                 |  | Configure IP features                      |
| ipv6               |  | Configure IPv6 features                    |
| hold-time          |  | Configures IP-EIGRP hold time              |
| eigrp              |  | EIGRP interface configuration commands     |
| <i>eigrp-ptag</i>  |  | Process tag                                |
| <i>holdtime</i>    |  | Seconds before neighbor is considered down |
| <i>eigrp-ptag</i>  |  |  |

## Command Mode

- /exec/configure/if-igp

# ip host

[no] ip host <s0> <ipv4\_0>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ip                 | Configure IP features                           |
| host               | Add an entry to the ip hostname table           |
| s0                 | Name of Host                                    |
| ipv4_0             | Enter an IP address                             |

## Command Mode

- /exec/configure

# ip http source-interface

[no] ip http source-interface <ifnum> [ vrf { <vrf-name> | <vrf-known-name> } ]

## Syntax Description

| Syntax Description    |            |   |
|-----------------------|------------|---|
| no                    | (Optional) | Negate a command or set its defaults              |
| ip                    |            | Configure IP features                             |
| http                  |            | Configure HTTP client                             |
| source-interface      |            | Configure source interface feature for FTP client |
| <i>ifnum</i>          |            | Source interface                                  |
| vrf                   | (Optional) | Configure VRF                                     |
| <i>vrf-name</i>       | (Optional) | VRF name  |
| <i>vrf-known-name</i> | (Optional) | Known VRF name                                    |

## Command Mode

- /exec/configure

## ip icmp-errors source-interface

ip icmp-errors source-interface <interface> [ <icmp\_type> ] | no ip icmp-errors source-interface [ <interface> <icmp\_type> ]

### Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults              |
| ip                 |  | Configure IP features                             |
| icmp-errors        |  | ICMP unreachable/TTL-exceeded/param-prob messages |
| source-interface   |  | Configure source-address for applications         |
| <i>interface</i>   |  | Interface to pick source-address from             |
| <i>icmp_type</i>   |  | (Optional) ICMPv6 types                           |

### Command Mode

- /exec/configure /exec/configure/vrf



# ip igmp allow-v3-asm

[no] ip igmp allow-v3-asm

## Syntax Description

| Syntax Description |              |   |
|--------------------|--------------|---|
|                    | no           | (Optional) Negate a command or set its defaults |
|                    | ip           | Configure IP features                           |
|                    | igmp         | IGMP interface configuration commands           |
|                    | allow-v3-asm | Accept IGMPv3 reports for non SSM groups        |

## Command Mode

- /exec/configure/if-igp

# ip igmp any-query-destination

[no] ip igmp any-query-destination

## Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| ip                    | Configure IP features                           |  |
| igmp                  | IGMP global configuration commands              |  |
| any-query-destination | Allow any destination-IP for General Queries    |  |

## Command Mode

- /exec/configure

# ip igmp bootup-delay

{ { no ip igmp bootup-delay [ <delay> ] } } | { ip igmp bootup-delay <delay> } }

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults     |
| ip                 |  | Configure IP features                    |
| igmp               |  | IGMP global configuration commands       |
| bootup-delay       |  | Configures bootup route add delay to RIB |
| delay              |  | (Optional) Delay downloading in seconds  |

## Command Mode

- /exec/configure

# ip igmp enforce-router-alert

[no] ip igmp enforce-router-alert

## Syntax Description

| Syntax Description |                      |   |
|--------------------|----------------------|---|
|                    | no                   | (Optional) Negate a command or set its defaults                 |
|                    | ip                   | Configure IP features   |
|                    | igmp                 | IGMP global configuration commands                              |
|                    | enforce-router-alert | Enforce Router Alert option check for IGMPv2 and IGMPv3 packets |

## Command Mode

- /exec/configure

# ip igmp event-history cli

[no] ip igmp event-history cli { size { <size\_in\_text> | <size\_in\_kbytes> } }

## Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| ip                    | Configure IP features                           |  |
| igmp                  | IGMP global configuration commands              |  |
| event-history         | Configure event-history buffers                 |  |
| cli                   | CLI events for IGMP                             |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

## Command Mode

- /exec/configure

## ip igmp event-history ha

[no] ip igmp event-history ha { size { <size\_in\_text> | <size\_in\_kbytes> } }

### Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| ip                    | Configure IP features                           |  |
| igmp                  | IGMP global configuration commands              |  |
| event-history         | Configure event-history buffers                 |  |
| ha                    | HA events for IGMP                              |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

### Command Mode

- /exec/configure

# ip igmp event-history igmp-internal

[no] ip igmp event-history igmp-internal { size { <size\_in\_text> | <size\_in\_kbytes> } }

## Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| ip                    | Configure IP features                           |  |
| igmp                  | IGMP global configuration commands              |  |
| event-history         | Configure event-history buffers                 |  |
| igmp-internal         | Internal events for IGMP                        |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

## Command Mode

- /exec/configure

# ip igmp event-history interface

[no] ip igmp event-history { interface-events | group-events } { size { <size\_in\_text> | <size\_in\_kbytes> } }

## Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| ip                    | Configure IP features                           |  |
| igmp                  | IGMP global configuration commands              |  |
| event-history         | Configure event-history buffers                 |  |
| interface-events      | Interface-events for IGMP                       |  |
| group-events          | Group-events for IGMP                           |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

## Command Mode

- /exec/configure



# ip igmp event-history interface

```
[no] ip igmp event-history { interface-debug | group-debug } { size { <size_in_text> | <size_in_kbytes> } }
```

## Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| ip                    | Configure IP features                           |  |
| igmp                  | IGMP global configuration commands              |  |
| event-history         | Configure event-history buffers                 |  |
| interface-debug       | Interface-debug for IGMP                        |  |
| group-debug           | Group-debug for IGMP                            |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

## Command Mode

- /exec/configure

## ip igmp event-history mtrace

```
[no] ip igmp event-history mtrace { size { <size_in_text> | <size_in_kbytes> } }
```

### Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| ip                    | Configure IP features                           |  |
| igmp                  | IGMP global configuration commands              |  |
| event-history         | Configure event-history buffers                 |  |
| mtrace                | Mtrace events for IGMP                          |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

### Command Mode

- /exec/configure

## ip igmp event-history policy

[no] ip igmp event-history policy { size { <size\_in\_text> | <size\_in\_kbytes> } }

### Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| ip                    | Configure IP features                           |  |
| igmp                  | IGMP global configuration commands              |  |
| event-history         | Configure event-history buffers                 |  |
| policy                | Policy events for IGMP                          |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

### Command Mode

- /exec/configure

## ip igmp event-history vrf

```
[no] ip igmp event-history vrf { size { <size_in_text> | <size_in_kbytes> } }
```

### Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| ip                    | Configure IP features                           |  |
| igmp                  | IGMP global configuration commands              |  |
| event-history         | Configure event-history buffers                 |  |
| vrf                   | VRF events for IGMP                             |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

### Command Mode

- /exec/configure

# ip igmp file-debug

[no] ip igmp file-debug

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ip                 | Configure IP features                           |
| igmp               | IGMP global configuration commands              |
| file-debug         | Collect all debugs to a file                    |

## Command Mode

- /exec/configure

# ip igmp flush-routes

[no] ip igmp flush-routes

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| ip                 |            | Configure IP features                |
| igmp               |            | IGMP global configuration commands   |
| flush-routes       |            | Remove routes when restarting IGMP   |

## Command Mode

- /exec/configure

# ip igmp group-specific-strict

[no] ip igmp group-specific-strict

## Syntax Description

| Syntax Description    |            |   |
|-----------------------|------------|---|
| no                    | (Optional) | Negate a command or set its defaults    |
| ip                    |            | Configure IP features                   |
| igmp                  |            | IGMP global configuration commands      |
| group-specific-strict |            | Enable group specific consistency check |

## Command Mode

- /exec/configure

# ip igmp group-timeout

```
{ { no ip igmp group-timeout [ <time> ] } | { ip igmp group-timeout <time> } }
```

## Syntax Description

| Syntax Description | no            | Negate a command or set its defaults           |
|--------------------|---------------|--|
|                    | ip            | Configure IP features                          |
|                    | igmp          | IGMP interface configuration commands          |
|                    | group-timeout | Configures group membership timeout for IGMPv2 |
|                    | <i>time</i>   | (Optional) Time in seconds                     |

## Command Mode

- /exec/configure/if-igp



# ip igmp ha-stateful

[no] ip igmp ha-stateful

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| ip                 | Configure IP features                           |  |
| igmp               | IGMP global configuration commands              |  |
| ha-stateful        | Enable stateful IGMP HA                         |  |

## Command Mode

- /exec/configure

# ip igmp immediate-leave

[no] ip igmp immediate-leave

## Syntax Description

| Syntax Description |                 |   |
|--------------------|-----------------|---|
|                    | no              | (Optional) Negate a command or set its defaults |
|                    | ip              | Configure IP features                           |
|                    | igmp            | IGMP interface configuration commands           |
|                    | immediate-leave | Enable/Disable immediate leave                  |

## Command Mode

- /exec/configure/if-igp

# ip igmp join-group

[no] ip igmp join-group { { <group> [ source <source> ] } | { route-map <route-map-name> } }

## Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults               |  |
| ip                    | Configure IP features   |  |
| igmp                  | IGMP interface configuration commands                         |  |
| join-group            | Configures local group membership for router                  |  |
| <i>group</i>          | Multicast group IP address                                    |  |
| source                | (Optional) Configures source address for IGMPv3 (S,G) Channel |  |
| <i>source</i>         | (Optional) Source IP address                                  |  |
| route-map             | Join group policy   |  |
| <i>route-map-name</i> | route-map name  |  |

## Command Mode

- /exec/configure/if-igp

## ip igmp last-member-query-count

```
{ { no ip igmp last-member-query-count [ <count> ] } | { ip igmp last-member-query-count <count> } }
```

### Syntax Description

| Syntax Description      |  |  |
|-------------------------|--|--|
| no                      |  | Negate a command or set its defaults             |
| ip                      |  | Configure IP features                            |
| igmp                    |  | IGMP interface configuration commands            |
| last-member-query-count |  | Configures number of group-specific Queries sent |
| <i>count</i>            |  | (Optional) Count value                           |

### Command Mode

- /exec/configure/if-igp

# ip igmp last-member-query-response-time

```
{ { no ip igmp last-member-query-response-time [ <interval> ] } | { ip igmp last-member-query-response-time <interval> } }
```

## Syntax Description

| Syntax Description              |  |  |
|---------------------------------|--|--|
| no                              |  | Negate a command or set its defaults       |
| ip                              |  | Configure IP features                      |
| igmp                            |  | IGMP interface configuration commands      |
| last-member-query-response-time |  | Configures last member query response time |
| <i>interval</i>                 |  | (Optional) Interval in seconds             |

## Command Mode

- /exec/configure/if-igp

# ip igmp querier

```
{ { no ip igmp { querier-timeout | query-timeout } [ <time> ] } | { ip igmp { querier-timeout | query-timeout } <time> } }
```

## Syntax Description

| Syntax Description |  |                                       |
|--------------------|--|---------------------------------------|
| no                 |  | Negate a command or set its defaults  |
| ip                 |  | Configure IP features                 |
| igmp               |  | IGMP interface configuration commands |
| querier-timeout    |  | Configures querier timeout for IGMPv2 |
| query-timeout      |  | Configures querier timeout for IGMPv2 |
| <i>time</i>        |  | (Optional) Time in seconds            |

## Command Mode

- /exec/configure/if-igp

# ip igmp query-interval

```
{ { no ip igmp query-interval [ <interval> ] } | { ip igmp query-interval <interval> } }
```

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults           |
| ip                 |  | Configure IP features                          |
| igmp               |  | IGMP interface configuration commands          |
| query-interval     |  | Configures interval between Query transmission |
| <i>interval</i>    |  | (Optional) Interval in seconds                 |

## Command Mode

- /exec/configure/if-igp

# ip igmp query-max-response-time

```
{ { no ip igmp query-max-response-time [ <time> ] } | { ip igmp query-max-response-time <time> } }
```

## Syntax Description

| Syntax Description      |  |                                       |
|-------------------------|--|---------------------------------------|
| no                      |  | Negate a command or set its defaults  |
| ip                      |  | Configure IP features                 |
| igmp                    |  | IGMP interface configuration commands |
| query-max-response-time |  | Configures MRT for query messages     |
| <i>time</i>             |  | (Optional) Time in seconds            |

## Command Mode

- /exec/configure/if-igp



# ip igmp report-link-local-groups

[no] ip igmp report-link-local-groups

## Syntax Description

| Syntax Description       |   |  |
|--------------------------|---|--|
| no                       | (Optional) Negate a command or set its defaults |  |
| ip                       | Configure IP features                           |  |
| igmp                     | IGMP global configuration commands              |  |
| report-link-local-groups | Send Reports for groups in 224.0.0.0/24         |  |

## Command Mode

- /exec/configure/if-igp

# ip igmp report prefix-list

```
{ { ip igmp { report-policy | access-group } { <route-map-name> | prefix-list <prefix-list-name> } } | { no ip igmp { report-policy | access-group } [ <route-map-name> | prefix-list <prefix-list-name> ] } }
```

## Syntax Description

| Syntax Description      |  |                                       |
|-------------------------|--|---------------------------------------|
| no                      |  | Negate a command or set its defaults  |
| ip                      |  | Configure IP features                 |
| igmp                    |  | IGMP interface configuration commands |
| report-policy           |  | IGMP Report Policy                    |
| access-group            |  | IGMP access-group                     |
| <i>route-map-name</i>   |  | Route-map name                        |
| prefix-list             |  | Prefix list policy                    |
| <i>prefix-list-name</i> |  | prefix-list name                      |

## Command Mode

- /exec/configure/if-igp

# ip igmp robustness-variable

```
{ { no ip igmp robustness-variable [ <value> ] } | { ip igmp robustness-variable <value> } }
```

## Syntax Description

| Syntax Description |                     |  |
|--------------------|---------------------|--|
|                    | no                  | Negate a command or set its defaults       |
|                    | ip                  | Configure IP features                      |
|                    | igmp                | IGMP interface configuration commands      |
|                    | robustness-variable | Configures RFC defined Robustness Variable |
|                    | <i>value</i>        | (Optional) Count value                     |

## Command Mode

- /exec/configure/if-igp

# ip igmp snooping

{ { no ip igmp snooping } | { ip igmp snooping } }

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| ip                 |  | Configure IP features                |
| igmp               |  | IGMP configuration commands          |
| snooping           |  | Configures IGMP Snooping             |

## Command Mode

- /exec/configure/vlan-config /exec/configure/bdomain

# ip igmp snooping

{ { no ip igmp snooping } | { ip igmp snooping } }

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| ip                 |  | Configure IP features                |
| igmp               |  | IGMP configuration commands          |
| snooping           |  | Configures IGMP Snooping             |

## Command Mode

- /exec/configure/vlan

# ip igmp snooping

{ { no ip igmp snooping } | { ip igmp snooping } }

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| ip                 |  | Configure IP features                |
| igmp               |  | IGMP global configuration commands   |
| snooping           |  | Configures IGMP Snooping             |

## Command Mode

- /exec/configure

# ip igmp snooping

[no] ip igmp snooping { ha-stateful | cc-mode | m2rib-max-omfs <omf-count> | m2rib-max-omf-routes <omf-route-count> | m2rib-max-routes <route-count> | m2rib-max-buffers <buf-count> }

## Syntax Description

| Syntax Description   |                        |   |
|----------------------|------------------------|---|
| ip                   |                        | Configure IP features                           |
| igmp                 |                        | IGMP global configuration commands              |
| snooping             |                        | Configures IGMP Snooping                        |
| no                   |                        | (Optional) Negate a command or set its defaults |
| ha-stateful          |                        | Enable stateful IGMP-Snooping HA                |
| cc-mode              |                        | Enter MFDM congestion-control mode              |
| m2rib-max-omfs       |                        | Number of OMF entries in M2RIB buffer           |
| m2rib-max-routes     |                        | Number of route entries in M2RIB buffer         |
| m2rib-max-omf-routes |                        | Number of omf route entries in M2RIB buffer     |
| m2rib-max-buffers    |                        | Number of update buffers with M2RIB             |
|                      | <i>omf-count</i>       |   |
|                      | <i>route-count</i>     |   |
|                      | <i>buf-count</i>       |   |
|                      | <i>omf-route-count</i> |   |

## Command Mode

- /exec/configure

# ip igmp snooping disable-nve-static-router-port

[no] ip igmp snooping disable-nve-static-router-port

## Syntax Description

| Syntax Description             |   |  |
|--------------------------------|---|--|
| no                             | (Optional) Negate a command or set its defaults |  |
| ip                             | Configure IP features                           |  |
| igmp                           | IGMP global configuration commands              |  |
| snooping                       | Configures IGMP Snooping                        |  |
| disable-nve-static-router-port | Disable NVE as a static router port             |  |

## Command Mode

- /exec/configure



# ip igmp snooping event-history igmp-snoop-internal

```
[no] ip igmp snooping event-history igmp-snoop-internal { size { <size_in_text> | <size_in_kbytes> } }
```

## Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| ip                    | Configure IP features                           |  |
| igmp                  | IGMP global configuration commands              |  |
| snooping              | Configures IGMP Snooping                        |  |
| event-history         | Configure event-history buffers                 |  |
| igmp-snoop-internal   | Internal events for IGMP-snoop                  |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

## Command Mode

- /exec/configure

# ip igmp snooping event-history mfdm-sum

[no] ip igmp snooping event-history mfdm-sum { size { <size\_in\_text> | <size\_in\_kbytes> } }

## Syntax Description

### Syntax Description

|                       |   |
|-----------------------|---|
| no                    | (Optional) Negate a command or set its defaults |
| ip                    | Configure IP features                           |
| igmp                  | IGMP global configuration commands              |
| snooping              | Configures IGMP Snooping                        |
| event-history         | Configure event-history buffers                 |
| mfdm-sum              | MFDM-SUM events for IGMP-snoop                  |
| size                  | Configure size                                  |
| <i>size_in_text</i>   | Buffer size                                     |
| <i>size_in_kbytes</i> | Size in kbytes                                  |

## Command Mode

- /exec/configure

# ip igmp snooping event-history mfdm

[no] ip igmp snooping event-history mfdm { size { <size\_in\_text> | <size\_in\_kbytes> } }

## Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| ip                    | Configure IP features                           |  |
| igmp                  | IGMP global configuration commands              |  |
| snooping              | Configures IGMP Snooping                        |  |
| event-history         | Configure event-history buffers                 |  |
| mfdm                  | MFDM events for IGMP-snoop                      |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

## Command Mode

- /exec/configure

## ip igmp snooping event-history rib

```
[no] ip igmp snooping event-history rib { size { <size_in_text> | <size_in_kbytes> } }
```

### Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| ip                    | Configure IP features                           |  |
| igmp                  | IGMP global configuration commands              |  |
| snooping              | Configures IGMP Snooping                        |  |
| event-history         | Configure event-history buffers                 |  |
| rib                   | RIB events for IGMP-snoop                       |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

### Command Mode

- /exec/configure

# ip igmp snooping event-history vlan-events

[no] ip igmp snooping event-history vlan-events { size { <size\_in\_text> | <size\_in\_kbytes> } }

## Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| ip                    | Configure IP features                           |  |
| igmp                  | IGMP global configuration commands              |  |
| snooping              | Configures IGMP Snooping                        |  |
| event-history         | Configure event-history buffers                 |  |
| vlan-events           | VLAN/BD events for IGMP-snoop                   |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

## Command Mode

- /exec/configure

## ip igmp snooping event-history vlan

```
[no] ip igmp snooping event-history vlan { size { <size_in_text> | <size_in_kbytes> } }
```

### Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| ip                    | Configure IP features                           |  |
| igmp                  | IGMP global configuration commands              |  |
| snooping              | Configures IGMP Snooping                        |  |
| event-history         | Configure event-history buffers                 |  |
| vlan                  | VLAN/BD events for IGMP-snoop                   |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

### Command Mode

- /exec/configure

# ip igmp snooping event-history vpc

[no] ip igmp snooping event-history vpc { size { <size\_in\_text> | <size\_in\_kbytes> } }

## Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| ip                    | Configure IP features                           |  |
| igmp                  | IGMP global configuration commands              |  |
| snooping              | Configures IGMP Snooping                        |  |
| event-history         | Configure event-history buffers                 |  |
| vpc                   | VPC events for IGMP-snoop                       |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

## Command Mode

- /exec/configure

# ip igmp snooping explicit-tracking

{ { no ip igmp snooping explicit-tracking } | { ip igmp snooping explicit-tracking } }

## Syntax Description

| Syntax Description | no                | Negate a command or set its defaults          |
|--------------------|-------------------|---|
|                    | ip                | Configure IP features                         |
|                    | igmp              | IGMP configuration commands                   |
|                    | snooping          | Configures IGMP Snooping                      |
|                    | explicit-tracking | Configures Explicit Host tracking for VLAN/BD |

## Command Mode

- /exec/configure/vlan-config /exec/configure/bdomain



# ip igmp snooping explicit-tracking

{ { no ip igmp snooping explicit-tracking } | { ip igmp snooping explicit-tracking } }

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults          |
| ip                 |  | Configure IP features                         |
| igmp               |  | IGMP configuration commands                   |
| snooping           |  | Configures IGMP Snooping                      |
| explicit-tracking  |  | Configures Explicit Host tracking for VLAN/BD |

## Command Mode

- /exec/configure/vlan

# ip igmp snooping fast-leave

{ { no ip igmp snooping fast-leave } | { ip igmp snooping fast-leave } }

## Syntax Description

| Syntax Description |  |                                       |
|--------------------|--|---------------------------------------|
| no                 |  | Negate a command or set its defaults  |
| ip                 |  | Configure IP features                 |
| igmp               |  | IGMP configuration commands           |
| snooping           |  | Configures IGMP Snooping              |
| fast-leave         |  | Configures Fast leave for the VLAN/BD |

## Command Mode

- /exec/configure/vlan-config /exec/configure/bdomain

# ip igmp snooping fast-leave

{ { no ip igmp snooping fast-leave } | { ip igmp snooping fast-leave } }

## Syntax Description

| Syntax Description |  |                                       |
|--------------------|--|---------------------------------------|
| no                 |  | Negate a command or set its defaults  |
| ip                 |  | Configure IP features                 |
| igmp               |  | IGMP configuration commands           |
| snooping           |  | Configures IGMP Snooping              |
| fast-leave         |  | Configures Fast leave for the VLAN/BD |

## Command Mode

- /exec/configure/vlan

## ip igmp snooping group-timeout

[no] ip igmp snooping group-timeout { <timeout> | never }

### Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| ip                 | Configure IP features                           |  |
| igmp               | IGMP configuration commands                     |  |
| snooping           | Configures IGMP Snooping                        |  |
| group-timeout      | Configures group membership timeout in VLAN/BD  |  |
| <i>timeout</i>     | Timeout in minutes                              |  |
| never              | Never expire ports from group membership        |  |

### Command Mode

- /exec/configure/vlan-config /exec/configure/bdomain

## ip igmp snooping group-timeout

[no] ip igmp snooping group-timeout { <timeout> | never }

### Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults     |
| ip                 | Configure IP features                               |
| igmp               | IGMP configuration commands                         |
| snooping           | Configures IGMP Snooping                            |
| group-timeout      | Configures group membership timeout in all VLAN/BDs |
| <i>timeout</i>     | Timeout in minutes                                  |
| never              | Never expire ports from group membership            |

### Command Mode

- /exec/configure

# ip igmp snooping last-member-query-count

```
{ { no ip igmp snooping last-member-query-count [ <count> ] } | { ip igmp snooping last-member-query-count <count> } }
```

## Syntax Description

### Syntax Description

|                         |  |
|-------------------------|--|
| no                      | Negate a command or set its defaults             |
| ip                      | Configure IP features                            |
| igmp                    | IGMP configuration commands                      |
| snooping                | Configures IGMP Snooping                         |
| last-member-query-count | Configures number of group-specific queries sent |
| <i>count</i>            | (Optional) Count value                           |

## Command Mode

- /exec/configure/vlan-config /exec/configure/bdomain

# ip igmp snooping last-member-query-count

```
{ { no ip igmp snooping last-member-query-count [ <count> ] } | { ip igmp snooping last-member-query-count <count> } }
```

## Syntax Description

| Syntax Description      |  |  |
|-------------------------|--|--|
| no                      |  | Negate a command or set its defaults             |
| ip                      |  | Configure IP features                            |
| igmp                    |  | IGMP configuration commands                      |
| snooping                |  | Configures IGMP Snooping                         |
| last-member-query-count |  | Configures number of group-specific queries sent |
| <i>count</i>            |  | (Optional) Count value                           |

## Command Mode

- /exec/configure/vlan

# ip igmp snooping last-member-query-interval

```
{ { no ip igmp snooping last-member-query-interval [ <interval> ] } | { ip igmp snooping
last-member-query-interval <interval> } }
```

## Syntax Description

### Syntax Description

|                            |  |
|----------------------------|--|
| no                         | Negate a command or set its defaults                           |
| ip                         | Configure IP features  |
| igmp                       | IGMP configuration commands                                    |
| snooping                   | Configures IGMP Snooping                                       |
| last-member-query-interval | Configures interval between group-specific Query transmissions |
| <i>interval</i>            | (Optional) Interval in seconds                                 |

## Command Mode

- /exec/configure/vlan-config /exec/configure/bdomain



# ip igmp snooping last-member-query-interval

{ { no ip igmp snooping last-member-query-interval [ <interval> ] } | { ip igmp snooping last-member-query-interval <interval> } }

## Syntax Description

| Syntax Description         |  |  |
|----------------------------|--|--|
| no                         |  | Negate a command or set its defaults                           |
| ip                         |  | Configure IP features  |
| igmp                       |  | IGMP configuration commands                                    |
| snooping                   |  | Configures IGMP Snooping                                       |
| last-member-query-interval |  | Configures interval between group-specific Query transmissions |
| <i>interval</i>            |  | (Optional) Interval in seconds                                 |

## Command Mode

- /exec/configure/vlan

# ip igmp snooping link-local-groups-suppression

[no] ip igmp snooping link-local-groups-suppression

## Syntax Description

| Syntax Description |                               |  |
|--------------------|-------------------------------|--|
|                    | no                            | (Optional) Negate a command or set its defaults  |
|                    | ip                            | Configure IP features                            |
|                    | igmp                          | IGMP configuration commands                      |
|                    | snooping                      | Configures IGMP Snooping                         |
|                    | link-local-groups-suppression | Configures VLAN/BD link-local groups suppression |

## Command Mode

- /exec/configure/vlan-config /exec/configure/bdomain

# ip igmp snooping link-local-groups-suppression

[no] ip igmp snooping link-local-groups-suppression

## Syntax Description

| Syntax Description            |  |
|-------------------------------|--|
| no                            | (Optional) Negate a command or set its defaults  |
| ip                            | Configure IP features                            |
| igmp                          | IGMP configuration commands                      |
| snooping                      | Configures IGMP Snooping                         |
| link-local-groups-suppression | Configures VLAN/BD link-local groups suppression |

## Command Mode

- /exec/configure/vlan

# ip igmp snooping link-local-groups-suppression

[no] ip igmp snooping link-local-groups-suppression

## Syntax Description

| Syntax Description |                               |   |
|--------------------|-------------------------------|---|
|                    | no                            | (Optional) Negate a command or set its defaults |
|                    | ip                            | Configure IP features                           |
|                    | igmp                          | IGMP configuration commands                     |
|                    | snooping                      | Configures IGMP Snooping                        |
|                    | link-local-groups-suppression | Configures Global link-local groups suppression |

## Command Mode

- /exec/configure

# ip igmp snooping max-gq-miss

{ { no ip igmp snooping max-gq-miss } | { ip igmp snooping max-gq-miss <count> } }

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| ip                 |  | Configure IP features                |
| igmp               |  | IGMP global configuration commands   |
| snooping           |  | Configures IGMP Snooping             |
| max-gq-miss        |  | Configure general query miss count   |
| <i>count</i>       |  | Max number of GQ misses allowed      |

## Command Mode

- /exec/configure

# ip igmp snooping mrouter interface

```
{ { no ip igmp snooping mrouter interface <interface> } | { ip igmp snooping mrouter interface <interface> } }
```

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults         |
| ip                 |  | Configure IP features                        |
| igmp               |  | IGMP configuration commands                  |
| snooping           |  | Configures IGMP Snooping                     |
| mrouter            |  | Configures static multicast router interface |
| interface          |  | Specify interface for static-mrouter         |
| <i>interface</i>   |  | Interface name                               |

## Command Mode

- /exec/configure/vlan-config /exec/configure/bdomain

## ip igmp snooping mrouter interface

```
{ { no ip igmp snooping mrouter interface <interface> } | { ip igmp snooping mrouter interface <interface> } }
```

### Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults         |
| ip                 |  | Configure IP features                        |
| igmp               |  | IGMP configuration commands                  |
| snooping           |  | Configures IGMP Snooping                     |
| mrouter            |  | Configures static multicast router interface |
| interface          |  | Specify interface for static-mrouter         |
| <i>interface</i>   |  | Interface name                               |

### Command Mode

- /exec/configure/vlan

# ip igmp snooping mrouter vpc-peer-link

[no] ip igmp snooping mrouter vpc-peer-link

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 | (Optional) Negate a command or set its defaults          |  |
| ip                 | Configure IP features                                    |  |
| igmp               | IGMP configuration commands                              |  |
| snooping           | Configures IGMP Snooping                                 |  |
| mrouter            | Configures static multicast router interface             |  |
| vpc-peer-link      | Specify vpc-peer-link as static mrouter for all VLAN/BDS |  |

## Command Mode

- /exec/configure



# ip igmp snooping optimised-multicast-flood

[no] ip igmp snooping optimised-multicast-flood

## Syntax Description

| Syntax Description |                           |   |
|--------------------|---------------------------|---|
|                    | no                        | (Optional) Negate a command or set its defaults           |
|                    | ip                        | Configure IP features                                     |
|                    | igmp                      | IGMP configuration commands                               |
|                    | snooping                  | Configures IGMP Snooping                                  |
|                    | optimised-multicast-flood | Configures Optimised Multicast Flood (OMF) on the VLAN/BD |

## Command Mode

- /exec/configure/vlan

## ip igmp snooping proxy-leave use-group-address

```
{ { ip igmp snooping proxy-leave use-group-address } | { no ip igmp snooping proxy-leave use-group-address } }
```

### Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| ip                 |  | Configure IP features                |
| igmp               |  | IGMP configuration commands          |
| snooping           |  | Configures IGMP Snooping             |
| proxy-leave        |  | Proxy Leave                          |
| use-group-address  |  | Use group address for proxy leave    |

### Command Mode

- /exec/configure/vlan-config /exec/configure/bdomain

# ip igmp snooping proxy general-queries

[no] ip igmp snooping proxy general-queries [ mrt <mrt> ]

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults                               |
| ip                 |            | Configure IP features  |
| igmp               |            | IGMP configuration commands  |
| snooping           |            | Configures IGMP Snooping   |
| proxy              |            | Configures IGMP snooping proxy                                     |
| general-queries    |            | Configures proxy for general-queries                               |
| mrt                | (Optional) | Configure max-response-time for the switch's proxy general-queries |
| <i>mrt</i>         | (Optional) | MRT in seconds   |

## Command Mode

- /exec/configure/vlan-config /exec/configure/bdomain

# ip igmp snooping proxy general-queries

[no] ip igmp snooping proxy general-queries [ mrt <mrt> ]

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults                               |
| ip                 |            | Configure IP features  |
| igmp               |            | IGMP configuration commands  |
| snooping           |            | Configures IGMP Snooping   |
| proxy              |            | Configures IGMP snooping proxy                                     |
| general-queries    |            | Configures proxy for general-queries                               |
| mrt                | (Optional) | Configure max-response-time for the switch's proxy general-queries |
| <i>mrt</i>         | (Optional) | MRT in seconds   |

## Command Mode

- /exec/configure

# ip igmp snooping querier-timeout

```
{ { no ip igmp snooping querier-timeout [ <time> ] } | { ip igmp snooping querier-timeout <time> } }
```

## Syntax Description

| Syntax Description |  |                                       |
|--------------------|--|---------------------------------------|
| no                 |  | Negate a command or set its defaults  |
| ip                 |  | Configure IP features                 |
| igmp               |  | IGMP configuration commands           |
| snooping           |  | Configures IGMP Snooping              |
| querier-timeout    |  | Configures querier timeout for IGMPv2 |
| <i>time</i>        |  | (Optional) Time in seconds            |

## Command Mode

- /exec/configure/vlan-config /exec/configure/bdomain

## ip igmp snooping querier-timeout

```
{ { no ip igmp snooping querier-timeout [ <time> ] } | { ip igmp snooping querier-timeout <time> } }
```

### Syntax Description

| Syntax Description |  |                                       |
|--------------------|--|---------------------------------------|
| no                 |  | Negate a command or set its defaults  |
| ip                 |  | Configure IP features                 |
| igmp               |  | IGMP configuration commands           |
| snooping           |  | Configures IGMP Snooping              |
| querier-timeout    |  | Configures querier timeout for IGMPv2 |
| <i>time</i>        |  | (Optional) Time in seconds            |

### Command Mode

- /exec/configure/vlan

# ip igmp snooping querier

{ { no ip igmp snooping querier [ <querier> ] } | { ip igmp snooping querier <querier> } }

## Syntax Description

|                           |                |                                      |
|---------------------------|----------------|--------------------------------------|
| <b>Syntax Description</b> | no             | Negate a command or set its defaults |
|                           | ip             | Configure IP features                |
|                           | igmp           | IGMP configuration commands          |
|                           | snooping       | Configures IGMP Snooping             |
|                           | querier        | Enables snooping querier             |
|                           | <i>querier</i> | (Optional) Querier IP address        |

## Command Mode

- /exec/configure/vlan-config /exec/configure/bdomain

# ip igmp snooping querier

```
{ { no ip igmp snooping querier [ <querier> ] } } | { ip igmp snooping querier <querier> } }
```

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 |            | Negate a command or set its defaults |
| ip                 |            | Configure IP features                |
| igmp               |            | IGMP configuration commands          |
| snooping           |            | Configures IGMP Snooping             |
| querier            |            | Enables snooping querier             |
| <i>querier</i>     | (Optional) | Querier IP address                   |

## Command Mode

- /exec/configure/vlan



# ip igmp snooping query-interval

```
{ { no ip igmp snooping query-interval [ <interval> ] } | { ip igmp snooping query-interval <interval> } }
```

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults           |
| ip                 |  | Configure IP features                          |
| igmp               |  | IGMP configuration commands                    |
| snooping           |  | Configures IGMP Snooping                       |
| query-interval     |  | Configures interval between query transmission |
| <i>interval</i>    |  | (Optional) Interval in seconds                 |

## Command Mode

- /exec/configure/vlan-config /exec/configure/bdomain

## ip igmp snooping query-interval

```
{ { no ip igmp snooping query-interval [ <interval> ] } | { ip igmp snooping query-interval <interval> } }
```

### Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults           |
| ip                 |  | Configure IP features                          |
| igmp               |  | IGMP configuration commands                    |
| snooping           |  | Configures IGMP Snooping                       |
| query-interval     |  | Configures interval between query transmission |
| <i>interval</i>    |  | (Optional) Interval in seconds                 |

### Command Mode

- /exec/configure/vlan

# ip igmp snooping query-max-response-time

{ { no ip igmp snooping query-max-response-time [ <time> ] } | { ip igmp snooping query-max-response-time <time> } }

## Syntax Description

| Syntax Description      |  |                                      |
|-------------------------|--|--------------------------------------|
| no                      |  | Negate a command or set its defaults |
| ip                      |  | Configure IP features                |
| igmp                    |  | IGMP configuration commands          |
| snooping                |  | Configures IGMP Snooping             |
| query-max-response-time |  | Configures MRT for query messages    |
| <i>time</i>             |  | (Optional) Time in seconds           |

## Command Mode

- /exec/configure/vlan-config /exec/configure/bdomain

## ip igmp snooping query-max-response-time

```
{ { no ip igmp snooping query-max-response-time [ <time> ] } | { ip igmp snooping query-max-response-time <time> } }
```

### Syntax Description

| Syntax Description      |  |                                      |
|-------------------------|--|--------------------------------------|
| no                      |  | Negate a command or set its defaults |
| ip                      |  | Configure IP features                |
| igmp                    |  | IGMP configuration commands          |
| snooping                |  | Configures IGMP Snooping             |
| query-max-response-time |  | Configures MRT for query messages    |
| <i>time</i>             |  | (Optional) Time in seconds           |

### Command Mode

- /exec/configure/vlan

# ip igmp snooping report-flood all

{ { ip igmp snooping report-flood { all | interface <interface> } } | { no ip igmp snooping report-flood { all | interface <interface> } } }

## Syntax Description

| Syntax Description |  |                                       |
|--------------------|--|---------------------------------------|
| no                 |  | Negate a command or set its defaults  |
| ip                 |  | Configure IP features                 |
| igmp               |  | IGMP configuration commands           |
| snooping           |  | Configures IGMP Snooping              |
| report-flood       |  | Configures Report flooding on a VLAN  |
| interface          |  | Specify interface for report flooding |
| all                |  | Flood on ALL active ports of VLAN     |
| <i>interface</i>   |  | Interface name                        |

## Command Mode

- /exec/configure/vlan-config /exec/configure/bdomain

# ip igmp snooping report-suppression

{ { no ip igmp snooping report-suppression } | { ip igmp snooping report-suppression } }

## Syntax Description

| Syntax Description | no                 | Negate a command or set its defaults                        |
|--------------------|--------------------|---|
|                    | ip                 | Configure IP features                                       |
|                    | igmp               | IGMP configuration commands                                 |
|                    | snooping           | Configures IGMP Snooping                                    |
|                    | report-suppression | Configures IGMPv1/IGMPv2 Report Suppression for the VLAN/BD |

## Command Mode

- /exec/configure/vlan-config /exec/configure/bdomain

# ip igmp snooping report-suppression

{ { no ip igmp snooping report-suppression } | { ip igmp snooping report-suppression } }

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults                        |
| ip                 |  | Configure IP features                                       |
| igmp               |  | IGMP configuration commands                                 |
| snooping           |  | Configures IGMP Snooping                                    |
| report-suppression |  | Configures IGMPv1/IGMPv2 Report Suppression for the VLAN/BD |

## Command Mode

- /exec/configure/vlan

# ip igmp snooping report-suppression

{ { no ip igmp snooping report-suppression } | { ip igmp snooping report-suppression } }

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults               |
| ip                 |  | Configure IP features                              |
| igmp               |  | IGMP configuration commands                        |
| snooping           |  | Configures IGMP Snooping                           |
| report-suppression |  | Configures Global IGMPv1/IGMPv2 Report Suppression |

## Command Mode

- /exec/configure



# ip igmp snooping report prefix interface

```
{ [ no ] ip igmp snooping { report-policy | access-group } { prefix-list | route-map } <pname> interface <interface> }
```

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| ip                 | Configure IP features                           |  |
| igmp               | IGMP configuration commands                     |  |
| snooping           | Configures IGMP Snooping                        |  |
| report-policy      | IGMP Report Policy                              |  |
| access-group       | IGMP access-group                               |  |
| prefix-list        | IPv4 Prefix-List Policy                         |  |
| route-map          | Route-Map Policy                                |  |
| <i>pname</i>       | Policy Name Name                                |  |
| interface          | Specify interface for filtering                 |  |
| <i>interface</i>   | Interface name                                  |  |

## Command Mode

- /exec/configure/vlan-config /exec/configure/bdomain

# ip igmp snooping robustness-variable

```
{ { no ip igmp snooping robustness-variable [ <value> ] } | { ip igmp snooping robustness-variable <value> } }
```

## Syntax Description

| Syntax Description |                     |  |
|--------------------|---------------------|--|
|                    | no                  | Negate a command or set its defaults       |
|                    | ip                  | Configure IP features                      |
|                    | igmp                | IGMP configuration commands                |
|                    | snooping            | Configures IGMP Snooping                   |
|                    | robustness-variable | Configures RFC defined Robustness Variable |
|                    | <i>value</i>        | (Optional) Count value                     |

## Command Mode

- /exec/configure/vlan-config /exec/configure/bdomain

# ip igmp snooping robustness-variable

```
{ { no ip igmp snooping robustness-variable [ <value> ] } | { ip igmp snooping robustness-variable <value> } }
```

## Syntax Description

| Syntax Description  |  |  |
|---------------------|--|--|
| no                  |  | Negate a command or set its defaults       |
| ip                  |  | Configure IP features                      |
| igmp                |  | IGMP configuration commands                |
| snooping            |  | Configures IGMP Snooping                   |
| robustness-variable |  | Configures RFC defined Robustness Variable |
| <i>value</i>        |  | (Optional) Count value                     |

## Command Mode

- /exec/configure/vlan

# ip igmp snooping self-mac-check

[no] ip igmp snooping self-mac-check

## Syntax Description

| Syntax Description |                |   |
|--------------------|----------------|---|
|                    | no             | (Optional) Negate a command or set its defaults |
|                    | ip             | Configure IP features                           |
|                    | igmp           | IGMP global configuration commands              |
|                    | self-mac-check | enable loopback packet check and drop it        |
|                    | snooping       | Configures IGMP Snooping                        |

## Command Mode

- /exec/configure

## ip igmp snooping startup-query-count

```
{ { no ip igmp snooping startup-query-count [ <count> ] } | { ip igmp snooping startup-query-count <count> } }
```

### Syntax Description

| Syntax Description  |  |  |
|---------------------|--|--|
| no                  |  | Negate a command or set its defaults         |
| ip                  |  | Configure IP features                        |
| igmp                |  | IGMP configuration commands                  |
| snooping            |  | Configures IGMP Snooping                     |
| startup-query-count |  | Configures number of queries sent at startup |
| <i>count</i>        |  | (Optional) Count value                       |

### Command Mode

- /exec/configure/vlan-config /exec/configure/bdomain

## ip igmp snooping startup-query-count

```
{ { no ip igmp snooping startup-query-count [ <count> ] } | { ip igmp snooping startup-query-count <count> } }
```

### Syntax Description

| Syntax Description  |  |  |
|---------------------|--|--|
| no                  |  | Negate a command or set its defaults         |
| ip                  |  | Configure IP features                        |
| igmp                |  | IGMP configuration commands                  |
| snooping            |  | Configures IGMP Snooping                     |
| startup-query-count |  | Configures number of queries sent at startup |
| <i>count</i>        |  | (Optional) Count value                       |

### Command Mode

- /exec/configure/vlan

# ip igmp snooping startup-query-interval

{ { no ip igmp snooping startup-query-interval [ <interval> ] } | { ip igmp snooping startup-query-interval <interval> } }

## Syntax Description

| Syntax Description     |  |                                      |
|------------------------|--|--------------------------------------|
| no                     |  | Negate a command or set its defaults |
| ip                     |  | Configure IP features                |
| igmp                   |  | IGMP configuration commands          |
| snooping               |  | Configures IGMP Snooping             |
| startup-query-interval |  | Configures query interval at startup |
| <i>interval</i>        |  | (Optional) Interval in seconds       |

## Command Mode

- /exec/configure/vlan-config /exec/configure/bdomain

# ip igmp snooping startup-query-interval

```
{ { no ip igmp snooping startup-query-interval [ <interval> ] } | { ip igmp snooping startup-query-interval <interval> } }
```

## Syntax Description

| Syntax Description     |  |                                      |
|------------------------|--|--------------------------------------|
| no                     |  | Negate a command or set its defaults |
| ip                     |  | Configure IP features                |
| igmp                   |  | IGMP configuration commands          |
| snooping               |  | Configures IGMP Snooping             |
| startup-query-interval |  | Configures query interval at startup |
| <i>interval</i>        |  | (Optional) Interval in seconds       |

## Command Mode

- /exec/configure/vlan



# ip igmp snooping static-group interface

```
{ { no ip igmp snooping static-group <group> [ source <source> ] interface <interface> } | { ip igmp snooping static-group <group> [ source <source> ] interface <interface> } }
```

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 | Negate a command or set its defaults       |  |
| ip                 | Configure IP features                      |  |
| igmp               | IGMP configuration commands                |  |
| snooping           | Configures IGMP Snooping                   |  |
| static-group       | Configures static group membership         |  |
| <i>group</i>       | Group IP Address                           |  |
| source             | (Optional) Configures static (S,G) channel |  |
| <i>source</i>      | (Optional) Source IP Address               |  |
| interface          | Specify interface for static-group         |  |
| <i>interface</i>   | Interface name                             |  |

## Command Mode

- /exec/configure/vlan-config /exec/configure/bdomain

# ip igmp snooping static-group interface

```
{ { no ip igmp snooping static-group <group> [ source <source> ] interface <interface> } | { ip igmp snooping static-group <group> [ source <source> ] interface <interface> } }
```

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults       |
| ip                 |  | Configure IP features                      |
| igmp               |  | IGMP configuration commands                |
| snooping           |  | Configures IGMP Snooping                   |
| static-group       |  | Configures static group membership         |
| <i>group</i>       |  | Group IP Address                           |
| source             |  | (Optional) Configures static (S,G) channel |
| <i>source</i>      |  | (Optional) Source IP Address               |
| interface          |  | Specify interface for static-group         |
| <i>interface</i>   |  | Interface name                             |

## Command Mode

- /exec/configure/vlan

# ip igmp snooping syslog-threshold

{ ip igmp snooping syslog-threshold <percentage> } | { no ip igmp snooping syslog-threshold }

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| ip                 |  | Configure IP features                |
| igmp               |  | IGMP configuration commands          |
| snooping           |  | Configures IGMP Snooping             |
| syslog-threshold   |  | IGMP SNOOPING table syslog threshold |
| <i>percentage</i>  |  | Percentage                           |

## Command Mode

- /exec/configure

## ip igmp snooping v3-report-suppression

```
{ { no ip igmp snooping v3-report-suppression } | { ip igmp snooping v3-report-suppression } }
```

### Syntax Description

#### Syntax Description

|                       |  |
|-----------------------|--|
| no                    | Negate a command or set its defaults                                     |
| ip                    | Configure IP features  |
| igmp                  | IGMP configuration commands  |
| snooping              | Configures IGMP Snooping   |
| v3-report-suppression | Configures IGMPv3 Report Suppression and Proxy Reporting for the VLAN/BD |

### Command Mode

- /exec/configure/vlan-config /exec/configure/bdomain

# ip igmp snooping v3-report-suppression

{ { no ip igmp snooping v3-report-suppression } | { ip igmp snooping v3-report-suppression } }

## Syntax Description

| Syntax Description    |  |  |
|-----------------------|--|--|
| no                    |  | Negate a command or set its defaults                                     |
| ip                    |  | Configure IP features  |
| igmp                  |  | IGMP configuration commands  |
| snooping              |  | Configures IGMP Snooping   |
| v3-report-suppression |  | Configures IGMPv3 Report Suppression and Proxy Reporting for the VLAN/BD |

## Command Mode

- /exec/configure/vlan

# ip igmp snooping v3-report-suppression

```
{ { no ip igmp snooping v3-report-suppression } | { ip igmp snooping v3-report-suppression } }
```

## Syntax Description

| Syntax Description | no                    | Negate a command or set its defaults                            |
|--------------------|-----------------------|---|
|                    | ip                    | Configure IP features   |
|                    | igmp                  | IGMP configuration commands                                     |
|                    | snooping              | Configures IGMP Snooping  |
|                    | v3-report-suppression | Configures Global IGMPv3 Report Suppression and Proxy Reporting |

## Command Mode

- /exec/configure

# ip igmp snooping version

{ { no ip igmp snooping version [ <version> ] } | { ip igmp snooping version <version> } }

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 |            | Negate a command or set its defaults       |
| ip                 |            | Configure IP features                      |
| igmp               |            | IGMP configuration commands                |
| snooping           |            | Configures IGMP Snooping                   |
| version            |            | Configures IGMP version number for VLAN/BD |
| <i>version</i>     | (Optional) | Version number value                       |

## Command Mode

- /exec/configure/vlan-config /exec/configure/bdomain

# ip igmp snooping version

{ { no ip igmp snooping version [ <version> ] } | { ip igmp snooping version <version> } }

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 | Negate a command or set its defaults       |  |
| ip                 | Configure IP features                      |  |
| igmp               | IGMP configuration commands                |  |
| snooping           | Configures IGMP Snooping                   |  |
| version            | Configures IGMP version number for VLAN/BD |  |
| <i>version</i>     | (Optional) Version number value            |  |

## Command Mode

- /exec/configure/vlan



# ip igmp snooping vpc

ip igmp snooping vpc { clear-cfs-flag | clear-pending-flag | clear-native-flag }

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| ip                 |  | Configure IP features                           |
| igmp               |  | IGMP global configuration commands              |
| snooping           |  | Configures IGMP Snooping                        |
| vpc                |  | vPC related command                             |
| clear-cfs-flag     |  | clear cfs learnt flag from the routes / oifs    |
| clear-native-flag  |  | clear native learnt flag from the routes / oifs |
| clear-pending-flag |  | clear pending flag if set                       |

## Command Mode

- /exec

# ip igmp snooping vpc

ip igmp snooping vpc [ vpc-incremental | vpc-sync-only ]

## Syntax Description

| Syntax Description |                 |   |
|--------------------|-----------------|---|
|                    | ip              | Configure IP features   |
|                    | igmp            | IGMP global configuration commands                                |
|                    | snooping        | Configures IGMP Snooping  |
|                    | vpc             | vPC related events  |
|                    | vpc-sync-only   | (Optional) default - no vpc-incremental with route proxy disabled |
|                    | vpc-incremental | (Optional) vpc-incremental mode with route proxy enabled          |

## Command Mode

- /exec/configure

# ip igmp snooping vpc peer-link-exclude

[no] ip igmp snooping vpc peer-link-exclude

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults               |
| ip                 |            | Configure IP features                              |
| igmp               |            | IGMP configuration commands                        |
| snooping           |            | Configures IGMP Snooping                           |
| vpc                |            | Configures vPC                                     |
| peer-link-exclude  |            | Exclude vPC Peer-link for Routed multicast traffic |

## Command Mode

- /exec/configure

# ip igmp snooping vpc peer-routes-download

ip igmp snooping vpc peer-routes-download [ stale ]

## Syntax Description

### Syntax Description

|                      |  |
|----------------------|--|
| ip                   | Configure IP features                                      |
| igmp                 | IGMP global configuration commands                         |
| snooping             | Configures IGMP Snooping                                   |
| vpc                  | vPC related command  |
| peer-routes-download | get peer-learned routes                                    |
| stale                | (Optional) stale the cfs learnt entry, i.e. clear cfs_flag |

## Command Mode

- /exec

# ip igmp snooping vxlan-umc drop

[no] ip igmp snooping vxlan-umc drop [ vlan <vlans-range> ]

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults                    |
| ip                 | Configure IP features  |
| igmp               | IGMP global configuration commands                                 |
| snooping           | Configures IGMP Snooping   |
| vxlan-umc          | Turn off flooding on VLANs   |
| drop               | Drop unknown multicast traffic on all VLANs                        |
| vlan               | (Optional) VLAN list to drop the unknown multicast traffic         |
| <i>vlans-range</i> | (Optional) VLAN IDs for which unknown multicast traffic is dropped |

## Command Mode

- /exec/configure

# ip igmp snooping vxlan

{ { no ip igmp snooping vxlan } | { ip igmp snooping vxlan } }

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| ip                 |  | Configure IP features                |
| igmp               |  | IGMP global configuration commands   |
| snooping           |  | Configures IGMP Snooping             |
| vxlan              |  | Configures Snooping for vxlan vlans  |

## Command Mode

- /exec/configure

# ip igmp spoof-check

[no] ip igmp spoof-check

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| ip                 | Configure IP features                           |  |
| igmp               | IGMP global configuration commands              |  |
| spoof-check        | Enable spoof check for IGMP                     |  |

## Command Mode

- /exec/configure

# ip igmp ssm-translate

[no] ip igmp ssm-translate <group> <source>

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 | (Optional) Negate a command or set its defaults    |  |
| ip                 | Configure IP features                              |  |
| igmp               | IGMP global configuration commands                 |  |
| ssm-translate      | Translate IGMPv1/v2 reports to (S,G) route entries |  |
| <i>group</i>       | IP Multicast group range                           |  |
| <i>source</i>      | IP Multicast address source                        |  |

## Command Mode

- /exec/configure /exec/configure/vrf



## ip igmp startup-query-count

```
{ { no ip igmp startup-query-count [ <count> ] } | { ip igmp startup-query-count <count> } }
```

### Syntax Description

| Syntax Description  |  |  |
|---------------------|--|--|
| no                  |  | Negate a command or set its defaults         |
| ip                  |  | Configure IP features                        |
| igmp                |  | IGMP interface configuration commands        |
| startup-query-count |  | Configures number of queries sent at startup |
| <i>count</i>        |  | (Optional) Count value                       |

### Command Mode

- /exec/configure/if-igp

# ip igmp startup-query-interval

```
{ { no ip igmp startup-query-interval [ <interval> ] } | { ip igmp startup-query-interval <interval> } }
```

## Syntax Description

| Syntax Description     |  |                                       |
|------------------------|--|---------------------------------------|
| no                     |  | Negate a command or set its defaults  |
| ip                     |  | Configure IP features                 |
| igmp                   |  | IGMP interface configuration commands |
| startup-query-interval |  | Configures query interval at startup  |
| <i>interval</i>        |  | (Optional) Interval in seconds        |

## Command Mode

- /exec/configure/if-igp

# ip igmp state-limit

```
{ { ip igmp state-limit <max-states> [ reserved <route-map-name> <max-reserved> ] } | { no ip igmp state-limit [ <max-states> [ reserved <route-map-name> <max-reserved> ] ] } }
```

## Syntax Description

| Syntax Description    |            |  |
|-----------------------|------------|--|
| no                    |            | Negate a command or set its defaults                 |
| ip                    |            | Configure IP features                                |
| igmp                  |            | IGMP interface configuration commands                |
| state-limit           |            | Configures State limit                               |
| <i>max-states</i>     |            | Maximum states allowed                               |
| reserved              | (Optional) | Reserve the states using route-map                   |
| <i>route-map-name</i> | (Optional) | Route-map name                                       |
| <i>max-reserved</i>   | (Optional) | Maximum (*,G)/(S,G) entires allowed on the interface |

## Command Mode

- /exec/configure/if-igp

## ip igmp static-oif

```
[no] ip igmp static-oif { { <group> [ source <source> ] } | { route-map <route-map-name> } }
```

### Syntax Description

| Syntax Description    |            |  |
|-----------------------|------------|--|
| no                    | (Optional) | Negate a command or set its defaults                   |
| ip                    |            | Configure IP features                                  |
| igmp                  |            | IGMP interface configuration commands                  |
| static-oif            |            | Configures static oif for a multicast forwarding entry |
| <i>group</i>          |            | Multicast group IP address                             |
| source                | (Optional) | Configures source address for IGMPv3 (S,G) Channel     |
| <i>source</i>         | (Optional) | Source IP address                                      |
| route-map             |            | Static group policy                                    |
| <i>route-map-name</i> |            | route-map name   |

### Command Mode

- /exec/configure/if-igp

# ip igmp suppress v3-gsq

[no] ip igmp suppress v3-gsq

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ip                 | Configure IP features                           |
| igmp               | IGMP interface configuration commands           |
| suppress           | Suppress  |
| v3-gsq             | v3 GSQ  |

## Command Mode

- /exec/configure/if-igp

# ip igmp syslog-threshold

{ ip igmp syslog-threshold <percentage> } | { no ip igmp syslog-threshold }

## Syntax Description

| Syntax Description |                   |                                      |
|--------------------|-------------------|--------------------------------------|
|                    | no                | Negate a command or set its defaults |
|                    | ip                | Configure IP features                |
|                    | igmp              | IGMP related events                  |
|                    | syslog-threshold  | IGMP table syslog threshold          |
|                    | <i>percentage</i> | Percentage                           |

## Command Mode

- /exec/configure

# ip igmp version

{ { no ip igmp version [ <version> ] } | { ip igmp version <version> } }

## Syntax Description

### Syntax Description

|                |  |
|----------------|--|
| no             | Negate a command or set its defaults         |
| ip             | Configure IP features                        |
| igmp           | IGMP interface configuration commands        |
| version        | Configures IGMP version number for interface |
| <i>version</i> | (Optional) Version number value              |

## Command Mode

- /exec/configure/if-igp

# ip load-sharing address

[no] ip load-sharing address { source-destination [ port source-destination2 | gre | gre-outer ] | destination port2 destination2 | source } { [ rotate <rotate> ] | [ concatenation ] } + [ universal-id <random-seed> ] | no ip load-sharing address

## Syntax Description

### Syntax Description

|                     |  |
|---------------------|--|
| no                  | (Optional) Negate a command or set its defaults                      |
| ip                  | Configure IP features  |
| load-sharing        | ECMP load-sharing  |
| address             | Configure source/destination addresses, port numbers and hash        |
| source-destination  | Use both source and destination values for address                   |
| port                | (Optional) Use source-destination value for port                     |
| gre                 | (Optional) Use source-destination value for gre-key                  |
| gre-outer           | (Optional) Use outer IPv4 header fields for GRE tunnel hashing       |
| source-destination2 | (Optional) Use both source and destination values for port           |
| destination         | Use destination address  |
| port2               | Use destination value for port                                       |
| destination2        | Use destination port   |
| source              | Use source address   |
| rotate              | (Optional) Offset to be used in the hash                             |
| <i>rotate</i>       | (Optional) Value used for offset, default value is 32                |
| concatenation       | (Optional) Enable/Disable concatenation                              |
| universal-id        | (Optional) Universal-id to randomize hash functions for load-balance |
| <i>random-seed</i>  | (Optional) Value used to randomize hash                              |

## Command Mode

- /exec/configure



# ip load-sharing per-packet

ip load-sharing per-packet | no ip load-sharing [ per-packet ]

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults          |
| ip                 |  | Configure IP features                         |
| load-sharing       |  | Style of load sharing                         |
| per-packet         |  | Enable per-packet load balancing on interface |

## Command Mode

- /exec/configure/if-igp

# ip local-proxy-arp

{ ip local-proxy-arp | no ip local-proxy-arp }

## Syntax Description

| Syntax Description |                 |                                      |
|--------------------|-----------------|--------------------------------------|
|                    | no              | Negate a command or set its defaults |
|                    | ip              | Configure IP features                |
|                    | local-proxy-arp | Configure local proxy ARP            |

## Command Mode

- /exec/configure/if-igp /exec/configure/if-vlan-common

# ip local policy route-map

ip local policy route-map <route-map-name> | no ip local policy route-map [ <route-map-name> | <route-map-name> ]

## Syntax Description

| Syntax Description    |            |                                      |
|-----------------------|------------|--------------------------------------|
| no                    |            | Negate a command or set its defaults |
| ip                    |            | Configure IP features                |
| local                 |            | Configure local PBR feature          |
| policy                |            | Configure PBR feature                |
| route-map             |            | Route-map for PBR                    |
| <i>route-map-name</i> |            | Route-map name                       |
| <i>route-map-name</i> | (Optional) | Route-map name                       |
| <i>route-map-name</i> | (Optional) | Known route-map name                 |

## Command Mode

- /exec/configure /exec/configure/vrf

# ip mroute

```
[no] ip mroute { <ip-addr> <ip-mask> | <ip-prefix> } { { <next-hop> | <nh-prefix> } | <interface> } [ <pref> ] [ vrf { <vrf-name> | <vrf-known-name> } ]
```

## Syntax Description

| Syntax Description    |            |   |
|-----------------------|------------|---|
| <i>no</i>             | (Optional) | Negate a command or set its defaults                  |
| <i>ip</i>             |            | Configure IP features                                 |
| <i>mroute</i>         |            | Configure multicast RPF static route                  |
| <i>ip-addr</i>        |            | IP prefix in format i.i.i.i                           |
| <i>ip-mask</i>        |            | IP network mask in format m.m.m.m                     |
| <i>ip-prefix</i>      |            | IP prefix and network mask length in format x.x.x.x/m |
| <i>next-hop</i>       |            | IP next-hop address in format i.i.i.i                 |
| <i>nh-prefix</i>      |            | IP next-hop prefix in format i.i.i.i/m                |
| <i>interface</i>      |            | Interface for interface static multicast routes       |
| <i>pref</i>           | (Optional) | Route preference                                      |
| <i>vrf</i>            | (Optional) | Display per-VRF information                           |
| <i>vrf-name</i>       | (Optional) | VRF name  |
| <i>vrf-known-name</i> | (Optional) | Known VRF name  |

## Command Mode

- /exec/configure /exec/configure/vrf

# ip msdp description

ip msdp description <peer-address> <text> | no ip msdp description <peer-address> [ <text> ]

## Syntax Description

| Syntax Description  |  |                                      |
|---------------------|--|--------------------------------------|
| no                  |  | Negate a command or set its defaults |
| ip                  |  | Configure IP features                |
| msdp                |  | MSDP global configuration commands   |
| description         |  | Configure MSDP description for peer  |
| <i>peer-address</i> |  | IP address of MSDP peer              |
| <i>text</i>         |  | Text description                     |

## Command Mode

- /exec/configure /exec/configure/vrf

# ip msdp event-history cli

[no] ip msdp event-history cli { size { <size\_in\_text> | <size\_in\_kbytes> } }

## Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| ip                    | Configure IP features                           |  |
| msdp                  | MSDP global configuration commands              |  |
| event-history         | Configure event-history buffer                  |  |
| cli                   | CLI logs for MSDP                               |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

## Command Mode

- /exec/configure

# ip msdp event-history events

[no] ip msdp event-history events { size { <size\_in\_text> | <size\_in\_kbytes> } }

## Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| ip                    | Configure IP features                           |  |
| msdp                  | MSDP global configuration commands              |  |
| event-history         | Configure event-history buffer                  |  |
| events                | Peer events for MSDP                            |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

## Command Mode

- /exec/configure

# ip msdp event-history msdp-internal

[no] ip msdp event-history msdp-internal { size { <size\_in\_text> | <size\_in\_kbytes> } }

## Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| ip                    | Configure IP features                           |  |
| msdp                  | MSDP global configuration commands              |  |
| event-history         | Configure event-history buffer                  |  |
| msdp-internal         | Internal logs for MSDP                          |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

## Command Mode

- /exec/configure



# ip msdp event-history routes

[no] ip msdp event-history routes { size { <size\_in\_text> | <size\_in\_kbytes> } }

## Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| ip                    | Configure IP features                           |  |
| msdp                  | MSDP global configuration commands              |  |
| event-history         | Configure event-history buffer                  |  |
| routes                | Route logs for MSDP                             |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

## Command Mode

- /exec/configure

## ip msdp event-history tcp

```
[no] ip msdp event-history tcp { size { <size_in_text> | <size_in_kbytes> } }
```

### Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| ip                    | Configure IP features                           |  |
| msdp                  | MSDP global configuration commands              |  |
| event-history         | Configure event-history buffer                  |  |
| tcp                   | TCP logs for MSDP                               |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

### Command Mode

- /exec/configure

# ip msdp flush-routes

[no] ip msdp flush-routes

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| ip                 | Configure IP features                           |  |
| msdp               | MSDP global configuration commands              |  |
| flush-routes       | Remove routes when restarting MSDP              |  |

## Command Mode

- /exec/configure /exec/configure/vrf

## ip msdp group-limit source

[no] ip msdp group-limit <limit> source <sprefix>

### Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| ip                 | Configure IP features                           |  |
| msdp               | MSDP global configuration commands              |  |
| group-limit        | Limit the number of groups per source           |  |
| <i>limit</i>       | Limit on number of groups                       |  |
| source             | Sources to limit groups to                      |  |
| <i>sprefix</i>     | Prefix to match sources against                 |  |

### Command Mode

- /exec/configure /exec/configure/vrf

# ip msdp keepalive

ip msdp keepalive <peer-address> <interval> <timeout> | no ip msdp keepalive <peer-address> [ <interval> <timeout> ]

## Syntax Description

| Syntax Description  |  |  |
|---------------------|--|--|
| no                  |  | Negate a command or set its defaults         |
| ip                  |  | Configure IP features                        |
| msdp                |  | MSDP global configuration commands           |
| keepalive           |  | Configure MSDP keepalive parameters for peer |
| <i>peer-address</i> |  | IP address of MSDP peer                      |
| <i>interval</i>     |  | Keepalive interval in seconds                |
| <i>timeout</i>      |  | Keepalive timeout in seconds                 |

## Command Mode

- /exec/configure /exec/configure/vrf

## ip msdp mesh-group

ip msdp mesh-group <peer-address> <name> | no ip msdp mesh-group <peer-address> [ <name> ]

### Syntax Description

| Syntax Description  |  |                                       |
|---------------------|--|---------------------------------------|
| no                  |  | Negate a command or set its defaults  |
| ip                  |  | Configure IP features                 |
| msdp                |  | MSDP global configuration commands    |
| mesh-group          |  | Configure member of mesh-group        |
| <i>name</i>         |  | Name of mesh-group                    |
| <i>peer-address</i> |  | IP address of MSDP peer in mesh-group |

### Command Mode

- /exec/configure /exec/configure/vrf

# ip msdp no-sa-data

[no] ip msdp no-sa-data

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ip                 | Configure IP features                           |
| msdp               | MSDP global configuration commands              |
| no-sa-data         | Don't send SA-encapsulated data                 |

## Command Mode

- */exec/configure /exec/configure/vrf*

## ip msdp originator-id

ip msdp originator-id <interface> | no ip msdp originator-id [ <interface> ]

### Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults          |
| ip                 |  | Configure IP features                         |
| msdp               |  | MSDP global configuration commands            |
| originator-id      |  | Configure alternative router-id for MSDP      |
| <i>interface</i>   |  | Use IP address of interface for originator-id |

### Command Mode

- /exec/configure /exec/configure/vrf



# ip msdp password

ip msdp password <peer-address> <password> | no ip msdp password <peer-address> [ <password> ]

## Syntax Description

|                           |                     |                                       |
|---------------------------|---------------------|---------------------------------------|
| <b>Syntax Description</b> | no                  | Negate a command or set its defaults  |
|                           | ip                  | Configure IP features                 |
|                           | msdp                | MSDP global configuration commands    |
|                           | password            | Configure MD5 authentication password |
|                           | <i>peer-address</i> | IP address of MSDP peer               |
|                           | <i>password</i>     | MD5 password                          |

## Command Mode

- /exec/configure /exec/configure/vrf

# ip msdp peer connect-source

{ { ip msdp peer <peer-address> connect-source <interface> [ remote-as <asn> ] } | { no ip msdp peer <peer-address> [ connect-source <interface> ] [ remote-as <asn> ] } }

## Syntax Description

### Syntax Description

|                     |  |
|---------------------|--|
| no                  | Negate a command or set its defaults                 |
| ip                  | Configure IP features                                |
| msdp                | MSDP global configuration commands                   |
| peer                | Configure MSDP peer                                  |
| <i>peer-address</i> | IP address of MSDP peer                              |
| connect-source      | Configure local IP address for TCP connection        |
| <i>interface</i>    | Use IP address of interface for peer address         |
| remote-as           | (Optional) Configure remote Autonomous System Number |
| <i>asn</i>          | (Optional) AS number                                 |

## Command Mode

- /exec/configure /exec/configure/vrf

# ip msdp reconnect-interval

ip msdp reconnect-interval <interval> | no ip msdp reconnect-interval [ <interval> ]

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults    |
| ip                 |  | Configure IP features                   |
| msdp               |  | MSDP global configuration commands      |
| reconnect-interval |  | Configure connection reconnect interval |
| <i>interval</i>    |  | Interval in seconds                     |

## Command Mode

- /exec/configure /exec/configure/vrf

# ip msdp redistribute

[no] ip msdp redistribute [ route-map <route-map-name> | prefix-list <prefix-list-name> ]

## Syntax Description

| Syntax Description      |            |                                       |
|-------------------------|------------|---------------------------------------|
| no                      | (Optional) | Negate a command or set its defaults  |
| ip                      |            | Configure IP features                 |
| msdp                    |            | MSDP global configuration commands    |
| redistribute            |            | Configure SA policy for all MSDP peer |
| route-map               | (Optional) | route-map policy                      |
| <i>route-map-name</i>   | (Optional) | route-map policy name                 |
| prefix-list             | (Optional) | Prefix list policy                    |
| <i>prefix-list-name</i> | (Optional) | prefix-list name                      |

## Command Mode

- /exec/configure /exec/configure/vrf

# ip msdp sa-interval

ip msdp sa-interval <interval> | no ip msdp sa-interval [ <interval> ]

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults                  |
| ip                 |  | Configure IP features                                 |
| msdp               |  | MSDP global configuration commands                    |
| sa-interval        |  | Configure Source-Active message transmission interval |
| <i>interval</i>    |  | Interval in seconds                                   |

## Command Mode

- /exec/configure /exec/configure/vrf

## ip msdp sa-limit

ip msdp sa-limit <peer-address> <limit> | no ip msdp sa-limit <peer-address> [ <limit> ]

### Syntax Description

| Syntax Description  |  |   |
|---------------------|--|---|
| no                  |  | Negate a command or set its defaults    |
| ip                  |  | Configure IP features                   |
| msdp                |  | MSDP global configuration commands      |
| sa-limit            |  | Configure maximum (S,G) entries allowed |
| <i>limit</i>        |  | Number of (S,G) entries                 |
| <i>peer-address</i> |  | IP address of MSDP peer in mesh-group   |

### Command Mode

- /exec/configure /exec/configure/vrf

# ip msdp sa-policy in

```
[no] ip msdp sa-policy <peer-address> { <route-map-name> | prefix-list <prefix-list-name> | <rtr_pol_name> } in
```

## Syntax Description

| Syntax Description      |   |  |
|-------------------------|---|--|
| no                      | (Optional) Negate a command or set its defaults |  |
| ip                      | Configure IP features                           |  |
| msdp                    | MSDP global configuration commands              |  |
| sa-policy               | Configure SA policy for MSDP peer               |  |
| prefix-list             | Prefix list policy                              |  |
| in                      | Input policy                                    |  |
| <i>peer-address</i>     | IP address of MSDP peer for SA policy           |  |
| <i>route-map-name</i>   | route-map policy name                           |  |
| <i>prefix-list-name</i> | prefix-list name                                |  |
| <i>rtr_pol_name</i>     | An existing routing-rules policy                |  |

## Command Mode

- /exec/configure /exec/configure/vrf

## ip msdp sa-policy out

```
[no] ip msdp sa-policy <peer-address> { <route-map-name> | prefix-list <prefix-list-name> | <rtr_pol_name>
} out
```

### Syntax Description

| Syntax Description      |            |                                       |
|-------------------------|------------|---------------------------------------|
| no                      | (Optional) | Negate a command or set its defaults  |
| ip                      |            | Configure IP features                 |
| msdp                    |            | MSDP global configuration commands    |
| sa-policy               |            | Configure SA policy for MSDP peer     |
| prefix-list             |            | Prefix list policy                    |
| out                     |            | Output policy                         |
| <i>peer-address</i>     |            | IP address of MSDP peer for SA policy |
| <i>route-map-name</i>   |            | route-map policy name                 |
| <i>prefix-list-name</i> |            | prefix-list name                      |
| <i>rtr_pol_name</i>     |            | An existing routing-rules policy      |

### Command Mode

- /exec/configure /exec/configure/vrf



# ip msdp shutdown

ip msdp shutdown <peer-address> | no ip msdp shutdown <peer-address>

## Syntax Description

| Syntax Description  |  |                                      |
|---------------------|--|--------------------------------------|
| no                  |  | Negate a command or set its defaults |
| ip                  |  | Configure IP features                |
| msdp                |  | MSDP global configuration commands   |
| shutdown            |  | Administratively shut down peer      |
| <i>peer-address</i> |  | IP address of MSDP peer              |

## Command Mode

- /exec/configure /exec/configure/vrf

# ip mtu eigrp

{ { { ip | ipv6 } mtu eigrp <eigrp-ptag> <mtu> } | { no { ip | ipv6 } mtu eigrp <eigrp-ptag> [ <mtu> ] } }

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults    |
| ip                 |  | Configure IP features                   |
| ipv6               |  | Configure IPv6 features                 |
| mtu                |  | Set Max Packet Size to be used by EIGRP |
| eigrp              |  | EIGRP interface configuration commands  |
| <i>eigrp-ptag</i>  |  | Process tag                             |
| <i>mtu</i>         |  | Interface MTU                           |
| <i>eigrp-ptag</i>  |  |   |

## Command Mode

- /exec/configure/if-igp

# ip name-server

```
[no] ip name-server { { <ipv4_0> | <ipv6_1> } [ { <ipv4_2> | <ipv6_3> } [ { <ipv4_4> | <ipv6_5> } [ { <ipv4_6> | <ipv6_7> } [ { <ipv4_8> | <ipv6_9> } [ { <ipv4_10> | <ipv6_11> } ] ] ] ] | { <ipv4_12> | <ipv6_13> } [ use-vrf { <vrf-name> | <vrf-known-name> } ] | { <ipv4_14> | <ipv6_15> } [ { <ipv4_16> | <ipv6_17> } [ use-vrf { <vrf-name> | <vrf-known-name> } ] ] | { <ipv4_18> | <ipv6_19> } [ { <ipv4_20> | <ipv6_21> } [ { <ipv4_22> | <ipv6_23> } [ use-vrf { <vrf-name> | <vrf-known-name> } ] ] ] | { <ipv4_24> | <ipv6_25> } [ { <ipv4_26> | <ipv6_27> } [ { <ipv4_28> | <ipv6_29> } [ { <ipv4_30> | <ipv6_31> } [ use-vrf { <vrf-name> | <vrf-known-name> } ] ] ] ] | { <ipv4_32> | <ipv6_33> } [ { <ipv4_34> | <ipv6_35> } [ { <ipv4_36> | <ipv6_37> } [ { <ipv4_38> | <ipv6_39> } [ { <ipv4_40> | <ipv6_41> } [ use-vrf { <vrf-name> | <vrf-known-name> } ] ] ] ] ] | { <ipv4_42> | <ipv6_43> } [ { <ipv4_44> | <ipv6_45> } [ { <ipv4_46> | <ipv6_47> } [ { <ipv4_48> | <ipv6_49> } [ { <ipv4_50> | <ipv6_51> } [ { <ipv4_52> | <ipv6_53> } [ use-vrf { <vrf-name> | <vrf-known-name> } ] ] ] ] ] ] }
```

## Syntax Description

### Syntax Description

|                       |   |
|-----------------------|---|
| no                    | (Optional) Negate a command or set its defaults |
| ip                    | Configure IP features                           |
| name-server           | Specify nameserver address                      |
| <i>ipv4_0</i>         | Enter an IPv4 address                           |
| <i>ipv4_2</i>         | (Optional) Enter an IPv4 address                |
| <i>ipv4_4</i>         | (Optional) Enter an IPv4 address                |
| <i>ipv4_6</i>         | (Optional) Enter an IPv4 address                |
| <i>ipv4_8</i>         | (Optional) Enter an IPv4 address                |
| <i>ipv4_10</i>        | (Optional) Enter an IPv4 address                |
| <i>ipv4_12</i>        | Enter an IPv4 address                           |
| use-vrf               | (Optional) Display per-VRF information          |
| <i>vrf-name</i>       | (Optional) VRF name                             |
| <i>vrf-known-name</i> | (Optional) Known VRF name                       |
| <i>ipv4_14</i>        | Enter an IPv4 address                           |
| <i>ipv4_16</i>        | (Optional) Enter an IPv4 address                |
| <i>ipv4_18</i>        | Enter an IPv4 address                           |
| <i>ipv4_20</i>        | (Optional) Enter an IPv4 address                |
| <i>ipv4_22</i>        | (Optional) Enter an IPv4 address                |
| <i>ipv4_24</i>        | Enter an IPv4 address                           |

|                |                                  |
|----------------|----------------------------------|
| <i>ipv4_26</i> | (Optional) Enter an IPv4 address |
| <i>ipv4_28</i> | (Optional) Enter an IPv4 address |
| <i>ipv4_30</i> | (Optional) Enter an IPv4 address |
| <i>ipv4_32</i> | Enter an IPv4 address            |
| <i>ipv4_34</i> | (Optional) Enter an IPv4 address |
| <i>ipv4_36</i> | (Optional) Enter an IPv4 address |
| <i>ipv4_38</i> | (Optional) Enter an IPv4 address |
| <i>ipv4_40</i> | (Optional) Enter an IPv4 address |
| <i>ipv4_42</i> | Enter an IPv4 address            |
| <i>ipv4_44</i> | (Optional) Enter an IPv4 address |
| <i>ipv4_46</i> | (Optional) Enter an IPv4 address |
| <i>ipv4_48</i> | (Optional) Enter an IPv4 address |
| <i>ipv4_50</i> | (Optional) Enter an IPv4 address |
| <i>ipv4_52</i> | (Optional) Enter an IPv4 address |

**Command Mode**

- /exec/configure /exec/configure/vrf

# ip nat inside

[no] ip nat { inside | outside }

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ip                 | Configure IP features                           |
| nat                | NAT interface commands                          |
| inside             | Inside interface for address translation        |
| outside            | Outside interface for address translation       |

## Command Mode

- /exec/configure/if-port-channel /exec/configure/if-vlan /exec/configure/if-remote-ethernet /exec/configure/if-igp /exec/configure/if-routing

## ip nat inside source

```
[no] ip nat inside source { { static <insideLocalIP> <insideGlobalIP> [ vrf <vrf-name> [ match-in-vrf ] ] [
group <group-id> [ dynamic ] ] [ add-route ] } | { static { tcp | udp } <insideLocalIP> <insideLocalPort>
<insideGlobalIP> <insideGlobalPort> [ vrf <vrf-name> [ match-in-vrf ] ] [ group <group-id> [ dynamic ] ] [
add-route ] } | { list <acl-name> } { pool <pool-name> [ vrf <vrf-name> [ match-in-vrf ] ] [ overload ] |
interface <globalAddrInterface> [ vrf <vrf-name> [ match-in-vrf ] ] overload } [ group <group-id> dynamic
] [ add-route ] }
```

### Syntax Description

#### Syntax Description

|                         |   |
|-------------------------|---|
| no                      | (Optional) Negate a command or set its defaults |
| ip                      | Configure IP features                           |
| nat                     | NAT configuration commands                      |
| inside                  | Inside address translation                      |
| source                  | Source address translation                      |
| static                  | Specify static local->global mapping            |
| tcp                     | Transmission Control Protocol                   |
| udp                     | User Datagram Protocol                          |
| list                    | Specify access list describing local addresses  |
| pool                    | Name pool of global addresses                   |
| interface               | Specify interface for global address            |
| vrf                     | (Optional) Specify vrf                          |
| match-in-vrf            | (Optional) Match incoming vrf                   |
| dynamic                 | (Optional) Dynamic twice NAT group              |
| <i>insideLocalIP</i>    | Inside local IP address                         |
| <i>insideLocalPort</i>  | Local UDP/TCP port                              |
| <i>insideGlobalIP</i>   | Inside global IP address                        |
| <i>insideGlobalPort</i> | Global UDP/TCP port                             |
| group                   | (Optional) Specify group for the twice NAT      |
| <i>group-id</i>         | (Optional) Group ID for the twice NAT           |
| <i>acl-name</i>         | Access-list-name                                |
| <i>pool-name</i>        | Pool name for global addresses                  |

|                                  |   |
|----------------------------------|---|
| <code>add-route</code>           | (Optional) Add a static route for outside local address |
| <code>vrf-name</code>            | (Optional) vrf name                                     |
| <code>globalAddrInterface</code> | interface type and number in module/slot format         |
| <code>overload</code>            | (Optional) Overload an address translation              |

**Command Mode**

- /exec/configure

# ip nat outside source

```
[no] ip nat outside source { static <outsideGlobalIP> <outsideLocalIP> [ vrf <vrf-name> [ match-in-vrf ] ] [
group <group-id> [ dynamic ] ] [ add-route ] | static { tcp | udp } <outsideGlobalIP> <outsideGlobalPort>
<outsideLocalIP> <outsideLocalPort> [ vrf <vrf-name> [ match-in-vrf ] ] [ group <group-id> [ dynamic ] ]
[ add-route ] | list <acl-name> pool <pool-name> [ vrf <vrf-name> [ match-in-vrf ] ] [ group <group-id>
dynamic ] } [ add-route ]
```

## Syntax Description

### Syntax Description

|                          |   |
|--------------------------|---|
| no                       | (Optional) Negate a command or set its defaults |
| ip                       | Configure IP features                           |
| nat                      | NAT configuration commands                      |
| outside                  | Outside address translation                     |
| source                   | Source address translation                      |
| static                   | Specify static global->local mapping            |
| tcp                      | Transmission Control Protocol                   |
| udp                      | User Datagram Protocol                          |
| list                     | Specify access list describing local addresses  |
| pool                     | Name pool of global addresses                   |
| vrf                      | (Optional) Specify vrf                          |
| match-in-vrf             | (Optional) Match incoming vrf                   |
| <i>outsideGlobalIP</i>   | Outside global IP address                       |
| <i>outsideGlobalPort</i> | Outside Global UDP/TCP port                     |
| <i>outsideLocalIP</i>    | Outside local IP address                        |
| <i>outsideLocalPort</i>  | Outside Local UDP/TCP port                      |
| group                    | (Optional) Specify group for the twice NAT      |
| dynamic                  | (Optional) Dynamic twice NAT group              |
| <i>group-id</i>          | (Optional) Group ID for the twice NAT           |
| <i>acl-name</i>          | Access-list-name                                |
| <i>vrf-name</i>          | (Optional) vrf name                             |
| <i>pool-name</i>         | Pool name for global addresses                  |



---

add-route (Optional) Add a static route for outside local address

---

**Command Mode**

- /exec/configure

## ip nat pool netmask

```
ip nat pool <pool-name> { netmask <netmask> | prefix-length <prefix-length> } [ no-alias ]
```

### Syntax Description

#### Syntax Description

|                      |   |
|----------------------|---|
| ip                   | Configure IP features                                   |
| nat                  | NAT configuration commands                              |
| pool                 | Define pool of addresses                                |
| netmask              | Specify the network mask                                |
| prefix-length        | Specify the prefix length                               |
| no-alias             | (Optional) Do not create alias for these pool addresses |
| <i>pool-name</i>     | Pool name   |
| <i>netmask</i>       | Network mask  |
| <i>prefix-length</i> | Prefix length   |

### Command Mode

- /exec/configure

# ip nat pool netmask

```
ip nat pool <pool-name> <start-ip> <end-ip> { netmask <netmask> | prefix-length <prefix-length> } [ no-alias ] | no ip nat pool <pool-name>
```

## Syntax Description

### Syntax Description

|                      |   |
|----------------------|---|
| no                   | Negate a command or set its defaults                    |
| ip                   | Configure IP features                                   |
| nat                  | NAT configuration commands                              |
| pool                 | Define pool of addresses                                |
| netmask              | Specify the network mask                                |
| prefix-length        | Specify the prefix length                               |
| no-alias             | (Optional) Do not create alias for these pool addresses |
| <i>pool-name</i>     | Pool name   |
| <i>start-ip</i>      | Start IP address  |
| <i>end-ip</i>        | End IP address  |
| <i>netmask</i>       | Network mask  |
| <i>prefix-length</i> | Prefix length   |

## Command Mode

- /exec/configure

## ip nat translation

[no] ip nat translation { tcp-timeout | udp-timeout | timeout } <timeout>

### Syntax Description

| Syntax Description |            |                                       |
|--------------------|------------|---------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults  |
| ip                 |            | Configure IP features                 |
| nat                |            | NAT configuration commands            |
| translation        |            | NAT translation entry configuration   |
| tcp-timeout        |            | Specify timeout for NAT TCP flows     |
| udp-timeout        |            | Specify timeout for NAT UDP flows     |
| timeout            |            | Specify timeout for dynamic NAT flows |
| <i>timeout</i>     |            | Timeout in seconds                    |

### Command Mode

- /exec/configure

# ip nat translation max-entries

ip nat translation max-entries [ all-host ] <max> | no ip nat translation max-entries [ all-host ]

## Syntax Description

| Syntax Description |            |   |
|--------------------|------------|---|
| no                 |            | Negate a command or set its defaults                |
| ip                 |            | Configure IP features                               |
| nat                |            | NAT configuration commands                          |
| translation        |            | NAT translation entry configuration                 |
| max-entries        |            | Specify maximum number of NAT dynamic entries       |
| all-host           | (Optional) | Specify maximum number of NAT entries for each host |
| max                |            | Number of entries                                   |

## Command Mode

- /exec/configure

# ip nat translation sampling-timeout

[no] ip nat translation sampling-timeout <timeout>

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults               |  |
| ip                 | Configure IP features   |  |
| nat                | NAT configuration commands                                    |  |
| translation        | NAT translation entry configuration                           |  |
| sampling-timeout   | Specify timeout after which the checking for activity is done |  |
| <i>timeout</i>     | Timeout in seconds (max: 2days)                               |  |

## Command Mode

- /exec/configure

# ip next-hop-self eigrp

[no] { ip | ipv6 } next-hop-self eigrp <eigrp-ptag>

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| ip                 | Configure IP features                           |  |
| ipv6               | Configure IPv6 features                         |  |
| next-hop-self      | Configures IP-EIGRP next-hop-self               |  |
| eigrp              | EIGRP interface configuration commands          |  |
| <i>eigrp-ptag</i>  | Process tag                                     |  |

## Command Mode

- /exec/configure/if-igp

## ip offset-list eigrp

```
[no] { ip | ipv6 } offset-list eigrp <eigrp-ptag> { { route-map <map> } | { prefix-list <list> } } { in | out }
<offset>
```

### Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| ip                 | Configure IP features                           |  |
| ipv6               | Configure IPv6 features                         |  |
| offset-list        | Add or subtract offset from EIGRP metrics       |  |
| eigrp              | EIGRP interface configuration commands          |  |
| <i>eigrp-ptag</i>  | Process tag                                     |  |
| route-map          | Use a route-map for offset-list selection       |  |
| <i>map</i>         | Route-map name                                  |  |
| prefix-list        | Use a prefix-list for offset-list selection     |  |
| <i>list</i>        | Reference to prefix-list name                   |  |
| in                 | Perform offset on incoming updates              |  |
| out                | Perform offset on outgoing updates              |  |
| <i>offset</i>      | Offset  |  |

### Command Mode

- /exec/configure/if-igp



# ip ospf advertise-subnet

[no] ip ospf advertise-subnet

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults                 |
| ip                 |            | Configure IP features                                |
| ospf               |            | OSPF configuration commands                          |
| advertise-subnet   |            | Advertise loopback interface IP subnet in router LSA |

## Command Mode

- /exec/configure/if-loopback

# ip ospf authentication-key

```
{ { ip ospf authentication-key <key> } | { no ip ospf authentication-key [ <key> ] } }
```

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults               |
| ip                 |  | Configure IP features                              |
| ospf               |  | OSPF configuration commands                        |
| authentication-key |  | Configure the authentication key for the interface |
| key                |  | Authentication key                                 |

## Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mpls-tunnel /exec/configure/if-mgmt-config

# ip ospf authentication

[no] ip ospf authentication [ message-digest | null ]

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| ip                 |            | Configure IP features                |
| ospf               |            | OSPF configuration commands          |
| authentication     |            | Authentication on the interface      |
| message-digest     | (Optional) | Use message-digest authentication    |
| null               | (Optional) | Use null(disable) authentication     |

## Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mpls-tunnel /exec/configure/if-mgmt-config

## ip ospf authentication key-chain

```
{ ip ospf authentication key-chain <keychain> } | { no ip ospf authentication key-chain [ <keychain> ] }
```

### Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| ip                 |  | Configure IP features                |
| ospf               |  | OSPF configuration commands          |
| authentication     |  | Authentication on the interface      |
| key-chain          |  | Authentication password key-chain    |
| <i>keychain</i>    |  | Key-chain name                       |

### Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mpls-tunnel /exec/configure/if-mgmt-config

# ip ospf bfd

[no] ip ospf bfd [ disable ]

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ip                 | Configure IP features                           |
| ospf               | OSPF configuration commands                     |
| bfd                | Enable BFD on this interface                    |
| disable            | (Optional) Disable BFD on this interface        |

## Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mgmt-config

## ip ospf cost

```
{ ip ospf cost <cost> } | { no ip ospf cost [ <cost> ] }
```

### Syntax Description

| Syntax Description | Description                          |
|--------------------|--------------------------------------|
| no                 | Negate a command or set its defaults |
| ip                 | Configure IP features                |
| ospf               | OSPF configuration commands          |
| cost               | Cost associated with interface       |
| <i>cost</i>        | Cost value                           |

### Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mpls-tunnel /exec/configure/if-mgmt-config

# ip ospf dead-interval

{ ip ospf dead-interval <interval> } | { no ip ospf dead-interval [ <interval> ] }

## Syntax Description

|                           |                 |                                      |
|---------------------------|-----------------|--------------------------------------|
| <b>Syntax Description</b> | no              | Negate a command or set its defaults |
|                           | ip              | Configure IP features                |
|                           | ospf            | OSPF configuration commands          |
|                           | dead-interval   | Dead interval                        |
|                           | <i>interval</i> | (seconds)                            |

## Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mpls-tunnel /exec/configure/if-mgmt-config

# ip ospf flood-bw-percentage

[no] ip ospf flood-bw-percentage <percentage>

## Syntax Description

| Syntax Description  |            |   |
|---------------------|------------|---|
| no                  | (Optional) | Negate a command or set its defaults      |
| ip                  |            | Configure IP features                     |
| ospf                |            | OSPF configuration commands               |
| flood-bw-percentage |            | Percentage of bandwidth used for flooding |
| <i>percentage</i>   |            | Negate a command or set its defaults      |

## Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mpls-tunnel /exec/configure/if-mgmt-config



# ip ospf hello-interval

{ ip ospf hello-interval <interval> } | { no ip ospf hello-interval [ <interval> ] }

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| ip                 |  | Configure IP features                |
| ospf               |  | OSPF configuration commands          |
| hello-interval     |  | Hello interval                       |
| <i>interval</i>    |  | (seconds)                            |

## Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mpls-tunnel /exec/configure/if-mgmt-config

## ip ospf message-digest-key md5

```
{ { ip ospf message-digest-key <keyid> md5 <key> } | { no ip ospf message-digest-key <keyid> [ md5 <key> ] } }
```

### Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults         |
| ip                 |  | Configure IP features                        |
| ospf               |  | OSPF configuration commands                  |
| message-digest-key |  | Message digest authentication password (key) |
| <i>keyid</i>       |  | Key ID                                       |
| md5                |  | Use MD5 algorithm                            |
| <i>key</i>         |  | The OSPF password (key)                      |

### Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mpls-tunnel /exec/configure/if-mgmt-config

# ip ospf mtu-ignore

[no] ip ospf mtu-ignore

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ip                 | Configure IP features                           |
| ospf               | OSPF configuration commands                     |
| mtu-ignore         | Disable OSPF MTU mismatch detection             |

## Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mpls-tunnel /exec/configure/if-mgmt-config

# ip ospf network broadcast

```
{ ip ospf network { broadcast | point-to-point } } | { no ip ospf network [ { broadcast | point-to-point } ] }
```

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults        |
| ip                 |  | Configure IP features                       |
| ospf               |  | OSPF configuration commands                 |
| network            |  | Network type                                |
| broadcast          |  | Specify OSPF broadcast multi-access network |
| point-to-point     |  | Specify OSPF point-to-point network         |

## Command Mode

- /exec/configure/if-broadcast /exec/configure/if-p2p /exec/configure/if-mgmt-config

# ip ospf network point-to-point

{ ip ospf network point-to-point } | { no ip ospf network [ point-to-point ] }

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| ip                 |  | Configure IP features                |
| ospf               |  | OSPF configuration commands          |
| network            |  | Network type                         |
| point-to-point     |  | Specify OSPF point-to-point network  |

## Command Mode

- /exec/configure/if-loopback

# ip ospf passive-interface

[ default | no ] ip ospf passive-interface

## Syntax Description

| Syntax Description |                   |   |
|--------------------|-------------------|---|
|                    | default           | (Optional) Undo a command                       |
|                    | no                | (Optional) Negate a command or set its defaults |
|                    | ip                | Configure IP features                           |
|                    | ospf              | OSPF configuration commands                     |
|                    | passive-interface | Suppress routing updates on the interface       |

## Command Mode

- /exec/configure/if-broadcast /exec/configure/if-p2p /exec/configure/if-mgmt-config

# ip ospf priority

{ ip ospf priority <prio> } | { no ip ospf priority [ <prio> ] }

## Syntax Description

|                           |             |                                      |
|---------------------------|-------------|--------------------------------------|
| <b>Syntax Description</b> | no          | Negate a command or set its defaults |
|                           | ip          | Configure IP features                |
|                           | ospf        | OSPF configuration commands          |
|                           | priority    | Router priority                      |
|                           | <i>prio</i> | Router priority                      |

## Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mpls-tunnel /exec/configure/if-mgmt-config

# ip ospf retransmit-interval

{ ip ospf retransmit-interval <interval> } | { no ip ospf retransmit-interval [ <interval> ] }

## Syntax Description

| Syntax Description  |  |                                      |
|---------------------|--|--------------------------------------|
| no                  |  | Negate a command or set its defaults |
| ip                  |  | Configure IP features                |
| ospf                |  | OSPF configuration commands          |
| retransmit-interval |  | Packet retransmission interval       |
| <i>interval</i>     |  | (seconds)                            |

## Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mpls-tunnel /exec/configure/if-mgmt-config



# ip ospf shutdown

[no] ip ospf shutdown

## Syntax Description

| Syntax   | Description                                     |
|----------|---|
| no       | (Optional) Negate a command or set its defaults |
| ip       | Configure IP features                           |
| ospf     | OSPF configuration commands                     |
| shutdown | shutdown ospf on this interface                 |

## Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mgmt-config

# ip ospf transmit-delay

```
{ ip ospf transmit-delay <delay> } | { no ip ospf transmit-delay [ <delay> ] }
```

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| ip                 |  | Configure IP features                |
| ospf               |  | OSPF configuration commands          |
| transmit-delay     |  | Packet transmission delay            |
| <i>delay</i>       |  | (seconds)                            |

## Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mpls-tunnel /exec/configure/if-mgmt-config

# ip passive-interface eigrp

[ default | no ] { ip | ipv6 } passive-interface eigrp <eigrp-ptag>

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| default            | (Optional) | Undo a command                           |
| no                 | (Optional) | Negate a command or set its defaults     |
| ip                 |            | Configure IP features                    |
| ipv6               |            | Configure IPv6 features                  |
| passive-interface  |            | Suppress routing updates on an interface |
| eigrp              |            | EIGRP interface configuration commands   |
| <i>eigrp-ptag</i>  |            | Process tag                              |

## Command Mode

- /exec/configure/if-igp

## ip pim anycast-rp

[no] ip pim anycast-rp <anycast-rp> <rp-addr>

### Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults             |
| ip                 |            | Configure IP features                            |
| pim                |            | PIM global configuration commands                |
| anycast-rp         |            | Configure an RP in an Anycast-RP set (using PIM) |
| <i>anycast-rp</i>  |            | Address for the Anycast-RP address               |
| <i>rp-addr</i>     |            | Address of RP in the Anycast-RP set              |

### Command Mode

- /exec/configure /exec/configure/vrf

# ip pim assert-rate-limit

```
{ { ip pim assert-rate-limit <rate> } | { no ip pim assert-rate-limit [ <rate> ] } }
```

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| ip                 |  | Configure IP features                |
| pim                |  | PIM global configuration commands    |
| assert-rate-limit  |  | Rate limit for PIM Asserts           |
| <i>rate</i>        |  | Packets per second                   |

## Command Mode

- /exec/configure /exec/configure/vrf

# ip pim auto-enable

{ { no ip pim auto-enable } | { ip pim auto-enable } }

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| ip                 |  | Configure IP features                |
| pim                |  | PIM global configuration commands    |
| auto-enable        |  | Auto-enable configure on the vrf     |

## Command Mode

- /exec/configure /exec/configure/vrf

# ip pim auto-rp listen

{ ip pim auto-rp { listen | forward } + } | { no ip pim auto-rp [ { listen | forward } + ] }

## Syntax Description

### Syntax Description

|         |  |
|---------|--|
| no      | Negate a command or set its defaults           |
| ip      | Configure IP features                          |
| pim     | PIM global configuration commands              |
| auto-rp | Auto-RP protocol RP-distribution configuration |
| listen  | Listen to Auto-RP messages                     |
| forward | Forward Auto-RP messages                       |

## Command Mode

- /exec/configure /exec/configure/vrf

## ip pim auto-rp mapping-agent-policy

```
{ ip pim auto-rp mapping-agent-policy { <route-map-name> | <rtr_pol_name> } | no ip pim auto-rp
mapping-agent-policy [ <route-map-name> | <rtr_pol_name> ] }
```

### Syntax Description

#### Syntax Description

|                       |   |
|-----------------------|---|
| no                    | Negate a command or set its defaults                |
| ip                    | Configure IP features                               |
| pim                   | PIM global configuration commands                   |
| auto-rp               | Auto-RP protocol RP-distribution configuration      |
| mapping-agent-policy  | Specify policy for filtering Mapping Agent messages |
| <i>route-map-name</i> | A route-map name                                    |
| <i>rtr_pol_name</i>   | An existing routing-rules policy                    |

### Command Mode

- /exec/configure /exec/configure/vrf



# ip pim auto-rp mapping-agent send-rp-discovery

```
{ { ip pim { { auto-rp mapping-agent } | send-rp-discovery } <interface> [ scope <ttl> ] } | { no ip pim { { auto-rp mapping-agent } | send-rp-discovery } [ <interface> ] [ scope <ttl> ] } }
```

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults                         |
| ip                 |  | Configure IP features  |
| pim                |  | PIM global configuration commands                            |
| auto-rp            |  | Auto-RP protocol RP-distribution configuration               |
| send-rp-discovery  |  | Configures router to send Auto-RP Discovery messages         |
| mapping-agent      |  | Configures router as an Auto-RP RP-mapping agent             |
| <i>interface</i>   |  | Use IP address of interface for Auto-RP Announce messages    |
| scope              |  | (Optional) Configure the scope of Auto-RP Discovery messages |
| <i>ttl</i>         |  | (Optional) TTL value for scope                               |

## Command Mode

- /exec/configure /exec/configure/vrf

## ip pim auto-rp rp-candidate-policy

```
{ ip pim auto-rp rp-candidate-policy { <route-map-name> | <rtr_pol_name> } | no ip pim auto-rp
rp-candidate-policy [ <route-map-name> | <rtr_pol_name> ] }
```

### Syntax Description

| Syntax Description |                       |  |
|--------------------|-----------------------|--|
|                    | no                    | Negate a command or set its defaults               |
|                    | ip                    | Configure IP features                              |
|                    | pim                   | PIM global configuration commands                  |
|                    | auto-rp               | Auto-RP protocol RP-distribution configuration     |
|                    | rp-candidate-policy   | Specify policy for filtering RP candidate messages |
|                    | <i>route-map-name</i> | A route-map name                                   |
|                    | <i>rtr_pol_name</i>   | An existing routing-rules policy                   |

### Command Mode

- /exec/configure /exec/configure/vrf

# ip pim auto-rp rp-candidate send-rp-announce group-list route-map prefix-list

```
{ { ip pim { auto-rp rp-candidate | send-rp-announce } { <interface> | <ipaddr> } { group-list <prefix> | route-map <route-map-name> | prefix-list <prefix-list-name> } { [ scope <ttl> ] | [ interval <interval> ] | [ bidir ] } + } | { no ip pim { { auto-rp rp-candidate } | send-rp-announce } [ <interface> | <ipaddr> ] [ group-list <prefix> | route-map <route-map-name> | prefix-list <prefix-list-name> ] { [ scope <ttl> ] | [ interval <interval> ] | [ bidir ] } } }
```

## Syntax Description

### Syntax Description

|                         |   |
|-------------------------|---|
| no                      | Negate a command or set its defaults                        |
| ip                      | Configure IP features                                       |
| pim                     | PIM global configuration commands                           |
| auto-rp                 | Auto-RP protocol RP-distribution configuration              |
| send-rp-announce        | Configures router to send Auto-RP Announce messages         |
| rp-candidate            | Configures router to be an Auto-RP candidate RP             |
| <i>interface</i>        | Use IP address of interface for Auto-RP Announce messages   |
| <i>ipaddr</i>           | IP address of RP for group                                  |
| group-list              | Group range list  |
| <i>prefix</i>           | Prefix of group range                                       |
| route-map               | Group range policy for Auto-RP Candidate RP                 |
| <i>route-map-name</i>   | route-map name  |
| prefix-list             | Prefix List policy for Auto-RP Candidate RP                 |
| <i>prefix-list-name</i> | prefix-list name  |
| scope                   | (Optional) Configure the scope of Auto-RP Announce messages |
| <i>ttl</i>              | (Optional) TTL value for scope                              |
| interval                | (Optional) Auto-RP Announce message transmission interval   |
| <i>interval</i>         | (Optional) Interval in seconds                              |
| bidir                   | (Optional) Group range advertised in PIM bidirectional mode |

## Command Mode

- /exec/configure /exec/configure/vrf

# ip pim bfd-instance

[no] ip pim bfd-instance [ disable ]

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ip                 | Configure IP features                           |
| pim                | PIM interface configuration commands            |
| bfd-instance       | Configures BFD on interface                     |
| disable            | (Optional) Disable BFD on interface             |

## Command Mode

- /exec/configure/if-igp

# ip pim bfd

[no] ip pim bfd

## Syntax Description

### Syntax Description

**no** (Optional) Negate a command or set its defaults

**ip** Configure IP features

**pim** PIM global configuration commands

**bfd** Enable / Disable BFD for all PIM interfaces in the VRF

## Command Mode

- /exec/configure /exec/configure/vrf

## ip pim bidir-rp-limit

[no] ip pim bidir-rp-limit <limit>

### Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults       |  |
| ip                 | Configure IP features                                 |  |
| pim                | PIM global configuration commands                     |  |
| bidir-rp-limit     | Configures maximum Bidir RPs for IPv4 PIM in this VRF |  |
| <i>limit</i>       | Set limit for Bidir RPs permitted in IPv4 PIM         |  |

### Command Mode

- /exec/configure /exec/configure/vrf

# ip pim border

[no] ip pim border

## Syntax Description

|                           |        |   |
|---------------------------|--------|---|
| <b>Syntax Description</b> | no     | (Optional) Negate a command or set its defaults       |
|                           | ip     | Configure IP features                                 |
|                           | pim    | PIM interface configuration commands                  |
|                           | border | Configures interface to be a boundary of a PIM domain |

## Command Mode

- /exec/configure/if-igp

# ip pim bsr-candidate

```
{ { ip pim [ bsr ] bsr-candidate <interface> [ hash-len <hash-len> ] [ priority <priority> ] [ interval <interval> ] } | { no ip pim [ bsr ] bsr-candidate [ <interface> ] [ hash-len <hash-len> ] [ priority <priority> ] [ interval <interval> ] } }
```

## Syntax Description

### Syntax Description

|                  |   |
|------------------|---|
| no               | Negate a command or set its defaults                        |
| ip               | Configure IP features                                       |
| pim              | PIM global configuration commands                           |
| bsr              | (Optional) Bootstrap protocol RP-distribution configuration |
| bsr-candidate    | Configure router as a Bootstrap Router candidate            |
| <i>interface</i> | Use IP address of interface for Bootstrap messages          |
| hash-len         | (Optional) Hash mask length used in Bootstrap messages      |
| <i>hash-len</i>  | (Optional) Hash mask length value                           |
| priority         | (Optional) BSR priority used in Bootstrap messages          |
| <i>priority</i>  | (Optional) BSR priority value                               |
| interval         | (Optional) Bootstrap message transmission interval          |
| <i>interval</i>  | (Optional) Interval in seconds                              |

## Command Mode

- /exec/configure /exec/configure/vrf



# ip pim bsr bsr-policy

```
{ ip pim bsr bsr-policy { <route-map-name> | <rtr_pol_name> } | no ip pim bsr bsr-policy [ <route-map-name> | <rtr_pol_name> ] }
```

## Syntax Description

| Syntax Description    |  |  |
|-----------------------|--|--|
| no                    |  | Negate a command or set its defaults             |
| ip                    |  | Configure IP features                            |
| pim                   |  | PIM global configuration commands                |
| bsr                   |  | Bootstrap protocol RP-distribution configuration |
| bsr-policy            |  | Specify policy for filtering BSR messages        |
| <i>route-map-name</i> |  | A route-map name                                 |
| <i>rtr_pol_name</i>   |  | An existing routing-rules policy                 |

## Command Mode

- /exec/configure /exec/configure/vrf

# ip pim bsr listen

{ ip pim bsr { listen | forward } + } | { no ip pim bsr [ { listen | forward } + ] }

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 | Negate a command or set its defaults             |  |
| ip                 | Configure IP features                            |  |
| pim                | PIM global configuration commands                |  |
| bsr                | Bootstrap protocol RP-distribution configuration |  |
| listen             | Listen to Bootstrap/Candidate-RP messages        |  |
| forward            | Forward Bootstrap/Candidate-RP messages          |  |

## Command Mode

- /exec/configure /exec/configure/vrf

# ip pim bsr rp-candidate-policy

{ ip pim bsr rp-candidate-policy { <route-map-name> | <rtr\_pol\_name> } | no ip pim bsr rp-candidate-policy [ <route-map-name> | <rtr\_pol\_name> ] }

## Syntax Description

| Syntax Description    |  |  |
|-----------------------|--|--|
| no                    |  | Negate a command or set its defaults               |
| ip                    |  | Configure IP features                              |
| pim                   |  | PIM global configuration commands                  |
| bsr                   |  | Bootstrap protocol RP-distribution configuration   |
| rp-candidate-policy   |  | Specify policy for filtering RP candidate messages |
| <i>route-map-name</i> |  | A route-map name                                   |
| <i>rtr_pol_name</i>   |  | An existing routing-rules policy                   |

## Command Mode

- /exec/configure /exec/configure/vrf

# ip pim cpu-punt dr-only

{ { no ip pim cpu-punt dr-only } | { ip pim cpu-punt dr-only } }

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | Negate a command or set its defaults                |  |
| ip                 | Configure IP features                               |  |
| pim                | PIM global configuration commands                   |  |
| cpu-punt           | Disable PIM NON-DR copy-to-cpu on RPF check failure |  |
| dr-only            | Disable PIM NON-DR copy-to-cpu on RPF check failure |  |

## Command Mode

- /exec/configure /exec/configure/vrf

# ip pim df-offer-burst-interval

[no] ip pim df-offer-burst-interval <burst-interval>

## Syntax Description

| Syntax Description      |   |  |
|-------------------------|---|--|
| no                      | (Optional) Negate a command or set its defaults |  |
| ip                      | Configure IP features                           |  |
| pim                     | PIM global configuration commands               |  |
| df-offer-burst-interval | Interval between DF offer bursts                |  |
| <i>burst-interval</i>   | Interval in milliseconds                        |  |

## Command Mode

- /exec/configure /exec/configure/vrf

# ip pim dr-delay

```
{ { ip pim dr-delay <delay> } | { no ip pim dr-delay [ <delay> ] } }
```

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | Negate a command or set its defaults              |  |
| ip                 | Configure IP features                             |  |
| pim                | PIM interface configuration commands              |  |
| dr-delay           | Configures delay for PIM DR election on interface |  |
| <i>delay</i>       | Delay value                                       |  |

## Command Mode

- /exec/configure/if-igp

# ip pim dr-priority

```
{ { ip pim dr-priority <priority> } | { no ip pim dr-priority [ <priority> ] } }
```

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults                 |
| ip                 |  | Configure IP features                                |
| pim                |  | PIM interface configuration commands                 |
| dr-priority        |  | Configures priority for PIM DR election on interface |
| <i>priority</i>    |  | Priority value                                       |

## Command Mode

- /exec/configure/if-igp

## ip pim event-history assert-receive

```
[no] ip pim event-history assert-receive { size { <size_in_text> | <size_in_kbytes> } }
```

### Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| ip                    | Configure IP features                           |  |
| pim                   | PIM global configuration commands               |  |
| event-history         | Configure event-history buffer                  |  |
| assert-receive        | Assert receive events for PIM                   |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

### Command Mode

- /exec/configure



# ip pim event-history bidir

[no] ip pim event-history bidir { size { <size\_in\_text> | <size\_in\_kbytes> } }

## Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| ip                    | Configure IP features                           |  |
| pim                   | PIM global configuration commands               |  |
| event-history         | Configure event-history buffer                  |  |
| bidir                 | Bidir events for PIM                            |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

## Command Mode

- /exec/configure

# ip pim event-history cli

```
[no] ip pim event-history cli { size { <size_in_text> | <size_in_kbytes> } }
```

## Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| ip                    | Configure IP features                           |  |
| pim                   | PIM global configuration commands               |  |
| event-history         | Configure event-history buffer                  |  |
| cli                   | CLI events for PIM                              |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

## Command Mode

- /exec/configure

# ip pim event-history hello

```
[no] ip pim event-history hello { size { <size_in_text> | <size_in_kbytes> } }
```

## Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| ip                    | Configure IP features                           |  |
| pim                   | PIM global configuration commands               |  |
| event-history         | Configure event-history buffer                  |  |
| hello                 | Hello events for PIM                            |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

## Command Mode

- /exec/configure

## ip pim event-history join-prune-summary

```
[no] ip pim event-history join-prune-summary { size { <size_in_text> | <size_in_kbytes> } }
```

### Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| ip                    | Configure IP features                           |  |
| pim                   | PIM global configuration commands               |  |
| event-history         | Configure event-history buffer                  |  |
| join-prune-summary    | JoinPrune-Summary for PIM                       |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

### Command Mode

- /exec/configure

# ip pim event-history join-prune

[no] ip pim event-history join-prune { size { <size\_in\_text> | <size\_in\_kbytes> } }

## Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| ip                    | Configure IP features                           |  |
| pim                   | PIM global configuration commands               |  |
| event-history         | Configure event-history buffer                  |  |
| join-prune            | Join Prune events for PIM                       |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

## Command Mode

- /exec/configure

## ip pim event-history mvpn

```
[no] ip pim event-history mvpn { size { <size_in_text> | <size_in_kbytes> } }
```

### Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| ip                    | Configure IP features                           |  |
| pim                   | Configure PIM event history                     |  |
| event-history         | Configure event-history buffer                  |  |
| mvpn                  | MVPN events for PIM                             |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

### Command Mode

- /exec/configure

## ip pim event-history null-register

[no] ip pim event-history null-register { size { <size\_in\_text> | <size\_in\_kbytes> } }

### Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| ip                    | Configure IP features                           |  |
| pim                   | PIM global configuration commands               |  |
| event-history         | Configure event-history buffer                  |  |
| null-register         | Null register events for PIM                    |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

### Command Mode

- /exec/configure

# ip pim event-history packet

```
[no] ip pim event-history packet { size { <size_in_text> | <size_in_kbytes> } }
```

## Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| ip                    | Configure IP features                           |  |
| pim                   | PIM global configuration commands               |  |
| event-history         | Configure event-history buffer                  |  |
| packet                | Packet events for PIM                           |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

## Command Mode

- /exec/configure



# ip pim event-history pim-internal

[no] ip pim event-history pim-internal { size { <size\_in\_text> | <size\_in\_kbytes> } }

## Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| ip                    | Configure IP features                           |  |
| pim                   | PIM global configuration commands               |  |
| event-history         | Configure event-history buffer                  |  |
| pim-internal          | Internal events for PIM                         |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

## Command Mode

- /exec/configure

## ip pim event-history rp

```
[no] ip pim event-history rp { size { <size_in_text> | <size_in_kbytes> } }
```

### Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| ip                    | Configure IP features                           |  |
| pim                   | PIM global configuration commands               |  |
| event-history         | Configure event-history buffer                  |  |
| rp                    | RP events for PIM                               |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

### Command Mode

- /exec/configure

# ip pim event-history vpc

[no] ip pim event-history vpc { size { <size\_in\_text> | <size\_in\_kbytes> } }

## Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| ip                    | Configure IP features                           |  |
| pim                   | Configure PIM event history                     |  |
| event-history         | Configure event-history buffer                  |  |
| vpc                   | vPC events for PIM                              |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

## Command Mode

- /exec/configure

# ip pim event-history vrf

```
[no] ip pim event-history vrf { size { <size_in_text> | <size_in_kbytes> } }
```

## Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| ip                    | Configure IP features                           |  |
| pim                   | PIM global configuration commands               |  |
| event-history         | Configure event-history buffer                  |  |
| vrf                   | VRF events for PIM                              |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

## Command Mode

- /exec/configure

# ip pim file-debug

[no] ip pim file-debug

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ip                 | Configure IP features                           |
| pim                | PIM global configuration commands               |
| file-debug         | Collect all debugs to a file                    |

## Command Mode

- /exec/configure

# ip pim flush-routes

[no] ip pim flush-routes

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| ip                 |            | Configure IP features                |
| pim                |            | PIM global configuration commands    |
| flush-routes       |            | Remove routes when restarting PIM    |

## Command Mode

- /exec/configure /exec/configure/vrf

# ip pim group-list

[no] ip pim { use-shared-tree-only | spt-threshold infinity } group-list { <route-map-name> | prefix-list <prefix-list-name> }

## Syntax Description

| Syntax Description      |  |                                      |
|-------------------------|--|--------------------------------------|
| no                      | (Optional)                                       | Negate a command or set its defaults |
| ip                      |  | Configure IP features                |
| pim                     |  | PIM global configuration commands    |
| use-shared-tree-only    | Use (*,G) only state, no source state is created |                                      |
| spt-threshold           | Source-tree switching threshold                  |                                      |
| infinity                | Never switch to source-tree                      |                                      |
| group-list              | Specify group ranges through policy              |                                      |
| <i>route-map-name</i>   | route-map name                                   |                                      |
| prefix-list             | Prefix List policy                               |                                      |
| <i>prefix-list-name</i> | prefix-list name                                 |                                      |

## Command Mode

- /exec/configure /exec/configure/vrf

## ip pim hello-authentication ah-md5

```
{ ip pim hello-authentication ah-md5 <auth-key> | no ip pim hello-authentication ah-md5 [ <auth-key> ] }
```

### Syntax Description

| Syntax Description   |  |                                      |
|----------------------|--|--------------------------------------|
| no                   |  | Negate a command or set its defaults |
| ip                   |  | Configure IP features                |
| pim                  |  | PIM interface configuration commands |
| hello-authentication |  | Add AH header option to Hellos       |
| ah-md5               |  | Use MD5 HMAC                         |
| <i>auth-key</i>      |  | MD5 authentication key               |

### Command Mode

- /exec/configure/if-igp



# ip pim hello-interval

{ { ip pim hello-interval <interval> } | { no ip pim hello-interval [ <interval> ] } }

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults        |
| ip                 |  | Configure IP features                       |
| pim                |  | PIM interface configuration commands        |
| hello-interval     |  | Configures the Hello interval for interface |
| <i>interval</i>    |  | Interval in milliseconds                    |

## Command Mode

- /exec/configure/if-igp

# ip pim isolate

[no] ip pim isolate

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ip                 | Configure IP features                           |
| pim                | PIM global configuration commands               |
| isolate            | Isolate this router from PIM perspective        |

## Command Mode

- /exec/configure

# ip pim jp-delay

```
{ { ip pim jp-delay <delay> } | { no ip pim jp-delay [ <delay> ] } }
```

## Syntax Description

|                           |              |                                       |
|---------------------------|--------------|---------------------------------------|
| <b>Syntax Description</b> | no           | Negate a command or set its defaults  |
|                           | ip           | Configure IP features                 |
|                           | pim          | PIM global configuration commands     |
|                           | jp-delay     | Join-Prune message inter-packet delay |
|                           | <i>delay</i> | Delay value in microseconds           |

## Command Mode

- /exec/configure /exec/configure/vrf

# ip pim jp-interval

[no] ip pim jp-interval <interval>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ip                 | Configure IP features                           |
| pim                | PIM interface configuration commands            |
| jp-interval        | Join-Prune interval used between peers          |
| <i>interval</i>    | Interval in seconds                             |

## Command Mode

- /exec/configure/if-igp

# ip pim jp-policy

```
{ ip pim jp-policy { <route-map-name> | prefix-list <prefix-list-name> } [ in | out ] | no ip pim jp-policy { <route-map-name> | prefix-list <prefix-list-name> } [ in | out ] }
```

## Syntax Description

| Syntax Description      |  |  |
|-------------------------|--|--|
| no                      |  | Negate a command or set its defaults             |
| ip                      |  | Configure IP features                            |
| pim                     |  | PIM interface configuration commands             |
| jp-policy               |  | Specify policy for receiving Join-Prune messages |
| <i>route-map-name</i>   |  | route-map name                                   |
| prefix-list             |  | Prefix List policy for static RP                 |
| <i>prefix-list-name</i> |  | prefix-list name                                 |
| in                      |  | (Optional) Inbound                               |
| out                     |  | (Optional) Outbound                              |

## Command Mode

- /exec/configure/if-igp

# ip pim log-neighbor-changes

[no] ip pim log-neighbor-changes

## Syntax Description

| Syntax Description |                      |   |
|--------------------|----------------------|---|
|                    | no                   | (Optional) Negate a command or set its defaults |
|                    | ip                   | Configure IP features                           |
|                    | pim                  | PIM global configuration commands               |
|                    | log-neighbor-changes | Log up/down PIM neighbor transitions            |

## Command Mode

- /exec/configure /exec/configure/vrf

# ip pim mtu

[no] ip pim mtu <size>

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <i>no</i> (Optional) Negate a command or set its defaults |
|                           | <i>ip</i> Configure IP features                           |
|                           | <i>pim</i> PIM global configuration commands              |
|                           | <i>mtu</i> MTU for IP PIM packet                          |
|                           | <i>size</i> MTU   |

## Command Mode

- /exec/configure

# ip pim mtu

[no] ip pim mtu <size>

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | no (Optional) Negate a command or set its defaults |
|                           | ip Configure IP features                           |
|                           | pim PIM global configuration commands              |
|                           | mtu MTU for IP PIM packet                          |
|                           | size MTU   |

## Command Mode

- /exec/configure



# ip pim neighbor-policy prefix-list

```
{ { ip pim neighbor-policy { <route-map-name> | prefix-list <prefix-list-name> } } | { no ip pim neighbor-policy [ <route-map-name> | prefix-list <prefix-list-name> ] } }
```

## Syntax Description

### Syntax Description

|                         |  |
|-------------------------|--|
| no                      | Negate a command or set its defaults                   |
| ip                      | Configure IP features                                  |
| pim                     | PIM interface configuration commands                   |
| neighbor-policy         | Configures a neighbor policy for filtering adjacencies |
| <i>route-map-name</i>   | route-map name   |
| prefix-list             | Prefix List policy for neighbor                        |
| <i>prefix-list-name</i> | prefix-list name                                       |

## Command Mode

- /exec/configure/if-igp

# ip pim non-dr flood

{ { no ip pim non-dr flood } | { ip pim non-dr flood } }

## Syntax Description

|                           |        |                                      |
|---------------------------|--------|--------------------------------------|
| <b>Syntax Description</b> | no     | Negate a command or set its defaults |
|                           | ip     | Configure IP features                |
|                           | pim    | PIM global configuration commands    |
|                           | non-dr | Enable PIM NON-DR flood on vlan      |
|                           | flood  | Enable PIM NON-DR flood on vlan      |

## Command Mode

- /exec/configure /exec/configure/vrf

# ip pim null-reg-delay

{ { ip pim null-reg-delay <delay> } | { no ip pim null-reg-delay [ <delay> ] } }

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| ip                 |  | Configure IP features                |
| pim                |  | PIM global configuration commands    |
| null-reg-delay     |  | Null registers inter-batch delay     |
| delay              |  | Delay value in microseconds          |

## Command Mode

- /exec/configure /exec/configure/vrf

## ip pim null-reg-routes

```
{ { ip pim null-reg-routes <num> } | { no ip pim null-reg-routes [ <num> ] } }
```

### Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| ip                 |  | Configure IP features                |
| pim                |  | PIM global configuration commands    |
| null-reg-routes    |  | Null registers number of routes      |
| <i>num</i>         |  | Numerical value                      |

### Command Mode

- /exec/configure /exec/configure/vrf

# ip pim passive

{ ip pim passive | no ip pim passive }

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | Negate a command or set its defaults   |
| ip                 | Configure IP features                  |
| pim                | PIM interface configuration commands   |
| passive            | Interface in passive mode. No send/rcv |

## Command Mode

- /exec/configure/if-igp

## ip pim pre-build-spt

```
{ { ip pim pre-build-spt [ force ] } | { no ip pim pre-build-spt } }
```

### Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 |            | Negate a command or set its defaults             |
| ip                 |            | Configure IP features                            |
| pim                |            | PIM global configuration commands                |
| pre-build-spt      |            | Pre construct PIM trees for all known (S,G)s     |
| force              | (Optional) | Enable pre-build-spt irrespective of (*,G) state |

### Command Mode

- /exec/configure /exec/configure/vrf

# ip pim register-policy

{ ip pim register-policy { <route-map-name> | prefix-list <prefix-list-name> } | no ip pim register-policy [ <route-map-name> | prefix-list <prefix-list-name> ] }

## Syntax Description

| Syntax Description      |  |  |
|-------------------------|--|--|
| no                      |  | Negate a command or set its defaults           |
| ip                      |  | Configure IP features                          |
| pim                     |  | PIM global configuration commands              |
| register-policy         |  | Specify policy for receiving Register messages |
| <i>route-map-name</i>   |  | A route-map name                               |
| prefix-list             |  | Prefix List policy for Registers               |
| <i>prefix-list-name</i> |  | prefix-list name                               |

## Command Mode

- /exec/configure /exec/configure/vrf

# ip pim register-rate-limit

```
{ { ip pim register-rate-limit <rate> } | { no ip pim register-rate-limit [ <rate> ] } }
```

## Syntax Description

| Syntax Description  |  |                                      |
|---------------------|--|--------------------------------------|
| no                  |  | Negate a command or set its defaults |
| ip                  |  | Configure IP features                |
| pim                 |  | PIM global configuration commands    |
| register-rate-limit |  | Rate limit for PIM data registers    |
| <i>rate</i>         |  | Packets per second                   |

## Command Mode

- /exec/configure /exec/configure/vrf



# ip pim register-replicate

[no] ip pim register-replicate

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 | (Optional) Negate a command or set its defaults                  |  |
| ip                 | Configure IP features  |  |
| pim                | PIM global configuration commands                                |  |
| register-replicate | Enable software replication of decapsulated PIM Register packets |  |

## Command Mode

- /exec/configure

## ip pim register-source

```
{ { ip pim register-source { <src-interface> } } | { no ip pim register-source [ <src-interface> ] } }
```

### Syntax Description

| Syntax Description | no                   | Negate a command or set its defaults                   |
|--------------------|----------------------|--|
|                    | ip                   | Configure IP features                                  |
|                    | pim                  | PIM global configuration commands                      |
|                    | register-source      | Configure source address for Register messages         |
|                    | <i>src-interface</i> | Use IP address of this interface for Register messages |

### Command Mode

- /exec/configure /exec/configure/vrf

# ip pim register-until-stop

[no] ip pim register-until-stop

## Syntax Description

| Syntax Description |                     |  |
|--------------------|---------------------|--|
|                    | no                  | (Optional) Negate a command or set its defaults    |
|                    | ip                  | Configure IP features                              |
|                    | pim                 | PIM global configuration commands                  |
|                    | register-until-stop | Send Data Registers till Register Stop is received |

## Command Mode

- /exec/configure

# ip pim rp-address

```
{ { ip pim rp-address <rp-address> [ group-list <prefix> | route-map <route-map-name> | prefix-list <prefix-list-name> ] [ bidir ] [ override ] } | { no ip pim rp-address <rp-address> [ group-list <prefix> | route-map <route-map-name> | prefix-list <prefix-list-name> ] [ bidir ] [ override ] } }
```

## Syntax Description

### Syntax Description

|                         |  |
|-------------------------|--|
| no                      | Negate a command or set its defaults                           |
| ip                      | Configure IP features  |
| pim                     | PIM global configuration commands                              |
| rp-address              | Configure static RP for group range                            |
| <i>rp-address</i>       | IP address of router which is RP for group range               |
| group-list              | (Optional) Group range for static RP                           |
| <i>prefix</i>           | (Optional) Group range prefix                                  |
| route-map               | (Optional) Route Map policy for static RP                      |
| <i>route-map-name</i>   | (Optional) route-map name                                      |
| prefix-list             | (Optional) Prefix List policy for static RP                    |
| <i>prefix-list-name</i> | (Optional) prefix-list name                                    |
| bidir                   | (Optional) Group range is treated in PIM bidirectional mode    |
| override                | (Optional) RP address will override the dynamically learnt RPs |

## Command Mode

- /exec/configure /exec/configure/vrf

# ip pim rp-candidate group-list route-map prefix-list

```
{ { ip pim [ bsr ] rp-candidate <interface> { group-list <prefix> | route-map <route-map-name> | prefix-list
<prefix-list-name> } [ priority <priority> ] [ interval <interval> ] [ bidir ] } | { no ip pim [ bsr ] rp-candidate
[ <interface> ] [ group-list <prefix> ] [ route-map <route-map-name> ] [ prefix-list <prefix-list-name> ] [
priority <priority> ] [ interval <interval> ] [ bidir ] } }
```

## Syntax Description

### Syntax Description

|                         |   |
|-------------------------|---|
| no                      | Negate a command or set its defaults                        |
| ip                      | Configure IP features                                       |
| pim                     | PIM global configuration commands                           |
| bsr                     | (Optional) Bootstrap protocol RP-distribution configuration |
| rp-candidate            | Configure router as a Rendezvous Point (RP) candidate       |
| <i>interface</i>        | Use IP address of interface for Candidate-RP messages       |
| group-list              | Group range list  |
| <i>prefix</i>           | Prefix of group range                                       |
| route-map               | Group range policy for Candidate RP                         |
| <i>route-map-name</i>   | route-map name  |
| prefix-list             | Prefix List policy for Candidate RP                         |
| <i>prefix-list-name</i> | prefix-list name  |
| priority                | (Optional) RP priority used in Candidate-RP messages        |
| <i>priority</i>         | (Optional) RP priority value                                |
| interval                | (Optional) Bootstrap message transmission interval          |
| <i>interval</i>         | (Optional) Interval in seconds                              |
| bidir                   | (Optional) Group range advertised in PIM bidirectional mode |

## Command Mode

- /exec/configure /exec/configure/vrf

## ip pim sg-expiry-timer infinity

```
{ { ip pim [ sparse ] sg-expiry-timer { <expiry-time> | infinity } [ sg-list <route-map-name> | prefix-list
<prefix-list-name> ] } | { no ip pim [ sparse ] sg-expiry-timer { <expiry-time> | infinity } [ sg-list
<route-map-name> | prefix-list <prefix-list-name> ] } }
```

### Syntax Description

| Syntax Description |                         |   |
|--------------------|-------------------------|---|
|                    | no                      | Negate a command or set its defaults                                  |
|                    | ip                      | Configure IP features   |
|                    | pim                     | PIM global configuration commands                                     |
|                    | sparse                  | (Optional) PIM ASM  |
|                    | sg-expiry-timer         | Adjust expiry time for PIM ASM (S,G) routes                           |
|                    | <i>expiry-time</i>      | Expiry timer interval in seconds                                      |
|                    | infinity                | Never expire (S,G) route due to data inactivity                       |
|                    | sg-list                 | (Optional) Specifies route-map for (S,G)s to apply the expiry timer   |
|                    | <i>route-map-name</i>   | (Optional) Route-map name   |
|                    | prefix-list             | (Optional) Specifies prefix-list for (S,G)s to apply the expiry timer |
|                    | <i>prefix-list-name</i> | (Optional) prefix-list name   |

### Command Mode

- /exec/configure /exec/configure/vrf

# ip pim sparse-mode

ip pim sparse-mode | no ip pim [ sparse-mode ]

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults    |
| ip                 |  | Configure IP features                   |
| pim                |  | PIM interface configuration commands    |
| sparse-mode        |  | Configures sparse-mode PIM on interface |

## Command Mode

- /exec/configure/if-igp

# ip pim ssm

```
{ ip pim ssm { { range { <group> + | none } } | { route-map <route-map-name> } | { prefix-list
<prefix-list-name> } } | no ip pim ssm { { range { <group> + | none } } | { route-map <route-map-name> }
| { prefix-list <prefix-list-name> } } }
```

## Syntax Description

### Syntax Description

|                         |  |
|-------------------------|--|
| no                      | Negate a command or set its defaults         |
| ip                      | Configure IP features                        |
| pim                     | PIM global configuration commands            |
| ssm                     | Source Specific Multicast (SSM) groups       |
| range                   | Configure explicit group ranges              |
| <i>group</i>            | List of group range prefixes                 |
| route-map               | Group range route-map policy for SSM range   |
| <i>route-map-name</i>   | A route-map name                             |
| prefix-list             | Group range prefix-list policy for SSM range |
| <i>prefix-list-name</i> | A prefix-list name                           |
| none                    | Remove all SSM group ranges                  |

## Command Mode

- /exec/configure /exec/configure/vrf



# ip pim state-limit

```
{ { ip pim state-limit <max-states> [ reserved <route-map-name> <max-reserved> ] } | { no ip pim state-limit [ <max-states> [ reserved <route-map-name> <max-reserved> ] ] } }
```

## Syntax Description

| Syntax Description    |  |   |
|-----------------------|--|---|
| no                    |  | Negate a command or set its defaults                                |
| ip                    |  | Configure IP features   |
| pim                   |  | PIM global configuration commands                                   |
| state-limit           |  | Configures State limit  |
| <i>max-states</i>     |  | Maximum (*,G)/(S,G) entries allowed in this VRF                     |
| reserved              |  | (Optional) Configures Reserved limit                                |
| <i>route-map-name</i> |  | (Optional) Route-map name   |
| <i>max-reserved</i>   |  | (Optional) Maximum reserved (*,G)/(S,G) entries allowed in this VRF |

## Command Mode

- /exec/configure /exec/configure/vrf

## ip ping source-interface

[no] ip ping source-interface <ifnum> [ vrf { <vrf-name> | <vrf-known-name> } ]

### Syntax Description

| Syntax Description    |            |  |
|-----------------------|------------|--|
| no                    | (Optional) | Negate a command or set its defaults               |
| ip                    |            | Configure IP features                              |
| ping                  |            | Configure ping client                              |
| source-interface      |            | Configure source interface feature for ping client |
| <i>ifnum</i>          |            | Source interface                                   |
| vrf                   | (Optional) | Configure VRF                                      |
| <i>vrf-name</i>       | (Optional) | VRF name   |
| <i>vrf-known-name</i> | (Optional) | Known VRF name                                     |

### Command Mode

- /exec/configure

# ip policy match router-address

[no] ip policy match router-address

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| ip                 |            | Configure IP features                |
| policy             |            | Configure PBR feature                |
| match              |            | Match values                         |
| router-address     |            | Router's IP address                  |

## Command Mode

- /exec/configure

## ip policy route-map

ip policy route-map <route-map-name> | no ip policy route-map [ <route-map-name> | <route-map-name> ]

### Syntax Description

| Syntax Description    |            |                                      |
|-----------------------|------------|--------------------------------------|
| no                    |            | Negate a command or set its defaults |
| ip                    |            | Configure IP features                |
| policy                |            | Configure PBR feature                |
| route-map             |            | Route-map for PBR                    |
| <i>route-map-name</i> |            | Route-map name                       |
| <i>route-map-name</i> | (Optional) | Route-map name                       |
| <i>route-map-name</i> | (Optional) | Known route-map name                 |

### Command Mode

- /exec/configure/if-igp

# ip port-unreachable

[no] ip port-unreachable

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ip                 | Configure IP features                           |
| port-unreachable   | Enable sending ICMP port-unreachable            |

## Command Mode

- /exec/configure/if-igp /exec/configure/if-mgmt-config

# ip port access-group

[no] ip port access-group <name> <inout>

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| ip                 |            | Configure IP features                |
| port               |            | Port policy                          |
| access-group       |            | Specify access control for packets   |
| <i>name</i>        |            | List name                            |
| <i>inout</i>       |            | Traffic direction                    |

## Command Mode

- /exec/configure/if-set-acl-l2

# ip prefix-list description

{ ip prefix-list <ipv4-pfl-name> description <line> } | { no ip prefix-list <ipv4-pfl-name> description }

## Syntax Description

| Syntax Description   |  |                                      |
|----------------------|--|--------------------------------------|
| no                   |  | Negate a command or set its defaults |
| ip                   |  | Configure IP features                |
| prefix-list          |  | Build a prefix list                  |
| <i>ipv4-pfl-name</i> |  | Name of prefix-list                  |
| <i>ipv4-pfl-name</i> |  | Known prefix-list name               |
| description          |  | Description of the IP prefix list    |
| <i>line</i>          |  | IP prefix-list description string    |

## Command Mode

- /exec/configure

# ip prefix-list permit

```
{ ip prefix-list <ipv4-pfl-name> { permit | deny } <prefix> { [ eq <equal> ] | [ ge <greater> ] [ le <lesser> ]
} [ mask <mask> ] } | { no ip prefix-list { <ipv4-pfl-name> | <ipv4-pfl-name> } [ { permit | deny } <prefix>
{ [ eq <equal> ] | [ ge <greater> ] [ le <lesser> ] } [ mask <mask> ] ] }
```

## Syntax Description

### Syntax Description

|                      |  |
|----------------------|--|
| no                   | Negate a command or set its defaults           |
| ip                   | Configure IP features                          |
| prefix-list          | Build a prefix list                            |
| <i>ipv4-pfl-name</i> | Name of prefix-list                            |
| <i>ipv4-pfl-name</i> | Name of prefix-list                            |
| <i>ipv4-pfl-name</i> | Known prefix-list name                         |
| permit               | Specify routes to forward                      |
| deny                 | Specify routes to reject                       |
| <i>prefix</i>        | IP prefix network/length, e.g., 35.0.0.0/8     |
| eq                   | (Optional) Exact prefix length to be matched   |
| <i>equal</i>         | (Optional) Exact prefix length                 |
| ge                   | (Optional) Minimum prefix length to be matched |
| <i>greater</i>       | (Optional) Minimum prefix length               |
| le                   | (Optional) Maximum prefix length to be matched |
| <i>lesser</i>        | (Optional) Maximum prefix length               |
| mask                 | (Optional) Explicit match mask                 |
| <i>mask</i>          | (Optional) Mask to use with the prefix         |

## Command Mode

- /exec/configure



# ip prefix-list seq permit

```
{ ip prefix-list <ipv4-pfl-name> seq <seq> { permit | deny } <prefix> { [ eq <equal> ] | [ ge <greater> ] [ le <lesser> ] } [ mask <mask> ] } | { no ip prefix-list { <ipv4-pfl-name> | <ipv4-pfl-name> } seq <seq> [ { permit | deny } <prefix> { [ eq <equal> ] | [ ge <greater> ] [ le <lesser> ] } [ mask <mask> ] ] }
```

## Syntax Description

### Syntax Description

|                      |  |
|----------------------|--|
| no                   | Negate a command or set its defaults           |
| ip                   | Configure IP features                          |
| prefix-list          | Build a prefix list                            |
| <i>ipv4-pfl-name</i> | Name of prefix-list                            |
| <i>ipv4-pfl-name</i> | Name of prefix-list                            |
| <i>ipv4-pfl-name</i> | Known prefix-list name                         |
| seq                  | Sequence number of an entry                    |
| <i>seq</i>           | Sequence number                                |
| permit               | Specify routes to forward                      |
| deny                 | Specify routes to reject                       |
| <i>prefix</i>        | IP prefix network/length, e.g., 35.0.0.0/8     |
| eq                   | (Optional) Exact prefix length to be matched   |
| <i>equal</i>         | (Optional) Exact prefix length                 |
| ge                   | (Optional) Minimum prefix length to be matched |
| <i>greater</i>       | (Optional) Minimum prefix length               |
| le                   | (Optional) Maximum prefix length to be matched |
| <i>lesser</i>        | (Optional) Maximum prefix length               |
| mask                 | (Optional) Explicit match mask                 |
| <i>mask</i>          | (Optional) Mask to use with the prefix         |

## Command Mode

- /exec/configure

# ip proxy-arp

{ ip proxy-arp | no ip proxy-arp }

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| ip                 |  | Configure IP features                |
| proxy-arp          |  | Configure proxy ARP                  |

## Command Mode

- /exec/configure/if-igp /exec/configure/if-vlan-common

# ip radius source-interface

[no] ip radius source-interface | ip radius source-interface <interface>

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults               |
| ip                 |  | Configure IP features                              |
| radius             |  | Radius server                                      |
| source-interface   |  | Source interface to be used to reach radius server |
| <i>interface</i>   |  | Interface Description                              |

## Command Mode

- /exec/configure

# ip redirects

ip redirects | no ip redirects

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| ip                 |  | Configure IP features                |
| redirects          |  | Send ICMP Redirect messages          |

## Command Mode

- /exec/configure/if-igp /exec/configure/if-mgmt-config

# ip repopulate internal context array

ip repopulate internal context array

## Syntax Description

| Syntax Description |  |                                    |
|--------------------|--|------------------------------------|
| ip                 |  | Display IP information             |
| repopulate         |  | Repopulate internal data structure |
| internal           |  | Commands for internal use          |
| context            |  | repopulate context related info    |
| array              |  | arrays which stores context ptrs   |

## Command Mode

- /exec

## ip rip authentication key-chain

```
{ ip rip authentication key-chain <keychain> | no ip rip authentication key-chain [ <keychain> ] }
```

### Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| ip                 |  | Configure IP features                |
| rip                |  | RIP configuration commands           |
| authentication     |  | Authentication control               |
| key-chain          |  | Set authentication key-chain         |
| <i>keychain</i>    |  | Name of key-chain                    |

### Command Mode

- /exec/configure/if-igp

# ip rip authentication mode text

{ ip rip authentication mode { text | md5 } | no ip rip authentication mode [ { text | md5 } ] }

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| ip                 |  | Configure IP features                |
| rip                |  | RIP configuration commands           |
| authentication     |  | RIP authentication control           |
| mode               |  | Set authentication mode              |
| text               |  | Clear text authentication            |
| md5                |  | Keyed message digest                 |

## Command Mode

- /exec/configure/if-igp

## ip rip metric

```
{ ipv6 | ip } rip { metric-offset | offset-list } <metric> | no { ipv6 | ip } rip { metric-offset | offset-list } [ <metric> ]
```

### Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| ipv6               |  | Configure IPv6 features              |
| ip                 |  | Configure IP features                |
| rip                |  | RIP configuration commands           |
| metric-offset      |  | RIP metric for interface             |
| offset-list        |  | RIP metric for interface             |
| <i>metric</i>      |  | RIP metric value                     |

### Command Mode

- /exec/configure/if-igp



# ip rip passive-interface

[no] { ipv6 | ip } rip passive-interface

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| ipv6               | Configure IPv6 features                         |  |
| ip                 | Configure IP features                           |  |
| rip                | RIP configuration commands                      |  |
| passive-interface  | RIP passive interface                           |  |

## Command Mode

- /exec/configure/if-igp

# ip rip poison-reverse

[no] { ipv6 | ip } rip poison-reverse

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults       |
| ipv6               |            | Configure IPv6 features                    |
| ip                 |            | Configure IP features                      |
| rip                |            | RIP configuration commands                 |
| poison-reverse     |            | RIP poison reverse (default split-horizon) |

## Command Mode

- /exec/configure/if-igp

# ip rip route-filter route in

[no] { ipv6 | ip } rip route-filter { route-map <map> | prefix-list <list> } { in | out }

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| ipv6               | Configure IPv6 features                         |  |
| ip                 | Configure IP features                           |  |
| rip                | RIP configuration commands                      |  |
| route-filter       | RIP route filtering                             |  |
| route-map          | route-map policy to constrain route filtering   |  |
| prefix-list        | prefix-list policy to constrain route filtering |  |
| <i>map</i>         | Route-map name                                  |  |
| <i>list</i>        | prefix-list name                                |  |
| in                 | inbound   |  |
| out                | outbound  |  |

## Command Mode

- /exec/configure/if-igp

# ip rip summary-address

[no] ip rip summary-address <ip-prefix> | no ipv6 rip summary-address <ipv6-prefix> | ipv6 rip summary-address <ipv6-prefix>

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| ip                 |            | Configure IP features                |
| ipv6               |            | Configure IPv6 features              |
| rip                |            | RIP configuration commands           |
| summary-address    |            | RIP summarization address            |
| <i>ip-prefix</i>   |            | Exact prefix                         |

## Command Mode

- /exec/configure/if-igp

# ip route

```
[no] ip route { <ip-addr> <ip-mask> | <ip-prefix> } { <interface> | { { <pin-interface> <next-hop> } | { <next-hop> | <nh-prefix> } | { <vlan-interface> } } [ vrf { <vrf-name> | <vrf-known-name> } ] [ track <object-num> ] [ name <rt-name> ] [ tag <tag-value> | <pref> ] +
```

## Syntax Description

### Syntax Description

|                       |  |
|-----------------------|--|
| no                    | (Optional) Negate a command or set its defaults        |
| ip                    | Configure IP features                                  |
| route                 | Route information                                      |
| <i>ip-addr</i>        | IP prefix in format i.i.i.i                            |
| <i>ip-mask</i>        | IP network mask in format m.m.m.m                      |
| <i>ip-prefix</i>      | IP prefix and network mask length in format x.x.x.x/m  |
| <i>pin-interface</i>  | Pin interface  |
| <i>next-hop</i>       | IP next-hop address in format i.i.i.i                  |
| <i>nh-prefix</i>      | IP next-hop prefix in format i.i.i.i/m                 |
| <i>interface</i>      | Interface for interface static routes                  |
| <i>vlan-interface</i> | vlan interface   |
| track                 | (Optional) Specify the Object to be Tracked            |
| <i>object-num</i>     | (Optional) Track Object Number                         |
| name                  | (Optional) Specify name of the next hop                |
| <i>rt-name</i>        | (Optional) Name of next hop                            |
| <i>pref</i>           | (Optional) Route preference                            |
| tag                   | (Optional) Supply tag value with static route          |
| <i>tag-value</i>      | (Optional) 32-bit value for tag                        |
| vrf                   | (Optional) VRF for next-hop if different from this vrf |
| <i>vrf-name</i>       | (Optional) VRF name                                    |
| <i>vrf-known-name</i> | (Optional) Known VRF name                              |

## Command Mode

- /exec/configure /exec/configure/config-mgmt /exec/configure/vrf

## ip route static bfd

[no] ip route static bfd <pin-interface> <next-hop>

### Syntax Description

| Syntax Description   |   |  |
|----------------------|---|--|
| no                   | (Optional) Negate a command or set its defaults |  |
| ip                   | Configure IP features                           |  |
| route                | Route information                               |  |
| static               | Static route based configuration                |  |
| bfd                  | Enable bfd detection on static route            |  |
| <i>pin-interface</i> | Interface on which bfd has to be enabled        |  |
| <i>next-hop</i>      | IP next-hop address in format i.i.i.i           |  |

### Command Mode

- /exec/configure /exec/configure/config-mgmt /exec/configure/vrf

# ip router eigrp

[no] { ip | ipv6 } router eigrp <eigrp-ptag>

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| ip                 | Configure IP features                           |  |
| ipv6               | Configure IPv6 features                         |  |
| router             | Enable a routing process                        |  |
| eigrp              | Configure an EIGRP routing process on interface |  |
| <i>eigrp-ptag</i>  | Process tag                                     |  |

## Command Mode

- /exec/configure/if-igp

# ip router isis

[no] ip router isis <tag>

## Syntax Description

|                           |               |  |
|---------------------------|---------------|--|
| <b>Syntax Description</b> | <b>no</b>     | (Optional) Negate a command or set its defaults    |
|                           | <b>ip</b>     | Configure IP features                              |
|                           | <b>router</b> | Enable a routing process                           |
|                           | <b>isis</b>   | Intermediate System to Intermediate System (IS-IS) |
|                           | <b>tag</b>    | Process tag  |

## Command Mode

- /exec/configure/if-igp



# ip router ospf area

[no] ip router ospf <tag> area { <area-id-ip> | <area-id-int> } [ secondaries none ]

## Syntax Description

| Syntax Description |            |                                       |
|--------------------|------------|---------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults  |
| ip                 |            | Configure IP features                 |
| router             |            | Enable a routing process              |
| ospf               |            | OSPF configuration commands           |
| tag                |            | Process tag                           |
| area               |            | Area associated with interface        |
| area-id-ip         |            | OSPF area ID in IP address format     |
| area-id-int        |            | OSPF area ID as a decimal format      |
| secondaries        | (Optional) | Do not include secondary IP addresses |
| none               | (Optional) | Do not include secondary IP addresses |

## Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mpls-tunnel /exec/configure/if-mgmt-config

## ip router ospf multi-area

[no] ip router ospf [ <tag> ] multi-area <area-id-ip>

### Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| ip                 |            | Configure IP features                |
| router             |            | Enable a routing process             |
| ospf               |            | OSPF configuration commands          |
| tag                | (Optional) | Process tag                          |
| multi-area         |            | Multi area associated with interface |
| area-id-ip         |            | Area Id as an integer or ip address  |

### Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mpls-tunnel /exec/configure/if-mgmt-config

# ip router rip

[no] { ipv6 | ip } router rip <tag>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ip                 | Configure IP features                           |
| ipv6               | Configure IPv6 features                         |
| <del>router</del>  | Enable a routing process                        |
| rip                | Routing Information Protocol (RIP)              |
| tag                | Process tag                                     |

## Command Mode

- /exec/configure/if-igp

# ip routing download-on-convergence

[no] ip routing download-on-convergence

## Syntax Description

| Syntax Description |                         |   |
|--------------------|-------------------------|---|
|                    | no                      | (Optional) Negate a command or set its defaults |
|                    | ip                      | IP events                                       |
|                    | routing                 | Enable debugging for routing events             |
|                    | download-on-convergence | Download Routes/RNHs after Table Convergence    |

## Command Mode

- /exec/configure

# ip routing event-history

[no] ip routing event-history { add-route | cli | delete-route | detail | errors | general | ha | loop-detection | modify-route | notifications | recursive-next-hop | summary | ufdm | ufdm-detail | ufdm-summary } size { <size\_in\_text> | <size\_in\_bytes> }

## Syntax Description

| Syntax Description   |   |  |
|----------------------|---|--|
| no                   | (Optional) Negate a command or set its defaults     |  |
| ip                   | Configure IP features                               |  |
| routing              | Routing information                                 |  |
| event-history        | Configure routing event log                         |  |
| add-route            | Add route   |  |
| cli                  | CLI   |  |
| delete-route         | Delete route  |  |
| detail               | Detail  |  |
| errors               | Errors  |  |
| general              | General   |  |
| ha                   | HA  |  |
| loop-detection       | Loop detection                                      |  |
| modify-route         | Modify route  |  |
| notifications        | Notification  |  |
| recursive-next-hop   | Recursive next hop                                  |  |
| summary              | Summary   |  |
| ufdm                 | UFDM  |  |
| ufdm-detail          | UFDM Detail   |  |
| ufdm-summary         | UFDM Summary  |  |
| size                 | Size of buffer                                      |  |
| <i>size_in_text</i>  | Buffer size   |  |
| <i>size_in_bytes</i> | Enter an integer value for the event history buffer |  |

## Command Mode

- /exec/configure

# ip rsvp signalling hello reroute state-timeout refresh interval

[no] ip rsvp signalling hello reroute state-timeout refresh interval <value>

## Syntax Description

| Syntax Description |               |   |
|--------------------|---------------|---|
|                    | ip            | Configure IP features                             |
|                    | rsvp          | RSVP configuration commands                       |
|                    | signalling    | Configure RSVP Signalling information             |
|                    | hello         | RSVP Hello configuration commands                 |
|                    | reroute       | RSVP Reroute commands                             |
|                    | state-timeout | RSVP Hello State timeout configuration            |
|                    | refresh       | Configure RSVP Hello refresh behavior for Reroute |
|                    | interval      | Time between sending Hello Requests for Reroute   |
|                    | <i>value</i>  | Hello interval in msec                            |

## Command Mode

- /exec/configure/if-igp

# ip secondary

ip { <ipaddress> | <ipprefix> } secondary | no ip { <ipaddress> | <ipprefix> } secondary

## Syntax Description

|                           |                  |   |
|---------------------------|------------------|---|
| <b>Syntax Description</b> | no               | Negate a command or set its defaults                |
|                           | ip               | Enable HSRP IPv4 and set the virtual IP address     |
|                           | <i>ipaddress</i> | Virtual IP address                                  |
|                           | <i>ipprefix</i>  | Virtual IP address and mask length                  |
|                           | secondary        | Make this IP address a secondary virtual IP address |

## Command Mode

- /exec/configure/if-eth-any/hsrp\_ipv4

# ip sla

[no] ip sla <index>

## Syntax Description

| Syntax Description |                                   |
|--------------------|-----------------------------------|
|                    | no (Optional)                     |
|                    | ip                                |
|                    | sla Service Level Agreement (SLA) |
|                    | <i>index</i> Entry Number         |

## Command Mode

- /exec/configure



# ip sla group schedule

```
{ no ip sla group schedule <group-id> | ip sla group schedule <group-id> { { add <operation-ids> | delete
<operation-ids> } | { <operation-ids> schedule-period <schedule-period-seconds> { [ ageout <ageout-seconds>
] [ frequency { <frequency-seconds> | range <random-frequency-range> } ] [ life { forever | <life-seconds>
} ] [ start-time { <hhmm> [ { January | February | March | April | May | June | July | August | September |
October | November | December } <day> | <day> [ January | February | March | April | May | June | July |
August | September | October | November | December ] ] | pending | now | after <hhmm> } ] } + } | reschedule
} }
```

## Syntax Description

### Syntax Description

|                                |  |
|--------------------------------|--|
| no                             |  |
| <i>add</i>                     | delete   |
| <i>start-time</i>              | (Optional) January   |
| <i>October</i>                 | (Optional) November  |
| <i>operation-ids</i>           | <schedule-period-seconds>  |
| <i>random-frequency-range</i>  | (Optional) <ageout-seconds>                                      |
| ip                             |  |
| sla                            | Service Level Agreement (SLA)                                    |
| group                          | Group Configuration or Group Scheduling                          |
| schedule                       | Group scheduling   |
| <i>group-id</i>                | Group schedule entry number                                      |
| delete                         | Delete probes from existing group                                |
| reschedule                     | Reschedule the group using previous config                       |
| <i>operation-ids</i>           | Multiple probe ID's to be group scheduled                        |
| schedule-period                | Group schedule period range                                      |
| <i>schedule-period-seconds</i> | seconds  |
| frequency                      | (Optional) Group operation frequency                             |
| range                          | (Optional) Group operation frequency-range for random scheduling |
| <i>frequency-seconds</i>       | (Optional) Specify frequency in seconds                          |
| ageout                         | (Optional) How long to keep this Entry when inactive             |
| <i>ageout-seconds</i>          | (Optional) Ageout Seconds  |

|                     |  |
|---------------------|--|
| life                | (Optional) Length of time to execute in seconds          |
| <i>life-seconds</i> | (Optional) Life seconds (default 3600)                   |
| forever             | (Optional) continue running forever                      |
| after               | (Optional) Start after a certain amount of time from now |
| <i>hhmm</i>         | (Optional) Start time (hh:mm)                            |
| January             | (Optional) Month of year                                 |
| February            | (Optional) Month of year                                 |
| March               | (Optional) Month of year                                 |
| April               | (Optional) Month of year                                 |
| May                 | (Optional) Month of year                                 |
| June                | (Optional) Month of year                                 |
| July                | (Optional) Month of year                                 |
| August              | (Optional) Month of year                                 |
| September           | (Optional) Month of year                                 |
| October             | (Optional) Month of year                                 |
| November            | (Optional) Month of year                                 |
| December            | (Optional) Month of year                                 |
| <i>day</i>          | (Optional) Day of month                                  |
| now                 | (Optional) Start now                                     |
| pending             | (Optional) Start pending                                 |

### Command Mode

- /exec/configure

# ip sla logging traps

[no] ip sla logging traps

## Syntax Description

| Syntax Description |                               |
|--------------------|-------------------------------|
| no                 | (Optional)                    |
| ip                 |                               |
| sla                | Service Level Agreement (SLA) |
| logging            | Enable Syslog                 |
| traps              | Enable syslog traps           |

## Command Mode

- /exec/configure

# ip sla reaction-configuration react

```
[no] ip sla reaction-configuration <react-cfg-entry-num> react <monitored-element> | ip sla
reaction-configuration <react-cfg-entry-num> react <monitored-element> { [ action-type <action> ] [
threshold-value <rising-value> <falling-value> ] [ threshold-type { <neverImmed> | <consecutive> [
<consecutive-occurrences> ] | <xOfy> [ <x-value> <y-value> ] | <average> [ <n-attempts> ] } ] } +
```

## Syntax Description

### Syntax Description

|                                |                                      |
|--------------------------------|--------------------------------------|
| no                             |                                      |
| <i>action-type</i>             | (Optional) threshold-value           |
| <i>falling-value</i>           | (Optional) <neverImmed>              |
| <i>consecutive-occurrences</i> | (Optional) <x-value>                 |
| ip                             |                                      |
| sla                            | Service Level Agreement (SLA)        |
| reaction-configuration         | IP SLAs Reaction-Configuration       |
| <i>react-cfg-entry-num</i>     | Entry Number                         |
| react                          | Reaction variable to be configured   |
| <i>monitored-element</i>       | monitored element                    |
| <i>action</i>                  | (Optional)                           |
| threshold-value                | (Optional) Threshold Value           |
| <i>rising-value</i>            | (Optional) Upper limit for Threshold |
| threshold-type                 | (Optional) Threshold Type            |
| <i>neverImmed</i>              | (Optional)                           |
| <i>consecutive</i>             | (Optional)                           |
| <i>xOfy</i>                    | (Optional)                           |
| <i>average</i>                 | (Optional)                           |
| <i>x-value</i>                 | (Optional) X value                   |
| <i>y-value</i>                 | (Optional) Y value                   |
| <i>n-attempts</i>              | (Optional) N Value                   |

## Command Mode

- /exec/configure

# ip sla reaction-trigger

[no] ip sla reaction-trigger <entry-num> <target-entry>

## Syntax Description

| Syntax Description  |                               |
|---------------------|-------------------------------|
| no                  | (Optional)                    |
| ip                  |                               |
| sla                 | Service Level Agreement (SLA) |
| reaction-trigger    | IP SLAs Trigger Assignment    |
| <i>entry-num</i>    | Entry Number                  |
| <i>target-entry</i> | Target entry Number           |

## Command Mode

- /exec/configure

# ip sla reset

ip sla reset

## Syntax Description

---

### Syntax Description

---

ip

---

sla Service Level Agreement (SLA)

---

reset IP SLAs Reset

---

## Command Mode

- /exec/configure

# ip sla responder

```
[no] ip sla responder [ { tcp-connect [ ipaddress<tcp-ip> ] port <tcp-port> } | { udp-echo [ ipaddress <udp-ip> ] port <udp-port> } ]
```

## Syntax Description

| Syntax Description |                                      |
|--------------------|--------------------------------------|
| <i>tcp-connect</i> | (Optional) ipaddress                 |
| no                 | (Optional)                           |
| ip                 |                                      |
| sla                |                                      |
| responder          | Enable IP SLAs Responder             |
| ipaddress          | (Optional) Permanent address         |
| port               | (Optional) Permanent port            |
| <i>tcp-port</i>    | (Optional) Port Number               |
| udp-echo           | (Optional) Setup udp-echo responder  |
| <i>udp-ip</i>      | (Optional) IP Address or IP HostName |
| <i>udp-port</i>    | (Optional) Port Number               |

## Command Mode

- /exec/configure

# ip sla restart

ip sla restart <index>

## Syntax Description

---

### Syntax Description

---

ip

---

sla Service Level Agreement (SLA)

---

restart Restart An Active Entry

---

*index* Entry Number

---

## Command Mode

- /exec/configure



# ip sla schedule

```
{ no ip sla schedule <index> | ip sla schedule <index> { [ life { <life-seconds> | forever } ] [ start-time { <hhmm> [ { January | February | March | April | May | June | July | August | September | October | November | December } <day> | <day> [ January | February | March | April | May | June | July | August | September | October | November | December ] ] | pending | now | { after <hhmm> } } ] [ ageout <ageout-seconds> ] [ recurring ] } + }
```

## Syntax Description

### Syntax Description

|                     |  |
|---------------------|--|
| no                  |  |
| <i>life</i>         | (Optional) forever                     |
| <i>August</i>       | (Optional) September                   |
| <i>recurring</i>    | (Optional) <life-seconds>              |
| ip                  |  |
| sla                 | Service Level Agreement (SLA)          |
| schedule            | Entry Scheduling                       |
| <i>index</i>        | Entry Number                           |
| <i>life-seconds</i> | (Optional) Life seconds (default 3600) |
| forever             | (Optional) continue running forever    |
| start-time          | (Optional) When to start this entry    |
| <i>hhmm</i>         | (Optional) Start time (hh:mm)          |
| January             | (Optional) Month of year               |
| February            | (Optional) Month of year               |
| March               | (Optional) Month of year               |
| April               | (Optional) Month of year               |
| May                 | (Optional) Month of year               |
| June                | (Optional) Month of year               |
| July                | (Optional) Month of year               |
| August              | (Optional) Month of year               |
| September           | (Optional) Month of year               |
| October             | (Optional) Month of year               |

|                       |  |
|-----------------------|--|
| November              | (Optional) Month of year                                 |
| December              | (Optional) Month of year                                 |
| <i>day</i>            | (Optional) Day of month                                  |
| now                   | (Optional) Start now                                     |
| after                 | (Optional) Start after a certain amount of time from now |
| pending               | (Optional) Start pending                                 |
| ageout                | (Optional) How long to keep this Entry when inactive     |
| <i>ageout-seconds</i> | (Optional) Ageout Seconds                                |

**Command Mode**

- /exec/configure

# ip source-route

[no] ip source-route

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ip                 | Configure IP features                           |
| source-route       | IP source routing option                        |

## Command Mode

- /exec/configure

## ip source binding vlan interface

[no] ip source binding <ipaddr1> <macaddr> vlan <vlanid> interface <interface1>

### Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| ip                 |            | Configure IP features                |
| source             |            | IP source                            |
| binding            |            | Static binding                       |
| <i>ipaddr1</i>     |            | IP address                           |
| <i>macaddr</i>     |            | MAC address                          |
| vlan               |            | VLAN                                 |
| <i>vlanid</i>      |            | VLAN id                              |
| interface          |            | interface                            |
| <i>interface1</i>  |            | interface                            |

### Command Mode

- /exec/configure

## ip source icmp-errors

[no] ip source <interface> icmp-errors

### Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults   |
| ip                 | Configure IP features                             |
| source             | Configure source-address for applications         |
| <i>interface</i>   | Interface to pick source-address from             |
| icmp-errors        | ICMP unreachable/TTL-exceeded/param-prob messages |

### Command Mode

- /exec/configure /exec/configure/vrf

## ip split-horizon eigrp

[no] { ip | ipv6 } split-horizon eigrp <eigrp-ptag>

### Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| ip                 | Configure IP features                           |  |
| ipv6               | Configure IPv6 features                         |  |
| split-horizon      | Configures IP-EIGRP split-horizon on interface  |  |
| eigrp              | EIGRP interface configuration commands          |  |
| <i>eigrp-ptag</i>  | Process tag                                     |  |

### Command Mode

- /exec/configure/if-igp

# ip ssh source-interface

```
[no] ip ssh source-interface <ifnum> [ vrf { <vrf-name> | <vrf-known-name> } ]
```

## Syntax Description

| Syntax Description    |            |  |
|-----------------------|------------|--|
| no                    | (Optional) | Negate a command or set its defaults                 |
| ip                    |            | Configure IP features                                |
| ssh                   |            | Configure ssh  |
| source-interface      |            | Configure source interface feature for domain-lookup |
| <i>ifnum</i>          |            | Source interface                                     |
| vrf                   | (Optional) | Configure VRF  |
| <i>vrf-name</i>       | (Optional) | VRF name   |
| <i>vrf-known-name</i> | (Optional) | Known VRF name                                       |

## Command Mode

- /exec/configure

# ip sticky-arp

{ ip sticky-arp [ ignore ] | no ip sticky-arp ignore }

## Syntax Description

| Syntax Description |            |   |
|--------------------|------------|---|
| no                 |            | Negate a command or set its defaults    |
| ip                 |            | Configure IP features                   |
| sticky-arp         |            | Configure sticky ARP                    |
| ignore             | (Optional) | Ignore previously configured sticky ARP |

## Command Mode

- /exec/configure/if-igp /exec/configure/if-vlan-common



# ip summary-address eigrp ipv6 summary-address eigrp

```
{ [ no ] ip summary-address eigrp <eigrp-ptag> { { <address> <mask> } | { <prefix> } } [ <distance> ] [
leak-map <leak-map> ] | [ no ] ipv6 summary-address eigrp <eigrp-ptag> <ipv6-prefix> [ <distance> ] [
leak-map <leak-map> ] }
```

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults             |
| ip                 |            | Configure IP features                            |
| ipv6               |            | Configure IPv6 features                          |
| summary-address    |            | Configures IP-EIGRP summary address on interface |
| eigrp              |            | EIGRP interface configuration commands           |
| <i>eigrp-ptag</i>  |            | Process tag                                      |
| <i>address</i>     |            | IP address                                       |
| <i>mask</i>        |            | IP network mask                                  |
| <i>prefix</i>      |            | IP prefix in slash format                        |
| <i>distance</i>    | (Optional) | Administrative distance                          |
| leak-map           | (Optional) | Allow dynamic prefixes based on the leak-map     |
| <i>leak-map</i>    | (Optional) | leak-map name                                    |
| <i>eigrp-ptag</i>  |            |  |

## Command Mode

- /exec/configure/if-igp

# ip tacacs source-interface

[no] ip tacacs source-interface | ip tacacs source-interface <interface>

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults               |
| ip                 |  | Configure IP features                              |
| tacacs             |  | Tacacs server                                      |
| source-interface   |  | Source interface to be used to reach tacacs server |
| <i>interface</i>   |  | Interface Description                              |

## Command Mode

- /exec/configure

# ip tcp path-mtu-discovery

{ { ip tcp path-mtu-discovery } | { no ip tcp path-mtu-discovery } }

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| ip                 |  | Configure IP features                |
| tcp                |  | Global TCP parameters                |
| path-mtu-discovery |  | Enable path-MTU discovery on TCP     |

## Command Mode

- /exec/configure /exec/configure/config-mgmt

# ip tcp synwait-time

```
{ { no ip tcp synwait-time } | { ip tcp synwait-time <time> } }
```

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults    |
| ip                 |  | Configure IP features                   |
| tcp                |  | Global TCP parameters                   |
| synwait-time       |  | Set time to wait on new TCP connections |
| <i>time</i>        |  | Wait time                               |

## Command Mode

- /exec/configure /exec/configure/config-mgmt

# ip telnet source-interface

[no] ip telnet source-interface <ifnum> [ vrf { <vrf-name> | <vrf-known-name> } ]

## Syntax Description

| Syntax Description    |            |  |
|-----------------------|------------|--|
| no                    | (Optional) | Negate a command or set its defaults                 |
| ip                    |            | Configure IP features                                |
| telnet                |            | Configure telnet                                     |
| source-interface      |            | Configure source interface feature for domain-lookup |
| <i>ifnum</i>          |            | Source interface                                     |
| vrf                   | (Optional) | Configure VRF  |
| <i>vrf-name</i>       | (Optional) | VRF name   |
| <i>vrf-known-name</i> | (Optional) | Known VRF name                                       |

## Command Mode

- /exec/configure

## ip tftp source-interface

```
[no] ip tftp source-interface <ifnum> [ vrf { <vrf-name> | <vrf-known-name> } ]
```

### Syntax Description

| Syntax Description    |            |  |
|-----------------------|------------|--|
| no                    | (Optional) | Negate a command or set its defaults               |
| ip                    |            | Configure IP features                              |
| tftp                  |            | Configure TFTP client                              |
| source-interface      |            | Configure source interface feature for TFTP client |
| <i>ifnum</i>          |            | Source interface                                   |
| vrf                   | (Optional) | Configure VRF                                      |
| <i>vrf-name</i>       | (Optional) | VRF name   |
| <i>vrf-known-name</i> | (Optional) | Known VRF name                                     |

### Command Mode

- /exec/configure

## ip traceroute source-interface

[no] ip traceroute source-interface <ifnum> [ vrf { <vrf-name> | <vrf-known-name> } ]

### Syntax Description

| Syntax Description    |            |   |
|-----------------------|------------|---|
| no                    | (Optional) | Negate a command or set its defaults              |
| ip                    |            | Configure IP features                             |
| traceroute            |            | Configure traceroute client                       |
| source-interface      |            | Configure source interface feature for traceroute |
| <i>ifnum</i>          |            | Source interface                                  |
| vrf                   | (Optional) | Configure VRF                                     |
| <i>vrf-name</i>       | (Optional) | VRF name  |
| <i>vrf-known-name</i> | (Optional) | Known VRF name                                    |

### Command Mode

- /exec/configure

# ip unnumbered

ip unnumbered <interface> | no ip unnumbered [ <interface> ]

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| ip                 |  | Configure IP features                |
| unnumbered         |  | Configure interface as unnumbered    |
| <i>interface</i>   |  | Interface with IP address            |

## Command Mode

- /exec/configure/ppm-ethernet-switch /exec/configure/if-p2p /exec/configure/if-gre-tunnel /exec/configure/if-any-tunnel /exec/configure/if-port-channel-sub



# ip unreachable

[no] ip unreachable

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults               |
| ip                 | Configure IP features   |
| unreachables       | Enable sending ICMP unreachable (other than port-unreachable) |

## Command Mode

- /exec/configure/if-igp /exec/configure/if-mgmt-config

# ip verify source dhcp-snooping-vlan

[no] ip verify source dhcp-snooping-vlan

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults                         |
| ip                 |            | Configure IP features  |
| verify             |            | Configure Unicast Reverse Path Forwarding or IP Source Guard |
| source             |            | IP Source Guard related commands                             |
| dhcp-snooping-vlan |            | Vlans on which snooping is enabled                           |

## Command Mode

- /exec/configure/if-switching

# ip verify unicast source reachable-via rx

```
[no] ip verify unicast source reachable-via { rx | any [ allow-default ] } [ policy { <policy-name> | <acl_pol_name> } ]
```

## Syntax Description

| Syntax Description  |            |  |
|---------------------|------------|--|
| no                  | (Optional) | Negate a command or set its defaults                           |
| ip                  |            | Configure IP features  |
| verify              |            | Configure Unicast Reverse Path Forwarding or IP Source Guard   |
| unicast             |            | Unicast Reverse Path Forwarding                                |
| source              |            | Validation of source address                                   |
| reachable-via       |            | Specify reachability check to apply to the source address      |
| rx                  |            | Source is reachable via interface on which packet was received |
| any                 |            | Source is reachable via any interface                          |
| allow-default       | (Optional) | Loose Default Route Unicast Reverse Path Forwarding            |
| policy              | (Optional) | Unicast Reverse Path Forwarding fail policy                    |
| <i>policy-name</i>  | (Optional) | An uRPF fail policy name                                       |
| <i>acl_pol_name</i> | (Optional) | An existing access-rules policy                                |

## Command Mode

- /exec/configure/if-igp

# ipv6

```
{ [ <seqno> ] | no } <permitdeny> { ipv6 | <proto> | <ipv6_other_proto> } { <src_any> | { <src_addr>
<src_wild> } | <src_prefix> | { src_key_host <src_host> } | { src_key_addrgrp <src_addrgrp_name> } } {
<dst_any> | { <dst_addr> <dst_wild> } | <dst_prefix> | { dst_key_host <dst_host> } | { dst_key_addrgrp
<dst_addrgrp_name> } } [ { { dscp { <dscp_num> | <dscp_str> } } ] [ { flow-label <flow_num> } ] [ fragments
] [ log ] [ time-range <time_range_name> ] [ packet-length { <plen_op> <plen0> | <plen_range> <plen1>
<plen2> } ] [ { udf { <udf_name> <udf_val> <udf_mask> } + } ] ] + [ vlan <vlanid> | ingress_intf { <intfid>
| <intfname> } | vlan_priority <vlanpriorityid> ] + [ capture session <session-id> ] { [ <actionv6> <actionidv6>
] }
```

## Syntax Description

### Syntax Description

|                         |   |
|-------------------------|---|
| <i>seqno</i>            | (Optional) Sequence number                            |
| no                      | Negate a command or set its defaults                  |
| <i>permitdeny</i>       | Permit/deny   |
| ipv6                    | Any IPV6 protocol                                     |
| <i>proto</i>            | A protocol number                                     |
| <i>ipv6_other_proto</i> | ipv6_other_proto                                      |
| vlan                    | (Optional) Configure match based on vlan              |
| ingress_intf            | (Optional) Configure match based on ingress interface |
| vlan_priority           | (Optional) Configure match based on priority          |
| udf                     | (Optional) User defined field match                   |
| <i>udf_name</i>         | (Optional) UDF name                                   |
| <i>udf_val</i>          | (Optional) UDF value to match                         |
| <i>udf_mask</i>         | (Optional) Mask to apply to UDF value                 |
| <i>vlanid</i>           | (Optional) VLAN number                                |
| <i>intfid</i>           | (Optional) Interface index                            |
| <i>intfname</i>         | (Optional) Interface name                             |
| <i>vlanpriorityid</i>   | (Optional) Vlan Priority                              |
| <i>src_any</i>          | Any   |
| src_key_host            | A single source host                                  |
| src_key_addrgrp         | Source address group                                  |
| <i>src_addrgrp_name</i> | Address group name                                    |

|                         |   |
|-------------------------|---|
| <i>dst_any</i>          | Any   |
| <i>dst_key_host</i>     | A single destination host   |
| <i>dst_key_addrgrp</i>  | Destination address group   |
| <i>dst_addrgrp_name</i> | Address group name  |
| <i>dscp</i>             | (Optional) Match packets with given dscp value  |
| <i>dscp_num</i>         | (Optional) Differentiated services codepoint value  |
| <i>dscp_str</i>         | (Optional) Differentiated services codepoint label  |
| <i>flow-label</i>       | (Optional) Flow label   |
| <i>flow_num</i>         | (Optional) Flow label value   |
| <i>fragments</i>        | (Optional) Check non-initial fragments  |
| <i>log</i>              | (Optional) Log matches against this entry   |
| <i>time-range</i>       | (Optional) Specify a time range   |
| <i>time_range_name</i>  | (Optional) Time range name  |
| <i>packet-length</i>    | (Optional) Match packets based on layer 3 packet length   |
| <i>plen_op</i>          | (Optional) Packet-length operator   |
| <i>plen_range</i>       | (Optional) Packet-length range  |
| <i>plen0</i>            | (Optional) Packet length  |
| <i>plen1</i>            | (Optional) Lower packet length  |
| <i>plen2</i>            | (Optional) Higher packet length   |
| <i>capture</i>          | (Optional) Enable packet capture on this filter for session   |
| <i>session</i>          | (Optional) Session ID <1-48> for this session   |
| <i>session-id</i>       | (Optional) Session ID <1-48> for this session   |
| <i>actionv6</i>         | (Optional) ActionV6   |
| <i>actionidv6</i>       | (Optional) redirect: Ethernet1/1,port-channel1 set-erspan-dscp: <1-63><br>set-erspan-gre-proto: <1-65535> |

### Command Mode

- /exec/configure/ipv6acl

# ipv6 access-class

[no] ipv6 access-class <name> <inout>

## Syntax Description

| Syntax Description |              |   |
|--------------------|--------------|---|
|                    | no           | (Optional) Negate a command or set its defaults |
|                    | ipv6         | Configure IPv6 features                         |
|                    | access-class | Specify IPv6 access control for packets         |
|                    | <i>name</i>  | List name                                       |
|                    | <i>inout</i> | Traffic direction                               |

## Command Mode

- /exec/configure/line

# ipv6 access-list

[no] ipv6 access-list <name> [ client <clienttype> <clientID> ]

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ipv6               | Configure IPv6 features                         |
| access-list        | Configure access list                           |
| <i>name</i>        | List name                                       |
| client             | (Optional) set client type                      |
| <i>clienttype</i>  | (Optional) CLI/ONEP                             |
| <i>clientID</i>    | (Optional) client appID                         |

## Command Mode

- /exec/configure

# ipv6 access-list match-local-traffic

[no] ipv6 access-list match-local-traffic | ipv6 access-list match-local-traffic

## Syntax Description

| Syntax Description  |  |   |
|---------------------|--|---|
| no                  |  | Negate a command or set its defaults                      |
| ipv6                |  | Configure IPv6 features                                   |
| access-list         |  | Configure access list                                     |
| match-local-traffic |  | Enable access-list matching for locally generated traffic |

## Command Mode

- /exec/configure



# ipv6 address

```
[no] ipv6 address [ { autoconfig [ default ] | [ <ipv6-prefix> [ eui64 ] [ route-preference <pref> ] [ tag <tag> ] [ anycast ] } } ] | ipv6 address { autoconfig [ default ] | [ <ipv6-prefix> [ eui64 ] [ route-preference <pref> ] [ tag <tag> ] [ anycast ] }
```

## Syntax Description

### Syntax Description

|                  |   |
|------------------|---|
| no               | Negate a command or set its defaults  |
| ipv6             | Configure IPv6 features   |
| address          | Configure IPv6 address on interface   |
| autoconfig       | (Optional) Configure IPv6 Stateless address autoconfig                                      |
| default          | (Optional) For SLAAC, adds default route and the nh would be fetched from RA source address |
| eui64            | (Optional) Configure Extended Unique Identifier for the low-order 64 bits                   |
| anycast          | (Optional) Configure IPv6 anycast address on interface                                      |
| route-preference | (Optional) U6RIB route preference for local/direct routes                                   |
| <i>pref</i>      | (Optional) Local/direct route preference  |
| tag              | (Optional) U6RIB route tag value for local/direct routes                                    |
| <i>tag</i>       | (Optional) Local/direct tag value   |

## Command Mode

- /exec/configure/if-igp /exec/configure/if-any-tunnel /exec/configure/if-vsan /exec/configure/if-mgmt-config

# ipv6 address dhcp

[no] ipv6 address dhcp

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ipv6               | Configure IPv6 features                         |
| address            | Configure IPv6 address on interface             |
| dhcp               | Configure IPv6 address from a dhcp server       |

## Command Mode

- /exec/configure/if-vlan /exec/configure/if-ethernet /exec/configure/if-mgmt-config /exec/configure/if-ethernet-all /exec/configure/if-sub

# ipv6 address secondary

ipv6 address <ipv6-prefix> [ eui64 ] secondary

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| ipv6               | Configure IPv6 features   |
| address            | Configure IPv6 address on interface                                       |
| eui64              | (Optional) Configure Extended Unique Identifier for the low-order 64 bits |
| secondary          | Configures additional addresses on interface                              |

## Command Mode

- /exec/configure/if-igp /exec/configure/if-mgmt-config /exec/configure/if-gre-tunnel /exec/configure/if-6to4-tunnel /exec/configure/if-vsant

# ipv6 address use-link-local-only

[no] ipv6 address use-link-local-only | ipv6 address use-link-local-only

## Syntax Description

### Syntax Description

|                     |   |
|---------------------|---|
| no                  | Negate a command or set its defaults                            |
| ipv6                | Configure IPv6 features   |
| address             | Configure IPv6 address on interface                             |
| use-link-local-only | Enable IPv6 on interface using only a single link-local address |

## Command Mode

- /exec/configure/if-igp /exec/configure/if-mgmt-config /exec/configure/if-gre-tunnel /exec/configure/if-6to4-tunnel /exec/configure/if-vsant

# ipv6 adjacency-stale-timer

```
{ { ipv6 [ icmp ] adjacency-stale-timer <stale-time> } | { no ipv6 [ icmp ] adjacency-stale-timer [ <stale-time> ] } }
```

## Syntax Description

| Syntax Description    |  |                                      |
|-----------------------|--|--------------------------------------|
| no                    |  | Negate a command or set its defaults |
| ipv6                  |  | Configure IPv6 features              |
| icmp                  |  | (Optional) Configure icmp parameters |
| adjacency-stale-timer |  | When probing for an adjacency begins |
| <i>stale-time</i>     |  | Seconds after adjacency uptime       |

## Command Mode

- /exec/configure

## ipv6 adjacency forcedownload

```
ipv6 adjacency [ vrf { <vrf-name> | <vrf-known-name> } ] { <interface> { * | <ipv6-addr> } | * } forcedownload
```

### Syntax Description

| Syntax Description    |            |   |
|-----------------------|------------|---|
| ipv6                  |            | Configure IPv6 features                     |
| adjacency             |            | Configure Adjmgr                            |
| vrf                   | (Optional) | Display per-VRF information                 |
| <i>vrf-name</i>       | (Optional) | VRF name                                    |
| <i>vrf-known-name</i> | (Optional) | Known VRF name                              |
| <i>interface</i>      |            | Display specific interface adjacencies only |
| *                     |            | for all adjacencies in this context         |
| forcedownload         |            | Create consistency in UFDM                  |

### Command Mode

- /exec/configure

## ipv6 adjacency l2fm-reg

```
[no] ipv6 adjacency l2fm-reg { [ vrf <vrf-known-name> ] | <interface> }
```

### Syntax Description

| Syntax Description    |            |                                      |
|-----------------------|------------|--------------------------------------|
| no                    | (Optional) | Negate a command or set its defaults |
| ipv6                  |            | Configure IPv6 features              |
| adjacency             |            | Configure Adjmgr                     |
| l2fm-reg              |            | Register with l2fm                   |
| vrf                   | (Optional) | vrf name                             |
| <i>vrf-known-name</i> | (Optional) | Known VRF name                       |
| <i>interface</i>      |            | Interface name                       |

### Command Mode

- /exec/configure

# ipv6 adjacency peer-gmac

```
[no] ipv6 adjacency [ vrf { <vrf-name> | <vrf-known-name> } ] { <interface> { * | <ipv6-addr> } | * }
peer-gmac
```

## Syntax Description

### Syntax Description

|                       |   |
|-----------------------|---|
| no                    | (Optional) Negate a command or set its defaults |
| ipv6                  | Configure IPv6 features                         |
| adjacency             | Configure Adjmgr                                |
| vrf                   | (Optional) Display per-VRF information          |
| <i>vrf-name</i>       | (Optional) VRF name                             |
| <i>vrf-known-name</i> | (Optional) Known VRF name                       |
| <i>interface</i>      | Display specific interface adjacencies only     |
| *                     | for all adjacencies in this context             |
| peer-gmac             | Set/clear the peer-gmac bit                     |

## Command Mode

- /exec/configure



# ipv6 adjacency remote-adj

```
[no] ipv6 adjacency [ vrf { <vrf-name> | <vrf-known-name> } ] { <interface> { * | <ipv6-addr> } | * }
remote-adj
```

## Syntax Description

| Syntax Description    |            |   |
|-----------------------|------------|---|
| no                    | (Optional) | Negate a command or set its defaults        |
| ipv6                  |            | Configure IPv6 features                     |
| adjacency             |            | Configure Adjmgr                            |
| vrf                   | (Optional) | Display per-VRF information                 |
| <i>vrf-name</i>       | (Optional) | VRF name                                    |
| <i>vrf-known-name</i> | (Optional) | Known VRF name                              |
| <i>interface</i>      |            | Display specific interface adjacencies only |
| *                     |            | for all adjacencies in this context         |
| remote-adj            |            | Set/clear the remote-adj bit                |

## Command Mode

- /exec/configure

# ipv6 adjacency route distance

{ ipv6 adjacency route distance <pref> } | { no ipv6 adjacency route distance }

## Syntax Description

| Syntax Description |                |                                      |
|--------------------|----------------|--------------------------------------|
| no                 |                | Negate a command or set its defaults |
| ipv6               |                | Configure IPv6 features              |
| adjacency          |                | Configure Adjmgr                     |
| route              | route          |                                      |
| distance           | admin-distance |                                      |
| <i>pref</i>        | preference     |                                      |

## Command Mode

- /exec/configure

# ipv6 amt gateway

[no] ipv6 amt gateway

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ipv6               | Configure IPv6 features                         |
| amt                | AMT global configuration commands               |
| gateway            | Configures IPv6 AMT gateway functionality       |

## Command Mode

- /exec/configure /exec/configure/vrf

# ipv6 amt gateway send-discovery

[no] ipv6 amt gateway send-discovery

## Syntax Description

| Syntax Description |                |  |
|--------------------|----------------|--|
|                    | no             | (Optional) Negate a command or set its defaults    |
|                    | ipv6           | Configure IPv6 features                            |
|                    | amt            | AMT global configuration commands                  |
|                    | gateway        | Configures IPv6 AMT gateway functionality          |
|                    | send-discovery | Trigger a Discovery message to the Anycast address |

## Command Mode

- /exec/configure /exec/configure/vrf

# ipv6 amt relay

[no] ipv6 amt relay

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ipv6               | Configure IPv6 features                         |
| amt                | AMT global configuration commands               |
| relay              | Configures IPv6 AMT relay functionality         |

## Command Mode

- /exec/configure /exec/configure/vrf

# ipv6 cache disable

[no] ipv6 cache disable

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ipv6               | Configure IPv6 features                         |
| cache              | Disable cache                                   |
| disable            | Disable cache                                   |

## Command Mode

- /exec/configure

# ipv6 dad

ipv6 dad { skip-results | force-dad | address <ipv6-prefix> } | no ipv6 dad skip-results

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults       |
| ipv6               |  | Configure IPv6 features                    |
| dad                |  | Duplicate Address Detection                |
| skip-results       |  | Skip DAD results                           |
| force-dad          |  | Does force DAD on given interface          |
| address            |  | Address to verify duplicate address in LAN |

## Command Mode

- /exec/configure/if-igp

# ipv6 destination

```
{ ipv6 { destination | source } <addr> } | { no ipv6 { destination | source } }
```

## Syntax Description

| Syntax Description |  |                                       |
|--------------------|--|---------------------------------------|
| no                 |  | Negate a command or set its defaults  |
| ipv6               |  | specify flow ipv6 address             |
| source             |  | specify flow source ipv6 address      |
| destination        |  | specify flow destination ipv6 address |

## Command Mode

- /exec/configure/configngoamprofileflow



# ipv6 dhcp relay

[no] ipv6 dhcp relay

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ipv6               | Configure IPv6 features                         |
| dhcp               | Configure DHCPv6 relay                          |
| relay              | Configure DHCPv6 relay agent                    |

## Command Mode

- /exec/configure

## ipv6 dhcp relay address

```
[no] ipv6 dhcp relay address [ <ip-addr-val> [ use-vrf <vrf-name> ] [ interface <interface-name> ] ] | no ipv6
dhcp relay address [ <ip-addr-val> [ interface <interface-name> ] [ use-vrf <vrf-name> ] ]
```

### Syntax Description

| Syntax Description    |  |  |
|-----------------------|--|--|
| no                    |  | Negate a command or set its defaults                   |
| ipv6                  |  | Configure IPv6 features                                |
| dhcp                  |  | Configure DHCPv6 relay                                 |
| relay                 |  | Configure DHCPv6 relay agent                           |
| address               |  | Configure DHCPv6 server relay address                  |
| use-vrf               |  | (Optional) server address VRF membership               |
| <i>vrf-name</i>       |  | (Optional) VRF name                                    |
| interface             |  | (Optional) Destination interface for the relay address |
| <i>interface-name</i> |  | (Optional) Destination interface                       |

### Command Mode

- /exec/configure/if-igp

# ipv6 dhcp relay address ipv6 dhcp relay address

ipv6 dhcp relay address <ip-addr-val> [ use-vrf <vrf-name> ] [ interface <interface-name> ] | ipv6 dhcp relay address <ip-addr-val> [ interface <interface-name> ] [ use-vrf <vrf-name> ]

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| ipv6               |  | Configure IPv6 features                                |
| dhcp               |  | Configure DHCPv6 relay                                 |
| relay              |  | Configure DHCPv6 relay agent                           |
| address            |  | Configure DHCPv6 server relay address                  |
| use-vrf            |  | (Optional) server address VRF membership               |
| vrf-name           |  | (Optional) VRF name                                    |
| interface          |  | (Optional) Destination interface for the relay address |
| interface-name     |  | (Optional) Destination interface                       |

## Command Mode

- /exec/configure/if-igp /exec/configure/ppm-ethernet-switch /exec/configure/ppm-port-channel-switch

# ipv6 dhcp relay option type cisco

[no] ipv6 dhcp relay option type cisco

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ipv6               | Configure IPv6 features                         |
| dhcp               | Configure DHCPv6 relay                          |
| relay              | DHCPv6 relay agent parameters                   |
| option             | Relay agent option                              |
| type               | Relay agent option type                         |
| cisco              | Use Cisco proprietary options                   |

## Command Mode

- /exec/configure

# ipv6 dhcp relay option vpn

[no] ipv6 dhcp relay option vpn

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults  |
| ipv6               | Configure IPv6 features                          |
| dhcp               | Configure DHCPv6 relay                           |
| relay              | DHCPv6 relay agent parameters                    |
| option             | Insert DHCPv6 relay information in Relay forward |
| vpn                | Enable DHCPv6 relay support across VRFs          |

## Command Mode

- /exec/configure

# ipv6 dhcp relay source-interface

ipv6 dhcp relay source-interface <interface-name>

## Syntax Description

### Syntax Description

|                       |   |
|-----------------------|---|
| ipv6                  | Configure IPv6 features                     |
| dhcp                  | Configure DHCPv6 relay                      |
| relay                 | Configure DHCPv6 relay agent                |
| source-interface      | Configure source interface for DHCPv6 relay |
| <i>interface-name</i> | Source interface                            |

## Command Mode

- /exec/configure /exec/configure/if-igp

# ipv6 dhcp relay source-interface

[no] ipv6 dhcp relay source-interface

## Syntax Description

| Syntax Description |                  |   |
|--------------------|------------------|---|
|                    | no               | Negate a command or set its defaults        |
|                    | ipv6             | Configure IPv6 features                     |
|                    | dhcp             | Configure DHCPv6 relay                      |
|                    | relay            | Configure DHCPv6 relay agent                |
|                    | source-interface | Configure source interface for DHCPv6 relay |

## Command Mode

- /exec/configure /exec/configure/if-igp

# ipv6 flood unknown ucast

[no] ipv6 flood unknown ucast

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ipv6               | Configure IPv6 features                         |
| flood              | Enable flood unknown ucast                      |
| unknown            | Enable flood unknown ucast                      |
| ucast              | Enable flood unknown ucast                      |

## Command Mode

- /exec/configure



# ipv6 flow monitor input

[no] ipv6 flow monitor <monitorname> { input | output } [ sampler <samplername> ]

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| ipv6               |  | Configure IPv6 features                                   |
| flow               |  | NetFlow related commands                                  |
| monitor            |  | Apply a Flow Monitor to this interface                    |
| <i>monitorname</i> |  | Name of Flow Monitor                                      |
| input              |  | Apply Flow Monitor on input traffic                       |
| output             |  | Apply Flow Monitor on output traffic                      |
| sampler            |  | (Optional) Optional Sampler to apply to this Flow Monitor |
| <i>samplername</i> |  | (Optional) Name of Sampler                                |

## Command Mode

- /exec/configure/if-routing /exec/configure/if-mgmt-ether /exec/configure/if-any-tunnel /exec/configure/if-eth-port-channel /exec/configure/if-eth-port-channel-p2p

## ipv6 flow monitor input

[no] ipv6 flow monitor <monitorname> { input | output } [ sampler <samplername> ]

### Syntax Description

#### Syntax Description

|                    |   |
|--------------------|---|
| ipv6               | Configure IPv6 features                                   |
| flow               | NetFlow related commands                                  |
| monitor            | Apply a Flow Monitor to this interface                    |
| <i>monitorname</i> | Name of Flow Monitor                                      |
| input              | Apply Flow Monitor on input traffic                       |
| output             | Apply Flow Monitor on output traffic                      |
| sampler            | (Optional) Optional Sampler to apply to this Flow Monitor |
| <i>samplername</i> | (Optional) Name of Sampler                                |

### Command Mode

- /exec/configure/vlan

# ipv6 flow monitor input

[no] ipv6 flow monitor <monitorname> input [ sampler <samplername> ]

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| ipv6               |  | Configure IPv6 features                                   |
| flow               |  | NetFlow related commands                                  |
| monitor            |  | Apply a Flow Monitor to this interface                    |
| <i>monitorname</i> |  | Name of Flow Monitor                                      |
| input              |  | Apply Flow Monitor on input traffic                       |
| sampler            |  | (Optional) Optional Sampler to apply to this Flow Monitor |
| <i>samplername</i> |  | (Optional) Name of Sampler                                |

## Command Mode

- /exec/configure/vlan-config

## ipv6 flow monitor input

[no] ipv6 flow monitor <monitorname> { input | output } [ sampler <samplername> ]

### Syntax Description

#### Syntax Description

|                    |   |
|--------------------|---|
| ipv6               | Configure IPv6 features                                   |
| flow               | NetFlow related commands                                  |
| monitor            | Apply a Flow Monitor to this interface                    |
| <i>monitorname</i> | Name of Flow Monitor                                      |
| input              | Apply Flow Monitor on input traffic                       |
| output             | Apply Flow Monitor on output traffic                      |
| sampler            | (Optional) Optional Sampler to apply to this Flow Monitor |
| <i>samplername</i> | (Optional) Name of Sampler                                |

### Command Mode

- /exec/configure/if-vlan-common

# ipv6 flow monitor output

```
ipv6 flow monitor <monitorname> output [ sampler <samplername> ]
```

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| ipv6               |  | Configure IPv6 features                                   |
| flow               |  | NetFlow related commands                                  |
| monitor            |  | Apply a Flow Monitor to this interface                    |
| <i>monitorname</i> |  | Name of Flow Monitor                                      |
| output             |  | Apply Flow Monitor on output traffic                      |
| sampler            |  | (Optional) Optional Sampler to apply to this Flow Monitor |
| <i>samplername</i> |  | (Optional) Name of Sampler                                |

## Command Mode

- /exec/configure/vlan-config

# ipv6 flow monitor output

[no] ipv6 flow monitor <monitorname> output [ sampler <samplername> ]

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| ipv6               |  | Configure IPv6 features                                   |
| flow               |  | NetFlow related commands                                  |
| monitor            |  | Apply a Flow Monitor to this interface                    |
| <i>monitorname</i> |  | Name of Flow Monitor                                      |
| output             |  | Apply Flow Monitor on output traffic                      |
| sampler            |  | (Optional) Optional Sampler to apply to this Flow Monitor |
| <i>samplername</i> |  | (Optional) Name of Sampler                                |

## Command Mode

- /exec/configure/vlan-config

# ipv6 forward

ipv6 forward | no ipv6 forward

## Syntax Description

| Syntax Description |                                      |
|--------------------|--------------------------------------|
| no                 | Negate a command or set its defaults |
| ipv6               | Configure IPv6 features              |
| forward            | Enable ipv6 forwarding on interface  |

## Command Mode

- /exec/configure/if-vlan /exec/configure/if-vlan-range

# ipv6 host

[no] ipv6 host <s0> <ipv6\_0>

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <b>no</b> (Optional) Negate a command or set its defaults |
|                           | <b>pv6</b> Configure IPv6 features                        |
|                           | <b>host</b> Add an entry to the ip hostname table         |
|                           | <b>s0</b> Name of Host                                    |

## Command Mode

- /exec/configure



# ipv6 icmp internal event-history size

[no] ipv6 icmp internal event-history { errors | icmpv6-internal | nd | mld { debugs | events } | ha | sync-event | ipv6-sync-event | vrf | cli } size { <size\_in\_text> | <size\_in\_Kbytes> }

## Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults       |  |
| ipv6                  | Configure IPv6 features                               |  |
| icmp                  | Configure icmp parameters                             |  |
| internal              | Commands for internal use                             |  |
| event-history         | various event logs of ICMPV                           |  |
| errors                | error logs ICMPV6                                     |  |
| icmpv6-internal       | internal debug events of ICMPV6                       |  |
| nd                    | ICMPV6 ND debugs                                      |  |
| mld                   | ICMPV6 MLD Information                                |  |
| events                | ICMPV6 MLD non-periodic events                        |  |
| debugs                | ICMPV6 MLD debug messages                             |  |
| ha                    | ICMPV6 debugs for HA events                           |  |
| sync-event            | ICMPV6 debugs for CFS and MCECM related events        |  |
| ipv6-sync-event       | ICMPV6 debugs for CFS and MCECM related events for I3 |  |
| vrf                   | ICMPV6 VRF related events                             |  |
| cli                   | ICMPV6 CLI related events                             |  |
| size                  | Configure the size of the event-hist buffer           |  |
| <i>size_in_text</i>   | Buffer size   |  |
| <i>size_in_Kbytes</i> | Size of the file in kbytes                            |  |

## Command Mode

- /exec/configure

# ipv6 icmp test rfc-4884

ipv6 icmp test rfc-4884 <pkt\_size>

## Syntax Description

---

**Syntax Description**

---

|      |                         |
|------|-------------------------|
| ipv6 | Configure IPv6 features |
|------|-------------------------|

---

|      |                 |
|------|-----------------|
| icmp | ICMPv6 commands |
|------|-----------------|

---

|      |              |
|------|--------------|
| test | test command |
|------|--------------|

---

|          |     |
|----------|-----|
| rfc-4884 | RFC |
|----------|-----|

---

|                 |               |
|-----------------|---------------|
| <i>pkt_size</i> | ipv6 pkt size |
|-----------------|---------------|

---

## Command Mode

- /exec/configure/if-igp

# ipv6 icmp vip vmac protocol group

[no] ipv6 icmp vip <ipv6-addr> vmac <mac-addr> protocol <prot> group <id>

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| ipv6               | Configure IPv6 features                         |  |
| icmp               | ICMPv6 commands                                 |  |
| vip                | Virtual IPv6 address                            |  |
| vmac               | Virtual MAC address                             |  |
| <i>mac-addr</i>    | Layer-2 MAC address                             |  |
| protocol           | FHRP protocol                                   |  |
| <i>prot</i>        | HSRP VRRP GLBP                                  |  |
| group              | Group id  |  |
| <i>id</i>          | Group id  |  |

## Command Mode

- /exec/configure/if-igp

## ipv6 internal event-history size

```
[no] ipv6 internal event-history { errors | bfd | log | ipc | snmp | ha | sdb } size { <size_in_text> | <size_in_Kbytes> }
```

### Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| ipv6                  | Configure IPv6 features                         |  |
| internal              | Commands for internal use                       |  |
| event-history         | various event logs of IPV6                      |  |
| errors                | error logs of IPV6                              |  |
| log                   | syslog message of IPV6                          |  |
| ipc                   | ipc debug message of IPV6                       |  |
| snmp                  | snmp debug message of IPV6                      |  |
| ha                    | ha debug message of IPV6                        |  |
| sdb                   | sdb debug message of IPV6                       |  |
| bfd                   | bfd debug message for ipv6                      |  |
| size                  | Configure the size of the event-hist buffer     |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_Kbytes</i> | Size of the file in kbytes                      |  |

### Command Mode

- /exec/configure

# ipv6 link-local

[no] ipv6 link-local [ <ipv6-addr> ] | ipv6 link-local <ipv6-addr>

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| ipv6               |  | Configure IPv6 features              |
| link-local         |  | Change format of link-local address  |

## Command Mode

- /exec/configure/if-vlan /exec/configure/if-mgmt-config /exec/configure/if-gre-tunnel /exec/configure/if-6to4-tunnel /exec/configure/if-igp /exec/configure/if-vsan

## ipv6 local policy route-map

ipv6 local policy route-map <route-map-name> | no ipv6 local policy route-map [ <route-map-name> | <route-map-name> ]

### Syntax Description

| Syntax Description    |            |                                      |
|-----------------------|------------|--------------------------------------|
| no                    |            | Negate a command or set its defaults |
| ipv6                  |            | Configure IPv6 features              |
| local                 |            | Configure local PBR feature          |
| policy                |            | Configure PBR feature                |
| route-map             |            | Route-map for PBR                    |
| <i>route-map-name</i> |            | Route-map name                       |
| <i>route-map-name</i> | (Optional) | Route-map name                       |
| <i>route-map-name</i> | (Optional) | Known route-map name                 |

### Command Mode

- /exec/configure /exec/configure/vrf

# ipv6 mld allow-v2-asm

[no] ipv6 [ icmp ] mld allow-v2-asm

## Syntax Description

| Syntax Description |              |   |
|--------------------|--------------|---|
|                    | no           | (Optional) Negate a command or set its defaults |
|                    | ipv6         | Configure IPv6 features                         |
|                    | icmp         | (Optional) ICMPv6 commands                      |
|                    | mld          | Multicast Listener Discovery commands           |
|                    | allow-v2-asm | Accept MLDv2 reports for non SSM groups         |

## Command Mode

- /exec/configure/if-igp

# ipv6 mld group-timeout

```
{ { no ipv6 [ icmp ] mld group-timeout [ <time> ] } | { ipv6 [ icmp ] mld group-timeout <time> } }
```

## Syntax Description

| Syntax Description |  |                                       |
|--------------------|--|---------------------------------------|
| no                 |  | Negate a command or set its defaults  |
| ipv6               |  | Configure IPv6 features               |
| icmp               |  | (Optional) ICMPv6 commands            |
| mld                |  | Multicast Listener Discovery commands |
| group-timeout      |  | Configures group membership timeout   |
| <i>time</i>        |  | (Optional) Time in seconds            |

## Command Mode

- /exec/configure/if-igp



# ipv6 mld immediate-leave

[no] ipv6 [ icmp ] mld immediate-leave

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| ipv6               | Configure IPv6 features                         |  |
| icmp               | (Optional) ICMPv6 commands                      |  |
| mld                | Multicast Listener Discovery commands           |  |
| immediate-leave    | Enable/Disable immediate leave                  |  |

## Command Mode

- /exec/configure/if-igp

## ipv6 mld join-group

```
[no] ipv6 [ icmp ] mld join-group { { <group> [ source <source> ] } } | { route-map <route-map-name> } }
```

### Syntax Description

| Syntax Description    |            |   |
|-----------------------|------------|---|
| no                    | (Optional) | Negate a command or set its defaults              |
| ipv6                  |            | Configure IPv6 features                           |
| icmp                  | (Optional) | ICMPv6 commands                                   |
| mld                   |            | Multicast Listener Discovery commands             |
| join-group            |            | Configures local group membership for router      |
| source                | (Optional) | Configures source address for MLDv2 (S,G) channel |
| route-map             |            | Join group policy                                 |
| <i>route-map-name</i> |            | route-map name                                    |

### Command Mode

- /exec/configure/if-igp

# ipv6 mld last-member-query-count

```
{ { no ipv6 [ icmp ] mld last-member-query-count [ <count> ] } | { ipv6 [ icmp ] mld last-member-query-count <count> } }
```

## Syntax Description

| Syntax Description      |  |  |
|-------------------------|--|--|
| no                      |  | Negate a command or set its defaults             |
| ipv6                    |  | Configure IPv6 features                          |
| icmp                    |  | (Optional) ICMPv6 commands                       |
| mld                     |  | Multicast Listener Discovery commands            |
| last-member-query-count |  | Configures number of group-specific Queries sent |
| <i>count</i>            |  | (Optional) Count value                           |

## Command Mode

- /exec/configure/if-igp

# ipv6 mld last-member-query-response-time

```
{ { no ipv6 [ icmp ] mld last-member-query-response-time [ <interval> ] } | { ipv6 [ icmp ] mld
last-member-query-response-time <interval> } }
```

## Syntax Description

| Syntax Description              |  |  |
|---------------------------------|--|--|
| no                              |  | Negate a command or set its defaults       |
| ipv6                            |  | Configure IPv6 features                    |
| icmp                            |  | (Optional) ICMPv6 commands                 |
| mld                             |  | Multicast Listener Discovery commands      |
| last-member-query-response-time |  | Configures last member query response time |
| <i>interval</i>                 |  | (Optional) Interval in seconds             |

## Command Mode

- /exec/configure/if-igp

# ipv6 mld querier

```
{ { no ipv6 [ icmp ] mld { querier-timeout | query-timeout } [ <time> ] } | { ipv6 [ icmp ] mld { querier-timeout | query-timeout } <time> } }
```

## Syntax Description

| Syntax Description |  |                                       |
|--------------------|--|---------------------------------------|
| no                 |  | Negate a command or set its defaults  |
| ipv6               |  | Configure IPv6 features               |
| icmp               |  | (Optional) ICMPv6 commands            |
| mld                |  | Multicast Listener Discovery commands |
| query-timeout      |  | Configures querier timeout for MLDv1  |
| querier-timeout    |  | Configures querier timeout for MLDv1  |
| <i>time</i>        |  | (Optional) Time in seconds            |

## Command Mode

- /exec/configure/if-igp

# ipv6 mld query-interval

```
{ { no ipv6 [ icmp ] mld query-interval [ <interval> ] } | { ipv6 [ icmp ] mld query-interval <interval> } }
```

## Syntax Description

| Syntax Description | no              | Negate a command or set its defaults           |
|--------------------|-----------------|--|
|                    | ipv6            | Configure IPv6 features                        |
|                    | icmp            | (Optional) ICMPv6 commands                     |
|                    | mld             | Multicast Listener Discovery commands          |
|                    | query-interval  | Configures interval between Query transmission |
|                    | <i>interval</i> | (Optional) Interval in seconds                 |

## Command Mode

- /exec/configure/if-igp

# ipv6 mld query-max-response-time

```
{ { no ipv6 [ icmp ] mld query-max-response-time [ <time> ] } | { ipv6 [ icmp ] mld query-max-response-time <time> } }
```

## Syntax Description

| Syntax Description      |  |                                       |
|-------------------------|--|---------------------------------------|
| no                      |  | Negate a command or set its defaults  |
| ipv6                    |  | Configure IPv6 features               |
| icmp                    |  | (Optional) ICMPv6 commands            |
| mld                     |  | Multicast Listener Discovery commands |
| query-max-response-time |  | Configures MRT for query messages     |
| <i>time</i>             |  | (Optional) Time in seconds            |

## Command Mode

- /exec/configure/if-igp

# ipv6 mld report-link-local-groups

[no] ipv6 [ icmp ] mld report-link-local-groups

## Syntax Description

| Syntax Description       |            |                                       |
|--------------------------|------------|---------------------------------------|
| no                       | (Optional) | Negate a command or set its defaults  |
| ipv6                     |            | Configure IPv6 features               |
| icmp                     | (Optional) | ICMPv6 commands                       |
| mld                      |            | Multicast Listener Discovery commands |
| report-link-local-groups |            | Send Reports for groups in ff02::/16  |

## Command Mode

- /exec/configure/if-igp



# ipv6 mld report

```
{ { ipv6 [ icmp ] mld { report-policy | access-group } <route-map-name> } | { no ipv6 [ icmp ] mld {
report-policy | access-group } [ <route-map-name> ] } }
```

## Syntax Description

| Syntax Description    |  |                                       |
|-----------------------|--|---------------------------------------|
| no                    |  | Negate a command or set its defaults  |
| ipv6                  |  | Configure IPv6 features               |
| icmp                  |  | (Optional) ICMPv6 commands            |
| mld                   |  | Multicast Listener Discovery commands |
| report-policy         |  | ICMPv6 MLD Report Policy              |
| access-group          |  | ICMPv6 MLD access-group               |
| <i>route-map-name</i> |  | Route-map name                        |

## Command Mode

- /exec/configure/if-igp

# ipv6 mld robustness-variable

```
{ { no ipv6 [ icmp ] mld robustness-variable [ <value> ] } | { ipv6 [ icmp ] mld robustness-variable <value> } }
```

## Syntax Description

| Syntax Description  |  |  |
|---------------------|--|--|
| no                  |  | Negate a command or set its defaults       |
| ipv6                |  | Configure IPv6 features                    |
| icmp                |  | (Optional) ICMPv6 commands                 |
| mld                 |  | Multicast Listener Discovery commands      |
| robustness-variable |  | Configures RFC defined Robustness Variable |
| <i>value</i>        |  | (Optional) Count value                     |

## Command Mode

- /exec/configure/if-igp

# ipv6 mld ssm-translate

[no] ipv6 [ icmp ] mld ssm-translate <group> <source>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ipv6               | Configure IPv6 features                         |
| icmp               | (Optional) Configure icmp parameters            |
| mld                | Multicast Listener Discovery commands           |
| ssm-translate      | Translate MLDv1 reports to (S,G) route entries  |

## Command Mode

- /exec/configure /exec/configure/vrf

# ipv6 mld startup-query-count

```
{ { no ipv6 [ icmp ] mld startup-query-count [ <count> ] } | { ipv6 [ icmp ] mld startup-query-count <count> } }
```

## Syntax Description

| Syntax Description  |  |  |
|---------------------|--|--|
| no                  |  | Negate a command or set its defaults         |
| ipv6                |  | Configure IPv6 features                      |
| icmp                |  | (Optional) ICMPv6 commands                   |
| mld                 |  | Multicast Listener Discovery commands        |
| startup-query-count |  | Configures number of queries sent at startup |
| <i>count</i>        |  | (Optional) Count value                       |

## Command Mode

- /exec/configure/if-igp

# ipv6 mld startup-query-interval

```
{ { no ipv6 [ icmp ] mld startup-query-interval [ <interval> ] } | { ipv6 [ icmp ] mld startup-query-interval <interval> } }
```

## Syntax Description

| Syntax Description     |  |                                       |
|------------------------|--|---------------------------------------|
| no                     |  | Negate a command or set its defaults  |
| ipv6                   |  | Configure IPv6 features               |
| icmp                   |  | (Optional) ICMPv6 commands            |
| mld                    |  | Multicast Listener Discovery commands |
| startup-query-interval |  | Configures query interval at startup  |
| <i>interval</i>        |  | (Optional) Interval in seconds        |

## Command Mode

- /exec/configure/if-igp

## ipv6 mld state-limit

```
{ { ipv6 [ icmp ] mld state-limit <max-states> [ reserved <route-map-name> <max-reserved> ] } | { no ipv6 [ icmp ] mld state-limit [ <max-states> [ reserved <route-map-name> <max-reserved> ] ] } }
```

### Syntax Description

#### Syntax Description

|                       |   |
|-----------------------|---|
| no                    | Negate a command or set its defaults                            |
| ipv6                  | Configure IPv6 features   |
| icmp                  | (Optional) ICMPv6 commands                                      |
| mld                   | Multicast Listener Discovery commands                           |
| state-limit           | Configures State limit  |
| <i>max-states</i>     | Maximum states allowed  |
| reserved              | (Optional) Reserve the states using route-map                   |
| <i>route-map-name</i> | (Optional) Route-map name                                       |
| <i>max-reserved</i>   | (Optional) Maximum (*,G)/(S,G) entires allowed on the interface |

### Command Mode

- /exec/configure/if-igp

# ipv6 mld static

```
[no] ipv6 [ icmp ] mld { static-group | static-oif } { { <group> [ source <source> ] } | { route-map
<route-map-name> } }
```

## Syntax Description

| Syntax Description    |  |  |
|-----------------------|--|--|
| no                    | (Optional) Negate a command or set its defaults              |  |
| ipv6                  | Configure IPv6 features                                      |  |
| icmp                  | (Optional) ICMPv6 commands                                   |  |
| mld                   | Multicast Listener Discovery commands                        |  |
| static-group          | Configures static oif for a multicast forwarding entry       |  |
| static-oif            | Configures static oif for a multicast forwarding entry       |  |
| source                | (Optional) Configures source address for MLDv2 (S,G) Channel |  |
| route-map             | Static group policy  |  |
| <i>route-map-name</i> | route-map name   |  |

## Command Mode

- /exec/configure/if-igp

# ipv6 mld version

```
{ { no ipv6 mld version [ <version> ] } | { ipv6 mld version <version> } }
```

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | Negate a command or set its defaults        |  |
| ipv6               | Configure IPv6 features                     |  |
| mld                | Multicast Listener Discovery commands       |  |
| version            | Configures MLD version number for interface |  |
| <i>version</i>     | (Optional) Version number value             |  |

## Command Mode

- /exec/configure/if-igp



# ipv6 mroute

```
[no] ipv6 mroute <ipv6-prefix> { { <next-hop> | <nh-prefix> } | <interface> } [ <pref> ] [ vrf { <vrf-name>
| <vrf-known-name> } ]
```

## Syntax Description

| Syntax Description    |            |   |
|-----------------------|------------|---|
| no                    | (Optional) | Negate a command or set its defaults            |
| ipv6                  |            | Configure IPv6 features                         |
| mroute                |            | Configure multicast RPF static route            |
| <i>interface</i>      |            | Interface for interface static multicast routes |
| <i>pref</i>           | (Optional) | Route preference                                |
| vrf                   | (Optional) | Display per-VRF information                     |
| <i>vrf-name</i>       | (Optional) | VRF name  |
| <i>vrf-known-name</i> | (Optional) | Known VRF name                                  |

## Command Mode

- /exec/configure /exec/configure/vrf

## ipv6 nd cache limit

```
{ { ipv6 nd cache limit <max> } | { no ipv6 nd cache limit } } [ syslog <rate> ]
```

### Syntax Description

| Syntax Description |                                      |
|--------------------|--------------------------------------|
| no                 | Negate a command or set its defaults |
| ipv6               | Configure IPv6 features              |
| nd                 | ICMPv6 Neighbor Discovery commands   |
| cache              | ND cache parameters                  |
| limit              | Limit size of ND adjacencies cache   |
| max                | Max no of ND adjacencies configured  |
| syslog             | (Optional) Syslog messages           |
| rate               | (Optional) Syslogs per second        |

### Command Mode

- /exec/configure

# ipv6 nd dad attempts

ipv6 nd dad attempts <attempt> | no ipv6 nd dad attempts

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults           |
| ipv6               |  | Configure IPv6 features                        |
| nd                 |  | ICMPv6 Neighbor Discovery commands             |
| dad                |  | Duplicate Address Detection                    |
| attempts           |  | Set IPv6 Duplicate Address Detection Transmits |
| <i>attempt</i>     |  | Number of attempts                             |

## Command Mode

- /exec/configure/if-igp

# ipv6 nd dadns-discover

{ ipv6 nd dadns-discover <dadns\_interval> } | { no ipv6 nd dadns-discover }

## Syntax Description

| Syntax Description    |  |                                      |
|-----------------------|--|--------------------------------------|
| no                    |  | Negate a command or set its defaults |
| ipv6                  |  | Configure IPv6 features              |
| nd                    |  | ICMPv6 Neighbor Discovery commands   |
| dadns-discover        |  | Discover host from DADNS             |
| <i>dadns_interval</i> |  | Interval in milliseconds             |

## Command Mode

- /exec/configure/if-igp

# ipv6 nd hop-limit

```
{ { ipv6 nd hop-limit <hop-limit> } | { no ipv6 nd hop-limit [ <hop-limit> ] } }
```

## Syntax Description

|                           |                  |  |
|---------------------------|------------------|--|
| <b>Syntax Description</b> | no               | Negate a command or set its defaults   |
|                           | ipv6             | Configure IPv6 features  |
|                           | nd               | ICMPv6 Neighbor Discovery commands   |
|                           | hop-limit        | Sent in RA messages, tells hosts what hop-limit to use when originating IPv6 packets |
|                           | <i>hop-limit</i> | Hop limit in IPv6 header   |

## Command Mode

- /exec/configure/if-igp

# ipv6 nd limit-incomplete-adjacency

```
{ { ipv6 nd limit-incomplete-adjacency <count> } | { no ipv6 nd limit-incomplete-adjacency [ <count> ] } }
```

## Syntax Description

| Syntax Description         |  |                                      |
|----------------------------|--|--------------------------------------|
| no                         |  | Negate a command or set its defaults |
| ipv6                       |  | Configure IPv6 features              |
| nd                         |  | ICMPv6 Neighbor Discovery commands   |
| limit-incomplete-adjacency |  | Number of incomplete adjacencies     |
| <i>count</i>               |  | Count                                |

## Command Mode

- /exec/configure

# ipv6 nd limit\_threshold\_am\_queue

{ { ipv6 nd limit\_threshold\_am\_queue <count> } | { no ipv6 nd limit\_threshold\_am\_queue [ <count> ] } }

## Syntax Description

| Syntax Description       |  |                                      |
|--------------------------|--|--------------------------------------|
| no                       |  | Negate a command or set its defaults |
| ipv6                     |  | Configure IPv6 features              |
| nd                       |  | ICMPv6 Neighbor Discovery commands   |
| limit_threshold_am_queue |  | Threshold AM queue                   |
| <i>count</i>             |  | Count                                |

## Command Mode

- /exec/configure

## ipv6 nd mac-extract

[no] ipv6 nd mac-extract [ exclude nud-phase ]

### Syntax Description

#### Syntax Description

|             |   |
|-------------|---|
| no          | (Optional) Negate a command or set its defaults       |
| ipv6        | Configure IPv6 features                               |
| nd          | ICMPv6 Neighbor Discovery commands                    |
| mac-extract | Extract next hop MAC address embedded in IPV6 address |
| exclude     | (Optional) Exclude                                    |
| nud-phase   | (Optional) during NUD phase                           |

### Command Mode

- /exec/configure/if-igp



# ipv6 nd managed-config-flag

[no] ipv6 nd managed-config-flag

## Syntax Description

| Syntax Description |                     |   |
|--------------------|---------------------|---|
|                    | no                  | (Optional) Negate a command or set its defaults   |
|                    | ipv6                | Configure IPv6 features   |
|                    | nd                  | ICMPv6 Neighbor Discovery commands  |
|                    | managed-config-flag | Sent in RA messages, tells hosts to use stateful address auto-configuration to obtain address information |

## Command Mode

- /exec/configure/if-igp

# ipv6 nd mtu

```
{ { ipv6 nd mtu <mtu> } | { no ipv6 nd mtu [ <mtu> ] } }
```

## Syntax Description

---

**Syntax Description**

---

no Negate a command or set its defaults

---

ipv6 Configure IPv6 features

---

nd ICMPv6 Neighbor Discovery commands

---

mtu Sent in RA messages, tells hosts what MTU to use on this link

---

*mtu* MTU in bytes

---

## Command Mode

- /exec/configure/if-igp

# ipv6 nd ns-interval

{ { ipv6 nd ns-interval <interval> [ <retry-count> ] } | { no ipv6 nd ns-interval [ <interval> ] } }

## Syntax Description

### Syntax Description

|                    |  |
|--------------------|--|
| no                 | Negate a command or set its defaults                                   |
| ipv6               | Configure IPv6 features  |
| nd                 | ICMPv6 Neighbor Discovery commands                                     |
| ns-interval        | Retransmission interval between sending Neighbor-Solicitation messages |
| <i>interval</i>    | Interval in milliseconds   |
| <i>retry-count</i> | (Optional) NS Retry count  |

## Command Mode

- /exec/configure/if-igp

## ipv6 nd off-list timeout

{ ipv6 nd off-list timeout <time> } | { no ipv6 nd off-list timeout }

### Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 | Negate a command or set its defaults             |  |
| ipv6               | Configure IPv6 features                          |  |
| nd                 | Display Neighbor Discovery interface information |  |
| off-list           | off-list   |  |
| timeout            | Expire time                                      |  |
| <i>time</i>        | Expire time value in seconds                     |  |

### Command Mode

- /exec/configure

# ipv6 nd other-config-flag

[no] ipv6 nd other-config-flag

## Syntax Description

---

### Syntax Description

|                   |   |
|-------------------|---|
| no                | (Optional) Negate a command or set its defaults   |
| ipv6              | Configure IPv6 features   |
| nd                | ICMPv6 Neighbor Discovery commands  |
| other-config-flag | Sent in RA messages, tells hosts to use stateful auto-configuration to obtain non-address related information |

---

## Command Mode

- /exec/configure/if-igp

# ipv6 nd prefix

```
{ { ipv6 nd prefix <prefix> [ { <val-life> | infinite } { <perf-life> | infinite } [ [ no-autoconfig ] [ no-onlink ] [ no-rtr-address ] [ off-link ] ] | no-advertise ] } | { no ipv6 nd prefix <prefix> } }
```

## Syntax Description

### Syntax Description

|                  |   |
|------------------|---|
| no               | Negate a command or set its defaults                        |
| ipv6             | Configure IPv6 features                                     |
| nd               | ICMPv6 Neighbor Discovery commands                          |
| prefix           | IPv6 Prefix to advertise in RA                              |
| <i>val-life</i>  | (Optional) Valid Lifetime (secs)                            |
| infinite         | (Optional) Infinite Valid Lifetime                          |
| no-advertise     | (Optional) Do not advertise prefix                          |
| <i>perf-life</i> | (Optional) Preferred Lifetime (secs)                        |
| infinite         | (Optional) Infinite Preferred Lifetime                      |
| no-autoconfig    | (Optional) Do not use prefix for autoconfiguration          |
| no-onlink        | (Optional) Do not use prefix for onlink determination       |
| no-rtr-address   | (Optional) Do not send full router address in prefix advert |
| off-link         | (Optional) Prefix is offlink                                |

## Command Mode

- /exec/configure/if-igp

# ipv6 nd prefix default

```
{ { ipv6 nd prefix default [ { <val-life> | infinite } { <perf-life> | infinite } [ [ no-autoconfig ] [ no-onlink ] [ no-rtr-address ] [ off-link ] ] | no-advertise ] } | { no ipv6 nd prefix default } }
```

## Syntax Description

### Syntax Description

|                  |   |
|------------------|---|
| no               | Negate a command or set its defaults                        |
| ipv6             | Configure IPv6 features                                     |
| nd               | ICMPv6 Neighbor Discovery commands                          |
| prefix           | IPv6 Prefix to advertise in RA                              |
| default          | Specify prefix default parameters                           |
| <i>val-life</i>  | (Optional) Valid Lifetime (secs)                            |
| infinite         | (Optional) Infinite Valid Lifetime                          |
| no-advertise     | (Optional) Do not advertise prefix                          |
| <i>perf-life</i> | (Optional) Preferred Lifetime (secs)                        |
| infinite         | (Optional) Infinite Preferred Lifetime                      |
| no-autoconfig    | (Optional) Do not use prefix for autoconfiguration          |
| no-onlink        | (Optional) Do not use prefix for onlink determination       |
| no-rtr-address   | (Optional) Do not send full router address in prefix advert |
| off-link         | (Optional) Prefix is offlink                                |

## Command Mode

- /exec/configure/if-igp

# ipv6 nd process adjacency statistics

[no] ipv6 nd process adjacency statistics

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ipv6               | Configure IPv6 features                         |
| nd                 | ICMPv6 Neighbor Discovery commands              |
| process            | Process Adjacency Statistics                    |
| adjacency          | Adjacency                                       |
| statistics         | Statistics                                      |

## Command Mode

- /exec/configure



# ipv6 nd ra-interval

ipv6 nd ra-interval <interval> [ min <min-interval> ] | no ipv6 nd ra-interval [ <interval> ] [ min <min-interval> ]

## Syntax Description

| Syntax Description  |  |   |
|---------------------|--|---|
| no                  |  | Negate a command or set its defaults                    |
| ipv6                |  | Configure IPv6 features                                 |
| nd                  |  | ICMPv6 Neighbor Discovery commands                      |
| ra-interval         |  | Interval between sending Router-Advertisement messages  |
| <i>interval</i>     |  | Interval in seconds                                     |
| min                 |  | (Optional) Minimum interval between sending RA messages |
| <i>min-interval</i> |  | (Optional) Interval in seconds                          |

## Command Mode

- /exec/configure/if-igp

# ipv6 nd ra-lifetime

```
{ { ipv6 nd ra-lifetime <lifetime> } | { no ipv6 nd ra-lifetime [ <lifetime> ] } }
```

## Syntax Description

### Syntax Description

|                 |  |
|-----------------|--|
| no              | Negate a command or set its defaults   |
| ipv6            | Configure IPv6 features  |
| nd              | ICMPv6 Neighbor Discovery commands   |
| ra-lifetime     | Sent in RA messages, Router Lifetime of a default router, 0 means this router will not be the default router |
| <i>lifetime</i> | Lifetime in seconds  |

## Command Mode

- /exec/configure/if-igp

# ipv6 nd ra dns search-list sequence

[no] ipv6 nd ra dns search-list <dnssl> [ { <dnssl\_life> | infinite } ] sequence <seqno>

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults                   |  |
| ipv6               | Configure IPv6 features   |  |
| nd                 | ICMPv6 Neighbor Discovery commands                                |  |
| ra                 | Router Advertisement  |  |
| dns                | Domain Name System  |  |
| search-list        | DNS Search List   |  |
| <i>dnssl</i>       | Configure DNS Search List to advertise in RA                      |  |
| <i>dnssl_life</i>  | (Optional) Configure IPv6 DNS Search list life time               |  |
| infinite           | (Optional) Configure IPv6 DNS Search list life time with infinite |  |
| sequence           | Sequence of Search List   |  |
| <i>seqno</i>       | Sequence number   |  |

## Command Mode

- /exec/configure/if-igp

# ipv6 nd ra dns search-list suppress

[no] ipv6 nd ra dns search-list suppress

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 | (Optional) Negate a command or set its defaults        |  |
| ipv6               | Configure IPv6 features                                |  |
| nd                 | ICMPv6 Neighbor Discovery commands                     |  |
| ra                 | Router Advertisement                                   |  |
| dns                | Domain Name System                                     |  |
| search-list        | DNS Search List  |  |
| suppress           | Disable sending DNSSL in Router-Advertisement messages |  |

## Command Mode

- /exec/configure/if-igp

# ipv6 nd ra dns server sequence

[no] ipv6 nd ra dns server <ipv6\_addr> [ { <rdnss\_life> | infinite } ] sequence <seqno>

## Syntax Description

### Syntax Description

|                   |  |
|-------------------|--|
| no                | (Optional) Negate a command or set its defaults              |
| ipv6              | Configure IPv6 features                                      |
| nd                | ICMPv6 Neighbor Discovery commands                           |
| ra                | Router Advertisement   |
| dns               | Domain Name System   |
| server            | Domain Name System Server                                    |
| <i>rdnss_life</i> | (Optional) Configure IPv6 DNS Server life time               |
| infinite          | (Optional) Configure IPv6 DNS Server life time with infinite |
| sequence          | Sequence of Server   |
| <i>seqno</i>      | Sequence number  |

## Command Mode

- /exec/configure/if-igp

# ipv6 nd ra dns server suppress

[no] ipv6 nd ra dns server suppress

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults        |
| ipv6               | Configure IPv6 features                                |
| nd                 | ICMPv6 Neighbor Discovery commands                     |
| ra                 | Router Advertisement                                   |
| dns                | Domain Name System                                     |
| server             | Domain Name System Server                              |
| suppress           | Disable sending RDNSS in Router-Advertisement messages |

## Command Mode

- /exec/configure/if-igp

# ipv6 nd ra route suppress

[no] ipv6 nd ra route suppress

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults          |
| ipv6               | Configure IPv6 features                                  |
| nd                 | ICMPv6 Neighbor Discovery commands                       |
| ra                 | Router Advertisement                                     |
| route              | Route Information Option in RFC 4191                     |
| suppress           | Disable sending Route Information Options in RA messages |

## Command Mode

- /exec/configure/if-igp

# ipv6 nd raguard

[no] ipv6 nd raguard

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ipv6               | Configure IPv6 features                         |
| nd                 | Configure IPv6 ND                               |
| raguard            | Configure RA guard                              |

## Command Mode

- /exec/configure/if-switching



# ipv6 nd reachable-time

{ { ipv6 nd reachable-time <time> } | { no ipv6 nd reachable-time [ <time> ] } }

## Syntax Description

### Syntax Description

|                |  |
|----------------|--|
| no             | Negate a command or set its defaults   |
| ipv6           | Configure IPv6 features  |
| nd             | ICMPv6 Neighbor Discovery commands   |
| reachable-time | Sent in RA messages, advertised time when a node considers a neighbor up after receiving a reachability confirmation |
| <i>time</i>    | Time in milliseconds   |

## Command Mode

- /exec/configure/if-igp

## ipv6 nd retrans-timer

```
{ { ipv6 nd retrans-timer <time> } | { no ipv6 nd retrans-timer [ <time> ] } }
```

### Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults                     |
| ipv6               |  | Configure IPv6 features                                  |
| nd                 |  | ICMPv6 Neighbor Discovery commands                       |
| retrans-timer      |  | Sent in RA messages, advertised time between NS messages |
| <i>time</i>        |  | Time in milliseconds                                     |

### Command Mode

- /exec/configure/if-igp

# ipv6 nd route route-preference High Low Medium infinite

```
{ { ipv6 nd route <prefix> route-preference { High | Low | Medium } { <lifetime> | infinite } [ {
verify-reachability } ] } | { no ipv6 nd route { <prefix> | all } route-preference } }
```

## Syntax Description

| Syntax Description  |            |   |
|---------------------|------------|---|
| no                  |            | Negate a command or set its defaults      |
| ipv6                |            | Configure IPv6 features                   |
| nd                  |            | ICMPv6 Neighbor Discovery commands        |
| route               |            | Route Information Option in RFC 4191      |
| route-preference    |            | Route preference value                    |
| High                |            | High router preference                    |
| Low                 |            | Low router preference                     |
| Medium              |            | Medium router preference                  |
| <i>lifetime</i>     |            | Lifetime (secs)                           |
| infinite            |            | Infinite lifetime of prefix               |
| verify-reachability | (Optional) | Verify if route is present in Route table |
| all                 |            | Remove all the Router Preference prefixes |

## Command Mode

- /exec/configure/if-igp

# ipv6 nd router-preference High Low Medium

{ { ipv6 nd router-preference { High | Low | Medium } } | { no ipv6 nd router-preference } }

## Syntax Description

| Syntax Description | no                | Negate a command or set its defaults |
|--------------------|-------------------|--------------------------------------|
|                    | ipv6              | Configure IPv6 features              |
|                    | nd                | ICMPv6 Neighbor Discovery commands   |
|                    | router-preference | Set default router preference value  |
|                    | High              | High default router preference       |
|                    | Low               | Low default router preference        |
|                    | Medium            | Medium default router preference     |

## Command Mode

- /exec/configure/if-igp

# ipv6 nd solicit-na accept

```
{ ipv6 nd solicit-na { { accept [ no-probe | <interval> ] | [ no-accept ] } | { accept1 [ no-probe1 | <interval1> ] | [ no-accept1 ] } } } | { no ipv6 nd solicit-na }
```

## Syntax Description

### Syntax Description

|                  |  |
|------------------|--|
| no               | Negate a command or set its defaults                         |
| ipv6             | Configure IPv6 features                                      |
| nd               | ICMPv6 Neighbor Discovery commands                           |
| solicit-na       | Solicited Neighbor Advertisemen                              |
| accept           | Accept Solicit NA without incomplete entry                   |
| no-probe         | (Optional) Do not probe, create a Reachable Entry            |
| <i>interval</i>  | (Optional) Probe Interval in Seconds                         |
| no-accept        | (Optional) Do not accept Solicit NA without incomplete entry |
| accept1          | Accept Solicit NA without incomplete entry                   |
| no-probe1        | (Optional) Do not probe, create a Reachable Entry            |
| <i>interval1</i> | (Optional) Probe Interval in Seconds                         |
| no-accept1       | (Optional) Do not accept Solicit NA without incomplete entry |

## Command Mode

- /exec/configure

# ipv6 nd suppress-ra

[no] ipv6 nd suppress-ra [ mtu ]

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults                 |
| ipv6               |            | Configure IPv6 features                              |
| nd                 |            | ICMPv6 Neighbor Discovery commands                   |
| suppress-ra        |            | Disable sending Router-Advertisement messages        |
| mtu                | (Optional) | Disable sending MTU in Router-Advertisement messages |

## Command Mode

- /exec/configure/if-igp

# ipv6 nd synchronize

ipv6 nd synchronize [ pull | push ]

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| ipv6               |  | Configure IPv6 features                          |
| nd                 |  | Display Neighbor Discovery interface information |
| synchronize        |  | CFS synchronize                                  |
| pull               |  | (Optional) Initiate CFS pull request             |
| push               |  | (Optional) Initiate CFS push message             |

## Command Mode

- /exec

# ipv6 nd synchronize

[no] ipv6 nd synchronize

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 | (Optional) Negate a command or set its defaults  |  |
| ipv6               | Configure IPv6 features                          |  |
| nd                 | Display Neighbor Discovery interface information |  |
| synchronize        | CFS synchronize                                  |  |

## Command Mode

- /exec/configure/vpc-domain



# ipv6 neighbor

[no] ipv6 neighbor <ipv6-addr> [ <mac-addr> ] | ipv6 neighbor <ipv6-addr> <mac-addr>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | Negate a command or set its defaults              |
| ipv6               | Configure IPv6 features                           |
| neighbor           | Configure IPv6 address to layer-2 address mapping |
| <i>mac-addr</i>    | (Optional) Layer-2 MAC address                    |

## Command Mode

- /exec/configure/if-igp /exec/configure/if-mgmt-config /exec/configure/if-vlan-common

# ipv6 neighbor allow-static-neighbor-outside-subnet

[no] ipv6 neighbor allow-static-neighbor-outside-subnet

## Syntax Description

| Syntax Description |                                      |   |
|--------------------|--------------------------------------|---|
|                    | no                                   | (Optional) Negate a command or set its defaults   |
|                    | ipv6                                 | Configure IPv6 features                           |
|                    | neighbor                             | Configure IPv6 address to layer-2 address mapping |
|                    | allow-static-neighbor-outside-subnet | Allow static neighbor outside interface subnet    |

## Command Mode

- /exec/configure

## ipv6 pim anycast-rp

[no] ipv6 pim anycast-rp <anycast-rp> <rp-addr>

### Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults   |
| ipv6               | Configure IPv6 features                           |
| pim                | PIM6 global configuration commands                |
| anycast-rp         | Configure an RP in an Anycast-RP set (using PIM6) |

### Command Mode

- /exec/configure /exec/configure/vrf

## ipv6 pim auto-rp listen

{ ipv6 pim auto-rp { listen | forward } + } | { no ipv6 pim auto-rp [ { listen | forward } + ] }

### Syntax Description

#### Syntax Description

|         |  |
|---------|--|
| no      | Negate a command or set its defaults               |
| ipv6    | Configure IPv6 features                            |
| pim     | PIM6 global configuration commands                 |
| auto-rp | Enable listening or forwarding of Auto-RP messages |
| listen  | Listen to Auto-RP messages                         |
| forward | Forward Auto-RP messages                           |

### Command Mode

- /exec/configure /exec/configure/vrf

# ipv6 pim auto-rp mapping-agent-policy

{ ipv6 pim auto-rp mapping-agent-policy { <route-map-name> | <rtr\_pol\_name> } | no ipv6 pim auto-rp mapping-agent-policy [ <route-map-name> | <rtr\_pol\_name> ] }

## Syntax Description

| Syntax Description    |  |   |
|-----------------------|--|---|
| no                    |  | Negate a command or set its defaults                |
| ipv6                  |  | Configure IPv6 features                             |
| pim                   |  | PIM6 global configuration commands                  |
| auto-rp               |  | Auto-RP protocol RP-distribution configuration      |
| mapping-agent-policy  |  | Specify policy for filtering Mapping Agent messages |
| <i>route-map-name</i> |  | A route-map name                                    |
| <i>rtr_pol_name</i>   |  | An existing routing-rules policy                    |

## Command Mode

- /exec/configure /exec/configure/vrf

## ipv6 pim auto-rp mapping-agent send-rp-discovery

```
{ { ipv6 pim { { auto-rp mapping-agent } | send-rp-discovery } <interface> [ scope <ttl> ] } | { no ipv6 pim
{ { auto-rp mapping-agent } | send-rp-discovery } [ <interface> ] [ scope <ttl> ] } }
```

### Syntax Description

| Syntax Description | no                | Negate a command or set its defaults                         |
|--------------------|-------------------|--|
|                    | ipv6              | Configure IPv6 features                                      |
|                    | auto-rp           | Auto-RP protocol RP-distribution configuration               |
|                    | pim               | PIM6 global configuration commands                           |
|                    | send-rp-discovery | Configures router to send Auto-RP Discovery messages         |
|                    | mapping-agent     | Configures router as an Auto-RP RP-mapping agent             |
|                    | <i>interface</i>  | IPv6 address of interface for Auto-RP Announce messages      |
|                    | scope             | (Optional) Configure the scope of Auto-RP Discovery messages |
|                    | <i>ttl</i>        | (Optional) TTL value for scope                               |

### Command Mode

- /exec/configure /exec/configure/vrf

# ipv6 pim auto-rp rp-candidate-policy

```
{ ipv6 pim auto-rp rp-candidate-policy { <route-map-name> | <rtr_pol_name> } | no ipv6 pim auto-rp
rp-candidate-policy [ <route-map-name> | <rtr_pol_name> ] }
```

## Syntax Description

| Syntax Description    |  |  |
|-----------------------|--|--|
| no                    |  | Negate a command or set its defaults               |
| ipv6                  |  | Configure IPv6 features                            |
| pim                   |  | PIM6 global configuration commands                 |
| auto-rp               |  | Auto-RP protocol RP-distribution configuration     |
| rp-candidate-policy   |  | Specify policy for filtering RP candidate messages |
| <i>route-map-name</i> |  | A route-map name                                   |
| <i>rtr_pol_name</i>   |  | An existing routing-rules policy                   |

## Command Mode

- /exec/configure /exec/configure/vrf

# ipv6 pim auto-rp rp-candidate send-rp-announce group

```
{ { ipv6 pim { { auto-rp rp-candidate } | send-rp-announce } <interface> { group-list <prefix> | route-map <route-map-name> } { [ scope <ttl> ] [ interval <interval> ] [ bidir ] } + } | { no ipv6 pim { { auto-rp rp-candidate } | send-rp-announce } [ <interface> ] [ group-list <prefix> ] [ route-map <route-map-name> ] { [ scope <ttl> ] [ interval <interval> ] [ bidir ] } } }
```

## Syntax Description

### Syntax Description

|                       |  |
|-----------------------|--|
| no                    | Negate a command or set its defaults                         |
| ipv6                  | Configure IPv6 features                                      |
| pim                   | PIM6 global configuration commands                           |
| auto-rp               | Auto-RP protocol RP-distribution configuration               |
| send-rp-announce      | Configures router to send Auto-RP Announce messages          |
| rp-candidate          | Configures router to be an Auto-RP candidate RP              |
| <i>interface</i>      | IPv6 address of interface for nnonce messages                |
| group-list            | Group range list   |
| route-map             | Group range policy for Auto-RP Candidate RP                  |
| <i>route-map-name</i> | route-map name   |
| scope                 | (Optional) Configure the scope of Auto-RP Announce messages  |
| <i>tll</i>            | (Optional) TTL value for scope                               |
| interval              | (Optional) Auto-RP Announce message transmission interval    |
| <i>interval</i>       | (Optional) Interval in seconds                               |
| bidir                 | (Optional) Group range advertised in PIM6 bidirectional mode |

## Command Mode

- /exec/configure /exec/configure/vrf



# ipv6 pim bidir-rp-limit

[no] ipv6 pim bidir-rp-limit <limit>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults       |
| ipv6               | Configure IPv6 features                               |
| pim                | PIM6 global configuration commands                    |
| bidir-rp-limit     | Configures maximum Bidir RPs for IPv6 PIM in this VRF |
| limit              | Set limit for Bidir RPs permitted in IPv6 PIM         |

## Command Mode

- /exec/configure /exec/configure/vrf

# ipv6 pim border

[no] ipv6 pim border

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

ipv6 Configure IPv6 features

---

pim PIM6 interface configuration commands

---

~~border~~ Configures interface to be a boundary of a PIM6 domain

---

## Command Mode

- /exec/configure/if-igp

# ipv6 pim bsr-candidate

```
{ { ipv6 pim [ bsr ] bsr-candidate <interface> [ hash-len <hash-len> ] [ priority <priority> ] } | { no ipv6 pim [ bsr ] bsr-candidate [ <interface> ] [ hash-len <hash-len> ] [ priority <priority> ] } }
```

## Syntax Description

### Syntax Description

|                      |   |
|----------------------|---|
| <i>no</i>            | Negate a command or set its defaults                        |
| <i>ipv6</i>          | Configure IPv6 features                                     |
| <i>pim</i>           | PIM6 global configuration commands                          |
| <i>bsr</i>           | (Optional) Bootstrap protocol RP-distribution configuration |
| <i>bsr-candidate</i> | Configure router as a Bootstrap Router candidate            |
| <i>interface</i>     | Use IPV6 address of interface for Bootstrap messages        |
| <i>hash-len</i>      | (Optional) Hash mask length used in Bootstrap messages      |
| <i>hash-len</i>      | (Optional) Hash mask length value                           |
| <i>priority</i>      | (Optional) BSR priority used in Bootstrap messages          |
| <i>priority</i>      | (Optional) BSR priority value                               |

## Command Mode

- /exec/configure /exec/configure/vrf

## ipv6 pim bsr bsr-policy

```
{ ipv6 pim bsr bsr-policy { <route-map-name> | <rtr_pol_name> } | no ipv6 pim bsr bsr-policy [
<route-map-name> | <rtr_pol_name> ] }
```

### Syntax Description

#### Syntax Description

|                       |  |
|-----------------------|--|
| no                    | Negate a command or set its defaults             |
| ipv6                  | Configure IPv6 features                          |
| pim                   | PIM6 global configuration commands               |
| bsr                   | Bootstrap protocol RP-distribution configuration |
| bsr-policy            | Specify policy for filtering BSR messages        |
| <i>route-map-name</i> | A route-map name                                 |
| <i>rtr_pol_name</i>   | An existing routing-rules policy                 |

### Command Mode

- /exec/configure /exec/configure/vrf

# ipv6 pim bsr listen

{ ipv6 pim bsr { listen | forward } + } | { no ipv6 pim bsr [ { listen | forward } + ] }

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | Negate a command or set its defaults             |
| ipv6               | Configure IPv6 features                          |
| pim                | PIM6 global configuration commands               |
| bsr                | Bootstrap protocol RP-distribution configuration |
| listen             | Listen to Bootstrap/Candidate-RP messages        |
| forward            | Forward Bootstrap/Candidate-RP messages          |

## Command Mode

- /exec/configure /exec/configure/vrf

## ipv6 pim bsr rp-candidate-policy

```
{ ipv6 pim bsr rp-candidate-policy { <route-map-name> | <rtr_pol_name> } | no ipv6 pim bsr
rp-candidate-policy [ <route-map-name> | <rtr_pol_name> ] }
```

### Syntax Description

#### Syntax Description

|                       |  |
|-----------------------|--|
| no                    | Negate a command or set its defaults               |
| ipv6                  | Configure IPv6 features                            |
| pim                   | PIM6 global configuration commands                 |
| bsr                   | Bootstrap protocol RP-distribution configuration   |
| rp-candidate-policy   | Specify policy for filtering RP candidate messages |
| <i>route-map-name</i> | A route-map name                                   |
| <i>rtr_pol_name</i>   | An existing routing-rules policy                   |

### Command Mode

- /exec/configure /exec/configure/vrf

# ipv6 pim dr-priority

```
{ { ipv6 pim dr-priority <priority> } | { no ipv6 pim dr-priority [ <priority> ] } }
```

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults                  |
| ipv6               |  | Configure IPv6 features                               |
| pim                |  | PIM6 interface configuration commands                 |
| dr-priority        |  | Configures priority for PIM6 DR election on interface |
| <i>priority</i>    |  | Priority value  |

## Command Mode

- /exec/configure/if-igp

## ipv6 pim event-history assert-receive

```
[no] ipv6 pim event-history assert-receive { size { <size_in_text> | <size_in_kbytes> } }
```

### Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| ipv6                  | Configure IPv6 features                         |  |
| pim                   | PIM6 global configuration commands              |  |
| event-history         | Configure event-history buffer                  |  |
| assert-receive        | Assert-receive events for PIM6                  |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

### Command Mode

- /exec/configure



# ipv6 pim event-history bidir

[no] ipv6 pim event-history bidir { size { <size\_in\_text> | <size\_in\_kbytes> } }

## Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| ipv6                  | Configure IPv6 features                         |  |
| pim                   | PIM6 global configuration commands              |  |
| event-history         | Configure event-history buffer                  |  |
| bidir                 | Bidir events for PIM6                           |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

## Command Mode

- /exec/configure

# ipv6 pim event-history hello

```
[no] ipv6 pim event-history hello { size { <size_in_text> | <size_in_kbytes> } }
```

## Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| ipv6                  | Configure IPv6 features                         |  |
| pim                   | PIM6 global configuration commands              |  |
| event-history         | Configure event-history buffer                  |  |
| hello                 | Hello events for PIM6                           |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

## Command Mode

- /exec/configure

## ipv6 pim event-history join-prune-summary

```
[no] ipv6 pim event-history join-prune-summary { size { <size_in_text> | <size_in_kbytes> } }
```

### Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| ipv6                  | Configure IPv6 features                         |  |
| pim                   | PIM6 global configuration commands              |  |
| event-history         | Configure event-history buffer                  |  |
| join-prune-summary    | Join/Prune-Summary events for PIM6              |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

### Command Mode

- /exec/configure

## ipv6 pim event-history join-prune

```
[no] ipv6 pim event-history join-prune { size { <size_in_text> | <size_in_kbytes> } }
```

### Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| ipv6                  | Configure IPv6 features                         |  |
| pim                   | PIM6 global configuration commands              |  |
| event-history         | Configure event-history buffer                  |  |
| join-prune            | Join/Prune events for PIM6                      |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

### Command Mode

- /exec/configure

## ipv6 pim event-history null-register

```
[no] ipv6 pim event-history null-register { size { <size_in_text> | <size_in_kbytes> } }
```

### Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| ipv6                  | Configure IPv6 features                         |  |
| pim                   | PIM6 global configuration commands              |  |
| event-history         | Configure event-history buffer                  |  |
| null-register         | Reg events for PIM6                             |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

### Command Mode

- /exec/configure

# ipv6 pim event-history packet

[no] ipv6 pim event-history packet { size { <size\_in\_text> | <size\_in\_kbytes> } }

## Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| ipv6                  | Configure IPv6 features                         |  |
| pim                   | PIM6 global configuration commands              |  |
| event-history         | Configure event-history buffer                  |  |
| packet                | Packet events for PIM6                          |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

## Command Mode

- /exec/configure

## ipv6 pim event-history pim6-internal

```
[no] ipv6 pim event-history pim6-internal { size { <size_in_text> | <size_in_kbytes> } }
```

### Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| ipv6                  | Configure IPv6 features                         |  |
| pim                   | PIM6 global configuration commands              |  |
| event-history         | Configure event-history buffer                  |  |
| pim6-internal         | Internal events for PIM6                        |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

### Command Mode

- /exec/configure

## ipv6 pim event-history rp

```
[no] ipv6 pim event-history rp { size { <size_in_text> | <size_in_kbytes> } }
```

### Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| ipv6                  | Configure IPv6 features                         |  |
| pim                   | PIM6 global configuration commands              |  |
| event-history         | Configure event-history buffer                  |  |
| rp                    | RP events for PIM6                              |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

### Command Mode

- /exec/configure



## ipv6 pim event-history vrf

```
[no] ipv6 pim event-history vrf { size { <size_in_text> | <size_in_kbytes> } }
```

### Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| ipv6                  | Configure IPv6 features                         |  |
| pim                   | PIM6 global configuration commands              |  |
| event-history         | Configure event-history buffer                  |  |
| vrf                   | VRF events for PIM6                             |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

### Command Mode

- /exec/configure

# ipv6 pim flush-routes

[no] ipv6 pim flush-routes

## Syntax Description

| Syntax Description |              |   |
|--------------------|--------------|---|
|                    | no           | (Optional) Negate a command or set its defaults |
|                    | ipv6         | Configure IPv6 features                         |
|                    | pim          | PIM6 global configuration commands              |
|                    | flush-routes | Remove routes when restarting PIM6              |

## Command Mode

- /exec/configure /exec/configure/vrf

# ipv6 pim hello-authentication ah-md5

```
{ ipv6 pim hello-authentication ah-md5 <auth-key> | no ipv6 pim hello-authentication ah-md5 [ <auth-key> ] }
```

## Syntax Description

| Syntax Description   |  |                                       |
|----------------------|--|---------------------------------------|
| no                   |  | Negate a command or set its defaults  |
| ipv6                 |  | Configure IPv6 features               |
| pim                  |  | PIM6 interface configuration commands |
| hello-authentication |  | Add AH header option to Hellos        |
| ah-md5               |  | Use MD5 HMAC                          |
| <i>auth-key</i>      |  | MD5 authentication key                |

## Command Mode

- /exec/configure/if-igp

# ipv6 pim hello-interval

```
{ { ipv6 pim hello-interval { <interval-min> | <interval-max> } } | { no ipv6 pim hello-interval [ <interval-min> | <interval-max> ] } }
```

## Syntax Description

| Syntax Description  |  |   |
|---------------------|--|---|
| no                  |  | Negate a command or set its defaults        |
| ipv6                |  | Configure IPv6 features                     |
| pim                 |  | PIM6 interface configuration commands       |
| hello-interval      |  | Configures the Hello interval for interface |
| <i>interval-min</i> |  | Interval in milliseconds                    |
| <i>interval-max</i> |  | Interval in milliseconds                    |

## Command Mode

- /exec/configure/if-igp

# ipv6 pim isolate

[no] ipv6 pim isolate

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | no (Optional) Negate a command or set its defaults    |
|                           | ipv6 Configure IPv6 features                          |
|                           | pim PIM6 global configuration commands                |
|                           | isolate Isolate this router from IPV6 PIM perspective |

## Command Mode

- /exec/configure

# ipv6 pim jp-delay

```
{ { ipv6 pim jp-delay <delay> } | { no ipv6 pim jp-delay [ <delay> ] } }
```

## Syntax Description

| Syntax Description |                                       |  |
|--------------------|---------------------------------------|--|
| no                 | Negate a command or set its defaults  |  |
| ipv6               | Configure IPv6 features               |  |
| pim                | PIM6 global configuration commands    |  |
| jp-delay           | Join-Prune message inter-packet delay |  |
| <i>delay</i>       | Delay value in microseconds           |  |

## Command Mode

- /exec/configure /exec/configure/vrf

# ipv6 pim jp-policy

```
{ ipv6 pim jp-policy { <route-map-name> | <rtr_pol_name> } [ in | out ] | no ipv6 pim jp-policy [ <route-map-name> | <rtr_pol_name> ] [ in | out ] }
```

## Syntax Description

| Syntax Description    |  |  |
|-----------------------|--|--|
| no                    |  | Negate a command or set its defaults             |
| ipv6                  |  | Configure IPv6 features                          |
| pim                   |  | PIM6 interface configuration commands            |
| jp-policy             |  | Specify policy for receiving Join-Prune messages |
| <i>route-map-name</i> |  | A route-map name                                 |
| <i>rtr_pol_name</i>   |  | An existing routing-rules policy                 |
| in                    |  | (Optional) Inbound                               |
| out                   |  | (Optional) Outbound                              |

## Command Mode

- /exec/configure/if-igp

# ipv6 pim log-neighbor-changes

[no] ipv6 pim log-neighbor-changes

## Syntax Description

| Syntax Description |                      |   |
|--------------------|----------------------|---|
|                    | no                   | (Optional) Negate a command or set its defaults |
|                    | ipv6                 | Configure IPv6 features                         |
|                    | pim                  | PIM6 global configuration commands              |
|                    | log-neighbor-changes | Log up/down PIM6 neighbor transitions           |

## Command Mode

- /exec/configure /exec/configure/vrf



# ipv6 pim neighbor-policy

```
{ ipv6 pim neighbor-policy <route-map-name> | no ipv6 pim neighbor-policy [ <route-map-name> ] }
```

## Syntax Description

### Syntax Description

|                       |  |
|-----------------------|--|
| no                    | Negate a command or set its defaults                   |
| ipv6                  | Configure IPv6 features                                |
| pim                   | PIM6 interface configuration commands                  |
| neighbor-policy       | Configures a neighbor policy for filtering adjacencies |
| <i>route-map-name</i> | A route-map name                                       |

## Command Mode

- /exec/configure/if-igp

# ipv6 pim passive

[no] ipv6 pim passive

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ipv6               | Configure IPv6 features                         |
| pim                | PIM6 interface configuration commands           |
| passive            | Interface in passive mode. No send/recv         |

## Command Mode

- /exec/configure/if-igp

# ipv6 pim register-policy

```
{ ipv6 pim register-policy { <route-map-name> | <rtr_pol_name> } | no ipv6 pim register-policy [
<route-map-name> | <rtr_pol_name> ] }
```

## Syntax Description

| Syntax Description    |  |  |
|-----------------------|--|--|
| no                    |  | Negate a command or set its defaults           |
| ipv6                  |  | Configure IPv6 features                        |
| pim                   |  | PIM6 global configuration commands             |
| register-policy       |  | Specify policy for receiving Register messages |
| <i>route-map-name</i> |  | A route-map name                               |
| <i>rtr_pol_name</i>   |  | An existing routing-rules policy               |

## Command Mode

- /exec/configure /exec/configure/vrf

# ipv6 pim register-rate-limit

```
{ { ipv6 pim register-rate-limit <rate> } | { no ipv6 pim register-rate-limit [ <rate> ] } }
```

## Syntax Description

| Syntax Description  |  |                                      |
|---------------------|--|--------------------------------------|
| no                  |  | Negate a command or set its defaults |
| ipv6                |  | Configure IPv6 features              |
| pim                 |  | PIM6 global configuration commands   |
| register-rate-limit |  | Rate limit for PIM data registers    |
| <i>rate</i>         |  | Packets per second                   |

## Command Mode

- /exec/configure /exec/configure/vrf

# ipv6 pim rp-address

```
{ { ipv6 pim rp-address <rp-address> [ group-list <prefix> | route-map <route-map-name> | prefix-list <prefix-list-name> ] [ bidir ] [ override ] } | { no ipv6 pim rp-address <rp-address> [ group-list <prefix> | route-map <route-map-name> | prefix-list <prefix-list-name> ] [ bidir ] [ override ] } }
```

## Syntax Description

### Syntax Description

|                         |  |
|-------------------------|--|
| no                      | Negate a command or set its defaults                         |
| ipv6                    | Configure IPv6 features                                      |
| pim                     | PIM6 global configuration commands                           |
| rp-address              | Configure static RP for group range                          |
| group-list              | (Optional) Group range for static RP                         |
| route-map               | (Optional) Route Map policy for static RP                    |
| <i>route-map-name</i>   | (Optional) route-map name                                    |
| prefix-list             | (Optional) Prefix List policy for static RP                  |
| <i>prefix-list-name</i> | (Optional) prefix-list name                                  |
| bidir                   | (Optional) Group range is treated in PIM6 bidirectional mode |
| override                | (Optional) Overrides the dynamically learnt RPs              |

## Command Mode

- /exec/configure /exec/configure/vrf

# ipv6 pim rp-candidate group

```
{ { ipv6 pim [ bsr ] rp-candidate <interface> { group-list <prefix> | route-map <route-map-name> } [ priority <priority> ] [ interval <interval> ] [ bidir ] } | { no ipv6 pim [ bsr ] rp-candidate [ <interface> ] [ group-list <prefix> ] [ route-map <route-map-name> ] [ priority <priority> ] [ interval <interval> ] [ bidir ] } }
```

## Syntax Description

### Syntax Description

|                       |  |
|-----------------------|--|
| no                    | Negate a command or set its defaults                         |
| ipv6                  | Configure IPv6 features                                      |
| pim                   | PIM6 global configuration commands                           |
| bsr                   | (Optional) Bootstrap protocol RP-distribution configuration  |
| rp-candidate          | Configure router as a Rendezvous Point (RP) candidate        |
| <i>interface</i>      | IPv6 address of interface for Candidate-RP messages          |
| group-list            | Group range list   |
| route-map             | Group range policy for Candidate RP                          |
| <i>route-map-name</i> | route-map name   |
| priority              | (Optional) RP priority used in Candidate-RP messages         |
| <i>priority</i>       | (Optional) RP priority value                                 |
| interval              | (Optional) Bootstrap message transmission interval           |
| <i>interval</i>       | (Optional) Interval in seconds                               |
| bidir                 | (Optional) Group range advertised in PIM6 bidirectional mode |

## Command Mode

- /exec/configure /exec/configure/vrf

# ipv6 pim sparse-mode

ipv6 pim sparse-mode | no ipv6 pim [ sparse-mode ]

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults      |
| ipv6               |  | Configure IPv6 features                   |
| pim                |  | PIM6 interface configuration commands     |
| sparse-mode        |  | Configures sparse-mode PIMv6 on interface |

## Command Mode

- /exec/configure/if-igp

## ipv6 pim ssm

```
{ ipv6 pim ssm { { range { <group> + | none } } | { route-map <route-map-name> } } | no ipv6 pim ssm { { range { <group> + | none } } | { route-map <route-map-name> } } }
```

### Syntax Description

#### Syntax Description

|                       |  |
|-----------------------|--|
| no                    | Negate a command or set its defaults   |
| ipv6                  | Configure IPv6 features                |
| pim                   | PIM6 global configuration commands     |
| ssm                   | Source Specific Multicast (SSM) groups |
| range                 | Configure explicit group ranges        |
| none                  | Remove all SSM group ranges            |
| route-map             | Group range policy for SSM range       |
| <i>route-map-name</i> | A route-map name                       |

### Command Mode

- /exec/configure /exec/configure/vrf



## ipv6 pim state-limit

```
{ { ipv6 pim state-limit <max-states> [ reserved <route-map-name> <max-reserved> ] } | { no ipv6 pim state-limit [ <max-states> [ reserved <route-map-name> <max-reserved> ] ] } }
```

### Syntax Description

| Syntax Description    |  |   |
|-----------------------|--|---|
| no                    |  | Negate a command or set its defaults                                |
| ipv6                  |  | Configure IPv6 features   |
| pim                   |  | PIM6 global configuration commands                                  |
| state-limit           |  | Configures State limit  |
| <i>max-states</i>     |  | Maximum (*,G)/(S,G) entries allowed in this VRF                     |
| reserved              |  | (Optional) Configures Reserved limit                                |
| <i>route-map-name</i> |  | (Optional) Route-map name   |
| <i>max-reserved</i>   |  | (Optional) Maximum reserved (*,G)/(S,G) entries allowed in this VRF |

### Command Mode

- /exec/configure /exec/configure/vrf

# ipv6 pim use-shared-tree-only spt-threshold infinity group-list

```
{ ipv6 pim { use-shared-tree-only | spt-threshold infinity } group-list <route-map-name> } | { no ipv6 pim {
use-shared-tree-only | spt-threshold infinity } [ group-list <route-map-name> ] }
```

## Syntax Description

### Syntax Description

|                       |  |
|-----------------------|--|
| no                    | Negate a command or set its defaults             |
| ipv6                  | Configure IPv6 features                          |
| pim                   | PIM6 global configuration commands               |
| use-shared-tree-only  | Use (*,G) only state, no source state is created |
| spt-threshold         | Source-tree switching threshold                  |
| infinity              | Never switch to source-tree                      |
| group-list            | Specify group ranges through policy              |
| <i>route-map-name</i> | Route-map name                                   |

## Command Mode

- /exec/configure /exec/configure/vrf

# ipv6 policy route-map

ipv6 policy route-map <route-map-name> | no ipv6 policy route-map [ <route-map-name> | <route-map-name> ]

## Syntax Description

| Syntax Description    |            |                                      |
|-----------------------|------------|--------------------------------------|
| no                    |            | Negate a command or set its defaults |
| ipv6                  |            | Configure IPv6 features              |
| policy                |            | Configure PBR feature                |
| route-map             |            | Route-map for PBR                    |
| <i>route-map-name</i> |            | Route-map name                       |
| <i>route-map-name</i> | (Optional) | Route-map name                       |
| <i>route-map-name</i> | (Optional) | Known route-map name                 |

## Command Mode

- /exec/configure/if-igp

# ipv6 port traffic-filter

[no] ipv6 port traffic-filter <name> <inout>

## Syntax Description

| Syntax Description |                |   |
|--------------------|----------------|---|
|                    | no             | (Optional) Negate a command or set its defaults |
|                    | ipv6           | Configure IPv6 features                         |
|                    | port           | Port policy                                     |
|                    | traffic-filter | Specify access control for packets              |
|                    | <i>name</i>    | List name                                       |
|                    | <i>inout</i>   | Traffic direction                               |

## Command Mode

- /exec/configure/if-set-acl-l2

# ipv6 prefix-list description

```
{ ipv6 prefix-list <ipv6-pfl-name> description <line> } | { no ipv6 prefix-list <ipv6-pfl-name> description }
```

## Syntax Description

| Syntax Description   |  |                                      |
|----------------------|--|--------------------------------------|
| no                   |  | Negate a command or set its defaults |
| ipv6                 |  | Configure IPv6 features              |
| prefix-list          |  | Build a prefix list                  |
| <i>ipv6-pfl-name</i> |  | Name of prefix-list                  |
| <i>ipv6-pfl-name</i> |  | Known prefix-list name               |
| description          |  | Description of the IPv6 prefix list  |
| <i>line</i>          |  | IPv6 prefix-list description string  |

## Command Mode

- /exec/configure

# ipv6 prefix-list permit

```
{ ipv6 prefix-list <ipv6-pfl-name> { permit | deny } <prefix> { [ eq <equal> ] | [ ge <greater> ] [ le <lesser> ] } } | { no ipv6 prefix-list { <ipv6-pfl-name> | <ipv6-pfl-name> } [ { permit | deny } <prefix> { [ eq <equal> ] | [ ge <greater> ] [ le <lesser> ] } ] }
```

## Syntax Description

### Syntax Description

|                      |  |
|----------------------|--|
| no                   | Negate a command or set its defaults           |
| ipv6                 | Configure IPv6 features                        |
| prefix-list          | Build a prefix list                            |
| <i>ipv6-pfl-name</i> | Name of prefix-list                            |
| <i>ipv6-pfl-name</i> | Name of prefix-list                            |
| <i>ipv6-pfl-name</i> | Known prefix-list name                         |
| permit               | Specify routes to forward                      |
| deny                 | Specify routes to reject                       |
| eq                   | (Optional) Exact prefix length to be matched   |
| <i>equal</i>         | (Optional) Exact prefix length                 |
| ge                   | (Optional) Minimum prefix length to be matched |
| <i>greater</i>       | (Optional) Minimum prefix length               |
| le                   | (Optional) Maximum prefix length to be matched |
| <i>lesser</i>        | (Optional) Maximum prefix length               |

## Command Mode

- /exec/configure

# ipv6 prefix-list seq permit

```
{ ipv6 prefix-list <ipv6-pfl-name> seq <seq> { permit | deny } <prefix> { [ eq <equal> ] | [ ge <greater> ] | [ le <lesser> ] } } | { no ipv6 prefix-list { <ipv6-pfl-name> | <ipv6-pfl-name> } seq <seq> [ { permit | deny } <prefix> { [ eq <equal> ] | [ ge <greater> ] | [ le <lesser> ] } ] }
```

## Syntax Description

| Syntax Description   |  |  |
|----------------------|--|--|
| no                   |  | Negate a command or set its defaults           |
| ipv6                 |  | Configure IPv6 features                        |
| prefix-list          |  | Build a prefix list                            |
| <i>ipv6-pfl-name</i> |  | Name of prefix-list                            |
| <i>ipv6-pfl-name</i> |  | Name of prefix-list                            |
| <i>ipv6-pfl-name</i> |  | Known prefix-list name                         |
| seq                  |  | Sequence number of an entry                    |
| <i>seq</i>           |  | Sequence number                                |
| permit               |  | Specify routes to forward                      |
| deny                 |  | Specify routes to reject                       |
| eq                   |  | (Optional) Exact prefix length to be matched   |
| <i>equal</i>         |  | (Optional) Exact prefix length                 |
| ge                   |  | (Optional) Minimum prefix length to be matched |
| <i>greater</i>       |  | (Optional) Minimum prefix length               |
| le                   |  | (Optional) Maximum prefix length to be matched |
| <i>lesser</i>        |  | (Optional) Maximum prefix length               |

## Command Mode

- /exec/configure

# ipv6 queue-packets-limit

[no] ipv6 queue-packets-limit [ <limit> ]

## Syntax Description

---

**Syntax Description**

|                     |  |
|---------------------|--|
| no                  | (Optional) Negate a command or set its defaults    |
| ipv6                | Configure IPv6 features                            |
| queue-packets-limit | Maximum number of queue packets for unresolved NDS |
| <i>limit</i>        | (Optional) Unresolved ND queue packet limit        |

---

## Command Mode

- /exec/configure



# ipv6 queue-packets

[no] ipv6 queue-packets

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults     |
| ipv6               |            | Configure IPv6 features                  |
| queue-packets      |            | Queue 1 packet when triggered NS is sent |

## Command Mode

- /exec/configure

# ipv6 redirects

ipv6 [ nd ] redirects | no ipv6 [ nd ] redirects

## Syntax Description

---

**Syntax Description**

---

|           |   |
|-----------|---|
| no        | Negate a command or set its defaults          |
| ipv6      | Configure IPv6 features                       |
| nd        | (Optional) ICMPv6 Neighbor Discovery commands |
| redirects | Enable sending ICMPv6 Redirect messages       |

---

## Command Mode

- /exec/configure/if-igp /exec/configure/if-mgmt-config

# ipv6 repopulate internal context array

ipv6 repopulate internal context array

## Syntax Description

| Syntax Description |                                    |  |
|--------------------|------------------------------------|--|
| ipv6               | Configure IPv6 features            |  |
| repopulate         | Repopulate internal data structure |  |
| internal           | Commands for internal use          |  |
| context            | repopulate context related info    |  |
| array              | arrays which stores context ptrs   |  |

## Command Mode

- /exec

# ipv6 route

```
[no] ipv6 route <ipv6-prefix> { <interface> | { { <link-local> <interface-link-local> } | { <pin-interface>
<next-hop> } | { <next-hop> | <nh-prefix> } | { <vlan-interface> } } [ vrf { <vrf-name> | <vrf-known-name>
} ] } [ track <object-num> ] [ name <rt-name> ] [ <pref> | tag <tag-value> ] +
```

## Syntax Description

### Syntax Description

|                             |  |
|-----------------------------|--|
| no                          | (Optional) Negate a command or set its defaults        |
| ipv6                        | Configure IPv6 features                                |
| route                       | Configure IPv6 unicast static route                    |
| <i>interface</i>            | Interface for interface static routes                  |
| <i>vlan-interface</i>       | vlan interface   |
| name                        | (Optional) Specify name of the next hop                |
| <i>rt-name</i>              | (Optional) Name of next hop                            |
| <i>pin-interface</i>        | Pin interface  |
| <i>interface-link-local</i> | Interface for interface static routes                  |
| track                       | (Optional) Specify the Object to be Tracked            |
| <i>object-num</i>           | (Optional) Track Object Number                         |
| vrf                         | (Optional) VRF for next-hop if different from this vrf |
| <i>vrf-name</i>             | (Optional) VRF name                                    |
| <i>vrf-known-name</i>       | (Optional) Known VRF name                              |
| <i>pref</i>                 | (Optional) Route preference                            |
| tag                         | (Optional) Supply tag value with static route          |
| <i>tag-value</i>            | (Optional) 32-bit value for tag                        |

## Command Mode

- /exec/configure /exec/configure/vrf

## ipv6 route static bfd

[no] ipv6 route static bfd <pin-interface> <next-hop>

### Syntax Description

| Syntax Description   |            |  |
|----------------------|------------|--|
| no                   | (Optional) | Negate a command or set its defaults     |
| ipv6                 |            | Configure IP features                    |
| route                |            | Route information                        |
| static               |            | Static route based configuration         |
| bfd                  |            | Enable bfd detection on static route     |
| <i>pin-interface</i> |            | Interface on which bfd has to be enabled |

### Command Mode

- /exec/configure /exec/configure/config-mgmt /exec/configure/vrf

# ipv6 router isis

[no] ipv6 router isis <tag>

## Syntax Description

### Syntax Description

|               |  |
|---------------|--|
| <b>no</b>     | (Optional) Negate a command or set its defaults    |
| <b>ipv6</b>   | Configure IPv6 features                            |
| <b>router</b> | Enable a routing process                           |
| <b>isis</b>   | Intermediate System to Intermediate System (IS-IS) |
| <b>tag</b>    | Process tag  |

## Command Mode

- /exec/configure/if-igp

# ipv6 router ospfv3 area

[no] ipv6 router ospfv3 <tag> area { <area-id-ip> | <area-id-int> } [ secondaries none ]

## Syntax Description

| Syntax Description |            |   |
|--------------------|------------|---|
| no                 | (Optional) | Negate a command or set its defaults    |
| ipv6               |            | Configure IPv6 features                 |
| router             |            | Enable a routing process                |
| ospfv3             |            | OSPFv3 configuration commands           |
| tag                |            | Process tag                             |
| area               |            | Area associated with interface          |
| area-id-ip         |            | OSPFv3 area ID in IP address format     |
| area-id-int        |            | OSPFv3 area ID as a decimal format      |
| secondaries        | (Optional) | Do not include secondary IPv6 addresses |
| none               | (Optional) | Do not include secondary IPv6 addresses |

## Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mpls-tunnel /exec/configure/if-mgmt-config

## ipv6 router ospfv3 multi-area

[no] ipv6 router ospfv3 [ <tag> ] multi-area <area-id-ip>

### Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| ipv6               |            | Configure IPv6 features              |
| router             |            | Enable a routing process             |
| ospfv3             |            | OSPFv3 configuration commands        |
| tag                | (Optional) | Process tag                          |
| multi-area         |            | Multi-Area associated with interface |
| area-id-ip         |            | Area Id as an integer or ip address  |

### Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mpls-tunnel /exec/configure/if-mgmt-config



# ipv6 routing event-history size

[no] ipv6 routing event-history { am | cli | detail | errors | general | ha | lfe | recursive-next-hop | summary | ufdm | ufdm-detail | ufdm-summary } size { <size\_in\_text> | <size\_in\_bytes> }

## Syntax Description

| Syntax Description   |   |  |
|----------------------|---|--|
| no                   | (Optional) Negate a command or set its defaults     |  |
| ipv6                 | Configure IPv6 features                             |  |
| routing              | Routing information                                 |  |
| event-history        | Configure routing event log                         |  |
| am                   | AM  |  |
| cli                  | CLI   |  |
| detail               | Detail  |  |
| errors               | Errors  |  |
| general              | General   |  |
| ha                   | HA  |  |
| lfe                  | LFE   |  |
| recursive-next-hop   | Recursive next hop                                  |  |
| summary              | Summary   |  |
| ufdm                 | UFDM  |  |
| ufdm-detail          | UFDM Detail   |  |
| ufdm-summary         | UFDM Summary  |  |
| size                 | Size of buffer                                      |  |
| <i>size_in_text</i>  | Buffer size   |  |
| <i>size_in_bytes</i> | Enter an integer value for the event history buffer |  |

## Command Mode

- /exec/configure

# ipv6 routing multicast software-replication

[no] ipv6 routing multicast software-replication

## Syntax Description

| Syntax Description   |   |  |
|----------------------|---|--|
| no                   | (Optional) Negate a command or set its defaults     |  |
| ipv6                 | Configure IPv6 features                             |  |
| routing              | Routing information                                 |  |
| multicast            | Configure multicast                                 |  |
| software-replication | Enable software replication of PIM ASM leak packets |  |

## Command Mode

- /exec/configure

# ipv6 source-route

[no] ipv6 source-route [ rh0 ]

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults       |
| ipv6               | Configure IPv6 features                               |
| source-route       | Process IPv6 Routing Header                           |
| rh0                | (Optional) Process IPv6 Routing Header - Type 0 (RH0) |

## Command Mode

- /exec/configure

# ipv6 switch-packets

[no] ipv6 switch-packets [ lla ]

## Syntax Description

### Syntax Description

|                |   |
|----------------|---|
| no             | (Optional) Negate a command or set its defaults                           |
| ipv6           | Configure IPv6 features   |
| switch-packets | Switch ND packets received on core ports                                  |
| lla            | (Optional) Switch ND packets targeted to Link local address on core ports |

## Command Mode

- /exec/configure

# ipv6 traffic-filter

[no] ipv6 traffic-filter <name> <inout>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ipv6               | Configure IPv6 features                         |
| traffic-filter     | Specify access control for packets              |
| <i>name</i>        | List name                                       |
| <i>inout</i>       | Traffic direction                               |

## Command Mode

- /exec/configure/if-set-acl-l3

# ipv6 unreachable

[no] ipv6 [ icmp ] unreachable

## Syntax Description

---

### Syntax Description

---

|              |  |
|--------------|--|
| no           | (Optional) Negate a command or set its defaults  |
| ipv6         | Configure IPv6 features  |
| icmp         | (Optional) ICMPv6 commands   |
| unreachables | Enable sending ICMPv6 Unreachable messages (port-unreachables are always rate-limit enabled) |

---

## Command Mode

- /exec/configure/if-igp

# ipv6 verify unicast source reachable-via rx

[no] ipv6 verify unicast source reachable-via { rx | any [ allow-default ] }

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 | (Optional) Negate a command or set its defaults                |  |
| ipv6               | Configure IPv6 features  |  |
| verify             | Unicast Reverse Path Forwarding                                |  |
| unicast            | Unicast Reverse Path Forwarding                                |  |
| source             | Validation of source address                                   |  |
| reachable-via      | Specify reachability check to apply to the source address      |  |
| rx                 | Source is reachable via interface on which packet was received |  |
| any                | Source is reachable via any interface                          |  |
| allow-default      | (Optional) Loose Default Route Unicast Reverse Path Forwarding |  |

## Command Mode

- /exec/configure/if-igp

# ipv6 vip

[no] ipv6 vip <ipv6-addr>

## Syntax Description

---

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | no (Optional) Negate a command or set its defaults |
|---------------------------|--|

---

|  |                             |
|--|-----------------------------|
|  | ip6 Configure IPv6 features |
|--|-----------------------------|

---

|  |                          |
|--|--------------------------|
|  | vip Virtual IPv6 address |
|--|--------------------------|

---

## Command Mode

- /exec/configure/if-igp



# is-type

is-type <is-type> | no is-type [ <is-type> ]

## Syntax Description

|                           |                |                                      |
|---------------------------|----------------|--------------------------------------|
| <b>Syntax Description</b> | no             | Negate a command or set its defaults |
|                           | is-type        | IS type for this IS-IS process       |
|                           | <i>is-type</i> | IS-IS IS type                        |

## Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

# ishow cli find nodes

ishow cli find nodes [ <component> ] [ recurse ]

## Syntax Description

| Syntax Description |                  |                           |
|--------------------|------------------|---------------------------|
|                    | ishow            | Show internal information |
|                    | cli              | Show CLI information      |
|                    | find             |                           |
|                    | nodes            | display                   |
|                    | <i>component</i> | (Optional) display        |
|                    | recurse          | (Optional) go             |

## Command Mode

- /exec

# ishow cli modes

ishow cli modes

## Syntax Description

| Syntax Description | Description               |
|--------------------|---------------------------|
| ishow              | Show internal information |
| cli                | Show CLI information      |
| mods               | show                      |

## Command Mode

- /exec

# ishow cli nodes

ishow cli nodes [ <mode> ]

## Syntax Description

---

**Syntax Description**

---

ishow Show internal information

---

cli Show CLI information

---

nodes show

---

*mode* (Optional) mode

---

## Command Mode

- /exec

# ishow cli paths

ishow cli paths <component> [ <type> ]

## Syntax Description

| Syntax Description |                           |  |
|--------------------|---------------------------|--|
| ishow              | Show internal information |  |
| cli                | Show CLI information      |  |
| paths              | show                      |  |
| <i>component</i>   | component                 |  |
| <i>type</i>        | (Optional)                |  |

## Command Mode

- /exec

# ishow cli tags

ishow cli tags

## Syntax Description

---

### Syntax Description

---

show Show internal information

---

cli Show CLI information

---

tags

---

## Command Mode

- /exec

# ishow core backtrace

ishow core <pid> backtrace

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| ishow              | Show internal information                                       |
| core               | display info from core file                                     |
| <i>pid</i>         | PID from 'show cores  |
| backtrace          | display backtrace -- needs enough space to unzip the core file! |

## Command Mode

- /exec

# isis authentication-check

[no] isis authentication-check

## Syntax Description

| Syntax Description   |   |
|----------------------|---|
| no                   | (Optional) Negate a command or set its defaults |
| isis                 | IS-IS configuration commands                    |
| authentication-check | Check authentication on received hellos         |

## Command Mode

- /exec/configure/if-p2p



# isis authentication-check level-1

[no] isis authentication-check level-1

## Syntax Description

| Syntax Description   |   |
|----------------------|---|
| no                   | (Optional) Negate a command or set its defaults |
| isis                 | IS-IS configuration commands                    |
| authentication-check | Check authentication on received hellos         |
| level-1              | Configure authentication check for level-1 IIHs |

## Command Mode

- /exec/configure/if-ma

# isis authentication-check level-2

[no] isis authentication-check level-2

## Syntax Description

| Syntax Description   |            |   |
|----------------------|------------|---|
| no                   | (Optional) | Negate a command or set its defaults            |
| isis                 |            | IS-IS configuration commands                    |
| authentication-check |            | Check authentication on received hellos         |
| level-2              |            | Configure authentication check for level-2 IIHs |

## Command Mode

- /exec/configure/if-ma

# isis authentication-type cleartext

```
{ isis authentication-type { cleartext | md5 } | no isis authentication-type [ { cleartext | md5 } ] }
```

## Syntax Description

| Syntax Description  |  |                                      |
|---------------------|--|--------------------------------------|
| no                  |  | Negate a command or set its defaults |
| isis                |  | IS-IS configuration commands         |
| authentication-type |  | Set hello authentication type        |
| cleartext           |  | Cleartext                            |
| md5                 |  | HMAC-MD5                             |

## Command Mode

- /exec/configure/if-p2p

# isis authentication-type cleartext

```
{ isis authentication-type { cleartext | md5 } <level> | no isis authentication-type [ { cleartext | md5 } ] <level>
}
```

## Syntax Description

| Syntax Description  |  |                                      |
|---------------------|--|--------------------------------------|
| no                  |  | Negate a command or set its defaults |
| isis                |  | IS-IS configuration commands         |
| authentication-type |  | Set hello authentication type        |
| cleartext           |  | Cleartext                            |
| md5                 |  | HMAC-MD5                             |
| <i>level</i>        |  | IS-IS level                          |

## Command Mode

- /exec/configure/if-ma

# isis authentication key-chain

```
{ isis authentication key-chain <auth-keychain> | no isis authentication key-chain [ <auth-keychain> ] }
```

## Syntax Description

| Syntax Description   |  |                                      |
|----------------------|--|--------------------------------------|
| no                   |  | Negate a command or set its defaults |
| isis                 |  | IS-IS configuration commands         |
| authentication       |  | Set hello authentication keychain    |
| key-chain            |  | Set hello authentication keychain    |
| <i>auth-keychain</i> |  | authentication keychain              |

## Command Mode

- /exec/configure/if-p2p

# isis authentication key-chain

```
{ isis authentication key-chain <auth-keychain> <level> | no isis authentication key-chain [ <auth-keychain> ] <level> }
```

## Syntax Description

| Syntax Description          |  |                                      |
|-----------------------------|--|--------------------------------------|
| <code>no</code>             |  | Negate a command or set its defaults |
| <code>isis</code>           |  | IS-IS configuration commands         |
| <code>authentication</code> |  | Set hello authentication keychain    |
| <code>key-chain</code>      |  | Set hello authentication keychain    |
| <code>auth-keychain</code>  |  | authentication keychain              |
| <code>level</code>          |  | IS-IS level                          |

## Command Mode

- /exec/configure/if-ma

# isis bfd

[no] isis bfd [ disable ]

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| isis               | IS-IS configuration commands                    |
| bfd                | Interface BFD configuration                     |
| disable            | (Optional) Disable BFD on interface             |

## Command Mode

- /exec/configure/if-igp

# isis circuit-type

isis circuit-type <circuit-type> | no isis circuit-type [ <circuit-type> ]

## Syntax Description

| Syntax Description  |  |                                      |
|---------------------|--|--------------------------------------|
| no                  |  | Negate a command or set its defaults |
| isis                |  | IS-IS configuration commands         |
| circuit-type        |  | Configure circuit type for interface |
| <i>circuit-type</i> |  | IS-IS circuit type                   |

## Command Mode

- /exec/configure/if-igp



# isis csnp-interval level

[no] isis csnp-interval <sec> { level-1 | level-2 }

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| isis               | IS-IS configuration commands                    |  |
| csnp-interval      | Set CSNP interval in seconds                    |  |
| sec                | CSNP interval value                             |  |
| level-1            | Specify interval for level-1 CSNPs              |  |
| level-2            | Specify interval for level-2 CSNPs              |  |

## Command Mode

- /exec/configure/if-igp

## isis event-history adjacency

```
[no] isis event-history adjacency { size { <size_in_text> | <size_in_kbytes> } }
```

### Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| isis                  | Event-history buffers for IS-IS                 |  |
| event-history         | Configure event-history buffers                 |  |
| adjacency             | Adjacency events for IS-IS                      |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

### Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

## isis event-history cli

[no] isis event-history cli { size { <size\_in\_text> | <size\_in\_kbytes> } }

### Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| isis                  | Event-history buffers for IS-IS                 |  |
| event-history         | Configure event-history buffers                 |  |
| cli                   | CLI events for IS-IS                            |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

### Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

# isis event-history csnp

[no] isis event-history csnp { size { <size\_in\_text> | <size\_in\_kbytes> } }

## Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| isis                  | Event-history buffers for IS-IS                 |  |
| event-history         | Configure event-history buffers                 |  |
| csnp                  | CSNP events for IS-IS                           |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

## Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

## isis event-history dis

[no] isis event-history dis { size { <size\_in\_text> | <size\_in\_kbytes> } }

### Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| isis                  | Event-history buffers for IS-IS                 |  |
| event-history         | Configure event-history buffers                 |  |
| dis                   | Dis events for IS-IS                            |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

### Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

## isis event-history events

[no] isis event-history events { size { <size\_in\_text> | <size\_in\_kbytes> } }

### Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| isis                  | Event-history buffers for IS-IS                 |  |
| event-history         | Configure event-history buffers                 |  |
| events                | Events for IS-IS                                |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

### Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

## isis event-history graceful

[no] isis event-history graceful { size { <size\_in\_text> | <size\_in\_kbytes> } }

### Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| isis                  | Event-history buffers for IS-IS                 |  |
| event-history         | Configure event-history buffers                 |  |
| graceful              | Graceful Restart events for IS-IS               |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

### Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

# isis event-history ha

```
[no] isis event-history ha { size { <size_in_text> | <size_in_kbytes> } }
```

## Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| isis                  | Event-history buffers for IS-IS                 |  |
| event-history         | Configure event-history buffers                 |  |
| ha                    | HA events for IS-IS                             |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

## Command Mode

- /exec/configure/router-isis/router-isis-vrf-common



## isis event-history iih

[no] isis event-history iih { size { <size\_in\_text> | <size\_in\_kbytes> } }

### Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| isis                  | Event-history buffers for IS-IS                 |  |
| event-history         | Configure event-history buffers                 |  |
| iih                   | IIH events for IS-IS                            |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

### Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

## isis event-history lsp-flood

```
[no] isis event-history lsp-flood { size { <size_in_text> | <size_in_kbytes> } }
```

### Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| isis                  | Event-history buffers for IS-IS                 |  |
| event-history         | Configure event-history buffers                 |  |
| lsp-flood             | LSP-flood events for IS-IS                      |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

### Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

## isis event-history lsp-gen

[no] isis event-history lsp-gen { size { <size\_in\_text> | <size\_in\_kbytes> } }

### Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| isis                  | Event-history buffers for IS-IS                 |  |
| event-history         | Configure event-history buffers                 |  |
| lsp-gen               | LSP-Gen events for IS-IS                        |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

### Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

## isis event-history mtr

[no] isis event-history mtr { size { <size\_in\_text> | <size\_in\_kbytes> } }

### Syntax Description

| Syntax Description    |            |                                      |
|-----------------------|------------|--------------------------------------|
| no                    | (Optional) | Negate a command or set its defaults |
| isis                  |            | Event-history buffers for IS-IS      |
| event-history         |            | Configure event-history buffers      |
| mtr                   |            | MTR events for IS-IS                 |
| size                  |            | Configure size                       |
| <i>size_in_text</i>   |            | Buffer size                          |
| <i>size_in_kbytes</i> |            | Size in kbytes                       |

### Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

## isis event-history psnp

```
[no] isis event-history psnp { size { <size_in_text> | <size_in_kbytes> } }
```

### Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| isis                  | Event-history buffers for IS-IS                 |  |
| event-history         | Configure event-history buffers                 |  |
| psnp                  | PSNP events for IS-IS                           |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

### Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

## isis event-history redist

[no] isis event-history redist { size { <size\_in\_text> | <size\_in\_kbytes> } }

### Syntax Description

| Syntax Description    |            |                                      |
|-----------------------|------------|--------------------------------------|
| no                    | (Optional) | Negate a command or set its defaults |
| isis                  |            | Event-history buffers for IS-IS      |
| event-history         |            | Configure event-history buffers      |
| redist                |            | Redist events for IS-IS              |
| size                  |            | Configure size                       |
| <i>size_in_text</i>   |            | Buffer size                          |
| <i>size_in_kbytes</i> |            | Size in kbytes                       |

### Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

## isis event-history spf-leaf

```
[no] isis event-history spf-leaf { size { <size_in_text> | <size_in_kbytes> } }
```

### Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| isis                  | Event-history buffers for IS-IS                 |  |
| event-history         | Configure event-history buffers                 |  |
| spf-leaf              | Shortest path first events for IS-IS            |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

### Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

## isis event-history spf-tree

```
[no] isis event-history spf-tree { size { <size_in_text> | <size_in_kbytes> } }
```

### Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| isis                  | Event-history buffers for IS-IS                 |  |
| event-history         | Configure event-history buffers                 |  |
| spf-tree              | SPF-Tree events for IS-IS                       |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

### Command Mode

- /exec/configure/router-isis/router-isis-vrf-common



## isis event-history tlv

[no] isis event-history tlv { size { <size\_in\_text> | <size\_in\_kbytes> } }

### Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| isis                  | Event-history buffers for IS-IS                 |  |
| event-history         | Configure event-history buffers                 |  |
| tlv                   | TLV events for IS-IS                            |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

### Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

## isis event-history urib

[no] isis event-history urib { size { <size\_in\_text> | <size\_in\_kbytes> } }

### Syntax Description

| Syntax Description    |            |                                      |
|-----------------------|------------|--------------------------------------|
| no                    | (Optional) | Negate a command or set its defaults |
| isis                  |            | Event-history buffers for IS-IS      |
| event-history         |            | Configure event-history buffers      |
| urib                  |            | URIB events for IS-IS                |
| size                  |            | Configure size                       |
| <i>size_in_text</i>   |            | Buffer size                          |
| <i>size_in_kbytes</i> |            | Size in kbytes                       |

### Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

# isis hello-interval

[no] isis hello-interval <sec>

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| isis               | IS-IS configuration commands                    |  |
| hello-interval     | Set Hello interval in seconds                   |  |
| sec                | Hello interval value                            |  |

## Command Mode

- /exec/configure/if-p2p

# isis hello-interval level

[no] isis hello-interval <sec> { level-1 | level-2 }

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| isis               | IS-IS configuration commands                    |  |
| hello-interval     | Set Hello interval in seconds                   |  |
| sec                | Hello interval value                            |  |
| level-1            | Specify hello-interval for level-1 IIHs         |  |
| level-2            | Specify hello-interval for level-2 IIHs         |  |

## Command Mode

- /exec/configure/if-ma

# isis hello-multiplier

[no] isis hello-multiplier <multi>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| isis               | IS-IS configuration commands                    |
| hello-multiplier   | Set multiplier for Hello holding time           |
| <i>multi</i>       | Hello multiplier value                          |

## Command Mode

- /exec/configure/if-p2p

# isis hello-multiplier level

[no] isis hello-multiplier <multi> { level-1 | level-2 }

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| isis               | IS-IS configuration commands                    |  |
| hello-multiplier   | Set multiplier for Hello holding time           |  |
| <i>multi</i>       | Hello multiplier value                          |  |
| level-1            | Specify hello multiplier for level-1 IIHs       |  |
| level-2            | Specify hello multiplier for level-2 IIHs       |  |

## Command Mode

- /exec/configure/if-ma

# isis hello-padding

```
{ isis hello-padding | no isis hello-padding [ always ] }
```

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| isis               |  | IS-IS configuration commands         |
| hello-padding      |  | Pad IS-IS hello PDUs to full MTU     |
| always             |  | (Optional) Pad every hello           |

## Command Mode

- /exec/configure/if-igp

# isis hello-padding always

isis hello-padding always

## Syntax Description

| Syntax Description |                                  |
|--------------------|----------------------------------|
| isis               | IS-IS configuration commands     |
| hello-padding      | Pad IS-IS hello PDUs to full MTU |
| always             | Pad every hello                  |

## Command Mode

- /exec/configure/if-igp



# isis ipv6 bfd

[no] isis ipv6 bfd [ disable ]

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| isis               | IS-IS configuration commands                    |
| ipv6               | Enable BFD for ipv6                             |
| bfd                | Interface BFD configuration                     |
| disable            | (Optional) Disable BFD on interface             |

## Command Mode

- /exec/configure/if-igp

# isis ipv6 metric

[no] isis ipv6 metric <metric> <level>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| isis               | IS-IS configuration commands                    |
| metric             | Configure metric for IPV6 topology              |
| ipv6               | Configure metric for IPV6 topology              |
| <i>metric</i>      | Default metric                                  |
| <i>level</i>       | IS-IS level                                     |

## Command Mode

- /exec/configure/if-igp /exec/configure/router-isis/router-isis-af-ipv6

# isis lsp-interval

[no] isis lsp-interval <msec>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| isis               | IS-IS configuration commands                    |
| lsp-interval       | Set LSP transmission interval                   |
| msec               | LSP transmission interval (milliseconds)        |

## Command Mode

- /exec/configure/if-igp

# isis mesh-group

```
{ isis mesh-group { blocked | <mesh-id> } | no isis mesh-group [ { blocked | <mesh-id> } ] }
```

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| isis               |  | IS-IS configuration commands         |
| mesh-group         |  | Set IS-IS mesh group                 |
| <i>mesh-id</i>     |  | Mesh group number                    |
| blocked            |  | Block LSPs on this interface         |

## Command Mode

- /exec/configure/if-igp

# isis metric

[no] isis metric <metric> <level>

## Syntax Description

---

**Syntax Description**

---

no (Optional) Negate a command or set its defaults

---

isis IS-IS configuration commands

---

metric Configure the metric for interface

---

*metric* Default metric

---

*level* IS-IS level

---

## Command Mode

- /exec/configure/if-igp /exec/configure/if-mpls-tunnel

# isis mtu-check

[no] isis mtu-check

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| isis               | IS-IS configuration commands                    |
| mtu-check          | Check mtu on received hellos, if its padded     |

## Command Mode

- /exec/configure/if-p2p

# isis mtu-check level

[no] isis mtu-check { level-1 | level-2 }

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| isis               | IS-IS configuration commands                    |
| mtu-check          | Check mtu on received hellos, if its padded     |
| level-1            | Configure mtu-check for level-1                 |
| level-2            | Configure mtu-check for level-2                 |

## Command Mode

- /exec/configure/if-ma

# isis network point-to-point

[no] isis network point-to-point

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| isis               | IS-IS configuration commands                    |
| network            | Change interface medium to p2p                  |
| point-to-point     | Change interface medium to p2p                  |

## Command Mode

- /exec/configure/if-igp /exec/configure/if-mpls-tunnel



# isis passive-interface

isis passive-interface <level> | no isis passive-interface <level> | default isis passive-interface [ <level\_obsolete> ]

## Syntax Description

| Syntax Description    |            |                                      |
|-----------------------|------------|--------------------------------------|
| no                    |            | Negate a command or set its defaults |
| isis                  |            | IS-IS configuration commands         |
| passive-interface     |            | Suppress IS-IS PDU                   |
| default               |            | Undo a command                       |
| <i>level</i>          |            | Level to suppress                    |
| <i>level_obsolete</i> | (Optional) | Level to suppress                    |

## Command Mode

- /exec/configure/if-igp

# isis priority level

[no] isis priority <priority> { level-1 | level-2 }

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| isis               | IS-IS configuration commands                    |
| priority           | Set priority for DIS election                   |
| <i>priority</i>    | Priority value                                  |
| level-1            | Specify priority for level-1 routing            |
| level-2            | Specify priority for level-2 routing            |

## Command Mode

- /exec/configure/if-ma

# isis retransmit-interval

[no] isis retransmit-interval <sec>

## Syntax Description

| Syntax Description  |  |
|---------------------|--|
| no                  | (Optional) Negate a command or set its defaults            |
| isis                | IS-IS configuration commands                               |
| retransmit-interval | Set per-LSP retransmission interval                        |
| sec                 | Interval between retransmissions of the same LSP (seconds) |

## Command Mode

- /exec/configure/if-p2p

# isis retransmit-throttle-interval

[no] isis retransmit-throttle-interval <msec>

## Syntax Description

| Syntax Description           |   |  |
|------------------------------|---|--|
| no                           | (Optional) Negate a command or set its defaults |  |
| isis                         | IS-IS configuration commands                    |  |
| retransmit-throttle-interval | Set interface LSP retransmission interval       |  |
| <i>msec</i>                  | Delay between retransmitted LSPs (milliseconds) |  |

## Command Mode

- /exec/configure/if-p2p

# isis shutdown

[no] isis shutdown

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults        |
| isis               | IS-IS configuration commands                           |
| shutdown           | Graceful shutdown IS-IS functionality on the interface |

## Command Mode

- /exec/configure/if-igp

# isolate

[no] isolate

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| isolate            | Isolate this router from RIP perspective        |

## Command Mode

- /exec/configure/router-rip

# isolate

[no] isolate

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| isolate            | Isolate this router from BGP perspective        |

## Command Mode

- /exec/configure/router-bgp

# isolate

[no] isolate

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| isolate            | Isolate this router from OSPF perspective       |

## Command Mode

- /exec/configure/router-ospf



# isolate

[no] isolate

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| isolate            | Isolate router, ISIS perspective (set overload) |

## Command Mode

- /exec/configure/router-isis

# isolate

[no] isolate

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| isolate            | Isolate this router from OSPFV3 perspective     |

## Command Mode

- /exec/configure/router-ospf3

# isolate

[no] isolate

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| isolate            | Isolate this router from EIGRP perspective      |

## Command Mode

- /exec/configure/router-eigrp

# itd

{ itd <service-name> } | { no itd <service-name> }

## Syntax Description

| Syntax Description  |  |                                      |
|---------------------|--|--------------------------------------|
| no                  |  | Negate a command or set its defaults |
| itd                 |  | ITD service                          |
| <i>service-name</i> |  | ITD service-name                     |

## Command Mode

- /exec/configure

# itd

```
{ itd <service-name> } | { no itd <service-name> }
```

## Syntax Description

| Syntax Description  |  |                                      |
|---------------------|--|--------------------------------------|
| no                  |  | Negate a command or set its defaults |
| itd                 |  | ITD service                          |
| <i>service-name</i> |  | ITD service-name                     |

## Command Mode

- /exec/configure

# itd device-group

```
{ itd device-group <svc-name> } | { no itd device-group <svc-name> }
```

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| itd                |  | ITD service                          |
| device-group       |  | ITD device group                     |
| <i>svc-name</i>    |  | service-name                         |

## Command Mode

- /exec/configure

# itd device-group

{ itd device-group <svc-name> } | { no itd device-group <svc-name> }

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| itd                |  | ITD service                          |
| device-group       |  | ITD device group                     |
| <i>svc-name</i>    |  | service-name                         |

## Command Mode

- /exec/configure

# itd session access-list refresh

itd session access-list <acl-name> refresh

## Syntax Description

| Syntax Description |                 |                    |
|--------------------|-----------------|--------------------|
|                    | itd             | ITD service        |
|                    | session         | ITD session        |
|                    | access-list     | ITD<br>access-list |
|                    | <i>acl-name</i> | acl-name           |
|                    | refresh         | refresh            |

## Command Mode

- /exec/configure



# itd session device-group

{ itd session device-group <svc-name> } | { no itd session device-group <svc-name> }

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| itd                |  | ITD service                          |
| session            |  | ITD session                          |
| device-group       |  | ITD device group                     |
| <i>svc-name</i>    |  | service-name                         |

## Command Mode

- /exec/configure

# itd statistics

{ itd statistics <service-name> } | { no itd statistics <service-name> }

## Syntax Description

| Syntax Description  |  |                                      |
|---------------------|--|--------------------------------------|
| no                  |  | Negate a command or set its defaults |
| itd                 |  | ITD service                          |
| statistics          |  | ITD statistics                       |
| <i>service-name</i> |  | ITD service-name                     |

## Command Mode

- /exec/configure

# itd statistics

{ itd statistics <service-name> } | { no itd statistics <service-name> }

## Syntax Description

| Syntax Description  |  |                                      |
|---------------------|--|--------------------------------------|
| no                  |  | Negate a command or set its defaults |
| itd                 |  | ITD service                          |
| statistics          |  | ITD statistics                       |
| <i>service-name</i> |  | ITD service-name                     |

## Command Mode

- /exec/configure





## J Commands

---

- [job name](#), on page 2346
- [json-pretty](#), on page 2347
- [json](#), on page 2348
- [json](#), on page 2349

# job name

[no] job name <s0>

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <b>no</b> (Optional) Negate a command or set its defaults |
|                           | <b>job</b> Assign a job to the schedule                   |
|                           | <b>name</b> Assign a job to the schedule                  |
|                           | <b>s0</b> Specify the job name                            |

## Command Mode

- /exec/configure/schedule

# json-pretty

| json-pretty

## Syntax Description

---

### Syntax Description

---

| Pipe command output to filter

---

json-pretty output in json pretty print format

---

## Command Mode

- /output

# json

| json

## Syntax Description

---

### Syntax Description

| Pipe command output to filter

---

json output in json format

---

## Command Mode

- /output



# json

| json

## Syntax Description

---

### Syntax Description

---

| Pipe command output to filter

---

json output in json format

---

## Command Mode

- /output





## K Commands

---

- [key-chain macsec-psk no-show](#), on page 2352
- [key-octet-string 7 cryptographic-algorithm AES\\_128\\_CMAC](#), on page 2353
- [key-octet-string 7 cryptographic-algorithm AES\\_256\\_CMAC](#), on page 2354
- [key-octet-string cryptographic-algorithm AES\\_128\\_CMAC](#), on page 2355
- [key-octet-string cryptographic-algorithm AES\\_256\\_CMAC](#), on page 2356
- [key-server-priority](#), on page 2357
- [key-string](#), on page 2358
- [key-string 7](#), on page 2359
- [key](#), on page 2360
- [key](#), on page 2361
- [key chain](#), on page 2362
- [key chain macsec](#), on page 2363
- [key config-key hex](#), on page 2364
- [kill-everyone](#), on page 2365
- [kill background](#), on page 2366
- [kubernetes server ip-address port](#), on page 2367

# key-chain macsec-psk no-show

[no] key-chain macsec-psk no-show

## Syntax Description

|                           |            |   |
|---------------------------|------------|---|
| <b>Syntax Description</b> | no         | (Optional) Negate a command or set its defaults |
|                           | key-chain  | Keychain Management                             |
|                           | macsec-psk | Macsec Pre-shared key                           |
|                           | no-show    | do not show                                     |

## Command Mode

- /exec/configure

# key-octet-string 7 cryptographic-algorithm AES\_128\_CMAC

```
{ key-octet-string 7 <keystring> cryptographic-algorithm AES_128_CMAC }
```

## Syntax Description

| Syntax Description      |  |  |
|-------------------------|--|--|
| key-octet-string        |  | Set key octet string                     |
| 7                       |  | Encryption Type - Proprietary            |
| <i>keystring</i>        |  | key octet string                         |
| cryptographic-algorithm |  | Select CMAC algorithm for authentication |
| AES_128_CMAC            |  | cryptographic-algorithm AES-128-CMAC     |

## Command Mode

- /exec/configure/macseckeychain-key

# key-octet-string 7 cryptographic-algorithm AES\_256\_CMAC

```
{ key-octet-string 7 <keystring> cryptographic-algorithm AES_256_CMAC }
```

## Syntax Description

| Syntax Description      |  |  |
|-------------------------|--|--|
| key-octet-string        |  | Set key octet string                     |
| 7                       |  | Encryption Type - Proprietary            |
| <i>keystring</i>        |  | key octet string                         |
| cryptographic-algorithm |  | Select CMAC algorithm for authentication |
| AES_256_CMAC            |  | cryptographic-algorithm AES-256-CMAC     |

## Command Mode

- /exec/configure/macseckeychain-key

# key-octet-string cryptographic-algorithm AES\_128\_CMAC

```
{ key-octet-string [ 0 ] <keystring> cryptographic-algorithm AES_128_CMAC | no key-octet-string [ 0 ]
<keystring> cryptographic-algorithm AES_128_CMAC }
```

## Syntax Description

| Syntax Description      |  |   |
|-------------------------|--|---|
| no                      |  | Negate a command or set its defaults                |
| key-octet-string        |  | Set key octet string                                |
| 0                       |  | (Optional) Encryption Type - No Encryption(default) |
| <i>keystring</i>        |  | key octet string                                    |
| cryptographic-algorithm |  | Select CMAC algorithm for authentication            |
| AES_128_CMAC            |  | cryptographic-algorithm AES-128-CMAC                |

## Command Mode

- /exec/configure/macseckeychain-key

## key-octet-string cryptographic-algorithm AES\_256\_CMAC

```
{ key-octet-string [ 0 ] <keystring> cryptographic-algorithm AES_256_CMAC | no key-octet-string [ 0 ]
<keystring> cryptographic-algorithm AES_256_CMAC }
```

### Syntax Description

| Syntax Description      |  |   |
|-------------------------|--|---|
| no                      |  | Negate a command or set its defaults                |
| key-octet-string        |  | Set key octet string                                |
| 0                       |  | (Optional) Encryption Type - No Encryption(default) |
| <i>keystring</i>        |  | key octet string                                    |
| cryptographic-algorithm |  | Select CMAC algorithm for authentication            |
| AES_256_CMAC            |  | cryptographic-algorithm AES-256-CMAC                |

### Command Mode

- /exec/configure/macseckeychain-key



# key-server-priority

[no] key-server-priority <pri>

## Syntax Description

| Syntax Description  |                               |
|---------------------|-------------------------------|
| key-server-priority | Configure Key-Server priority |
| <i>pri</i>          | key-server priority value     |

## Command Mode

- /exec/configure/macsec-policy

# key-string

```
{ key-string [ 0 ] <keystring> | no key-string }
```

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | Negate a command or set its defaults                |
| key-string         | Set key string                                      |
| 0                  | (Optional) Encryption Type - No Encryption(default) |
| <i>keystring</i>   | key string  |

## Command Mode

- /exec/configure/keychain-key

# key-string 7

```
{ key-string 7 <keystring> }
```

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | <i>key-string</i> Set key string       |
|                           | <i>7</i> Encryption Type - Proprietary |
|                           | <i>keystring</i> key string            |

## Command Mode

- /exec/configure/keychain-key

# key

[no] key <keyid>

## Syntax Description

---

|                           |    |   |
|---------------------------|----|---|
| <b>Syntax Description</b> | no | (Optional) Negate a command or set its defaults |
|---------------------------|----|---|

---

|  |     |                 |
|--|-----|-----------------|
|  | key | Configure a key |
|--|-----|-----------------|

---

|  |              |                |
|--|--------------|----------------|
|  | <i>keyid</i> | Key identifier |
|--|--------------|----------------|

---

## Command Mode

- /exec/configure/keychain

# key

[no] key <macsec\_keyid>

## Syntax Description

| Syntax Description  |  |
|---------------------|--|
| no                  | (Optional) Negate a command or set its defaults  |
| key                 | Configure a macsec key                           |
| <i>macsec_keyid</i> | MACsec Key identifier ranging from 1 octet to 32 |

## Command Mode

- /exec/configure/macseckeychain

# key chain

[no] key chain <keychain>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| key                | Key Management                                  |
| chain              | Keychain Management                             |
| <i>keychain</i>    | key-chain name                                  |

## Command Mode

- /exec/configure

# key chain macsec

[no] key chain <keychain> macsec

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| key                | Key Management                                  |
| chain              | Keychain Management                             |
| <i>keychain</i>    | macsec key-chain name                           |
| macsec             | Macsec Keychain                                 |

## Command Mode

- /exec/configure

## key config-key hex

[no] key config-key { hex | ascii } [ <master-key> ]

### Syntax Description

| Syntax Description |            |   |
|--------------------|------------|---|
| no                 | (Optional) | Negate a command or set its defaults                  |
| key                |            | Encryption key for strong encryption                  |
| config-key         |            | Master-key for strong encryption of secrets in config |
| hex                |            | Key followed should be in hex format                  |
| ascii              |            | Key followed should be in ascii format                |
| <i>master-key</i>  | (Optional) | Enter the Master-key                                  |

### Command Mode

- /exec



# kill-everyone

[no] [ eigrp ] kill-everyone

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| eigrp              | (Optional) EIGRP router configuration commands  |
| kill-everyone      | Kill all adjacencies on SIA                     |

## Command Mode

- /exec/configure/router-eigrp/router-eigrp-vrf-common /exec/configure/router-eigrp/router-eigrp-af-common

# kill background

kill background <pid>

## Syntax Description

---

### Syntax Description

---

|      |                     |
|------|---------------------|
| kill | terminate processes |
|------|---------------------|

---

|            |   |
|------------|---|
| background | kill background processes (started with 'source background <file>' command) |
|------------|---|

---

|            |  |
|------------|--|
| <i>pid</i> | background script to terminate, by process-id or just a regex matching any line from 'show background' command |
|------------|--|

---

## Command Mode

- /exec

# kubernetes server ip-address port

[no] kubernetes server ip-address <ip-addr> port <s0> [ vrf <vrf-name> ] | no kubernetes server

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| kubernetes         | kubernetes                                      |
| server             | kubernetes server                               |
| ip-address         | IP address of the kubernetes host               |
| <i>ip-addr</i>     | ip address of kubernetes Host                   |
| port               | Port number of the host                         |
| <i>s0</i>          | port number                                     |
| vrf                | (Optional) Display per-VRF information          |
| <i>vrf-name</i>    | (Optional) VRF name                             |

## Command Mode

- /exec/configure





## L Commands

---

- [l2rib dup-host-mac-detection](#), on page 2377
- [l2rib dup-host-mac-recovery](#), on page 2378
- [l2rib event-history size](#), on page 2379
- [l3-device-group](#), on page 2380
- [l3vm event-history](#), on page 2381
- [label-allocation-mode per-vrf](#), on page 2382
- [label allocate global](#), on page 2383
- [lacp fast-select-hot-standby](#), on page 2384
- [lacp mode delay](#), on page 2385
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- [lacp rapid-transition](#), on page 2387
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- [license grace-period days](#), on page 2407
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- [limit-resource m4route-mem maximum equal-to-min](#), on page 2411
- [limit-resource m6route-mem maximum](#), on page 2412
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- [limit-resource monitor-session-erspan-dst minimum maximum equal-to-min](#), on page 2414
- [limit-resource monitor-session-inband-src minimum maximum equal-to-min](#), on page 2415
- [limit-resource monitor-session minimum maximum equal-to-min](#), on page 2416
- [limit-resource port-channel minimum maximum](#), on page 2417
- [limit-resource u4route-mem maximum equal-to-min](#), on page 2418
- [limit-resource u6route-mem maximum equal-to-min](#), on page 2419
- [limit-resource vlan minimum maximum equal-to-min](#), on page 2420
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- [line console](#), on page 2422
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- [lisp ddt map-server-peer eid-prefix](#), on page 2433
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## l2rib dup-host-mac-detection

{ no l2rib dup-host-mac-detection } | { l2rib dup-host-mac-detection <num-of-moves> <duration> }

### Syntax Description

| Syntax Description     |  |  |
|------------------------|--|--|
| no                     |  | Negate a command or set its defaults               |
| l2rib                  |  | Layer 2 routing information base                   |
| dup-host-mac-detection |  | Set Duplicate-Host-MAC-Detection parameters        |
| <i>num-of-moves</i>    |  | Number of host moves to be allowed                 |
| <i>duration</i>        |  | Duplicate detection timeout in secs for host moves |

### Command Mode

- /exec/configure

## l2rib dup-host-mac-recovery

{ no l2rib dup-host-mac-recovery } | { l2rib dup-host-mac-recovery <timeout> <retry-count> }

### Syntax Description

| Syntax Description    |  |   |
|-----------------------|--|---|
| no                    |  | Negate a command or set its defaults                  |
| l2rib                 |  | Layer 2 routing information base                      |
| dup-host-mac-recovery |  | Set Duplicate-Host-MAC-Recovery (Unfreeze) parameters |
| <i>timeout</i>        |  | Unfreeze timeout (secs)                               |
| <i>retry-count</i>    |  | Unfreeze retry count                                  |

### Command Mode

- /exec/configure

## l2rib event-history size

```
l2rib event-history { client-tbl | ead-pl | errors | mac | mac-ip | misc-obj | rmac | topology | tx-infra | server }
size { default | medium | high | very-high }
```

### Syntax Description

#### Syntax Description

|               |  |
|---------------|--|
| l2rib         | Layer 2 routing information base   |
| event-history | Set event-history size for L2RIB   |
| client-tbl    | L2RIB Client, Producer, Consumer Tables Event Logs                             |
| ead-pl        | L2RIB EAD, Path-List Objects Event Logs  |
| errors        | L2RIB Error Logs   |
| mac           | L2RIB MAC Object Event Logs  |
| mac-ip        | L2RIB MAC Object Event Logs  |
| misc-obj      | L2RIB IMET, Flood-List, ARP-Signal, Peer ID, Startup-Routes Objects Event Logs |
| rmac          | L2RIB Router MAC Object Event Logs   |
| topology      | L2RIB Topology Object Event Logs   |
| tx-infra      | L2RIB TxList, TxSend, TxThread Event Logs                                      |
| server        | L2RIB Sysmgr, PSS, HA Logs   |
| size          | Size   |
| default       | Default (Low)  |
| medium        | Medium   |
| high          | High   |
| very-high     | Very High  |

### Command Mode

- /exec/configure

# l3-device-group

{ l3-device-group <name> } | { no l3-device-group <name> }

## Syntax Description

|                           |                 |                                      |
|---------------------------|-----------------|--------------------------------------|
| <b>Syntax Description</b> | no              | Negate a command or set its defaults |
|                           | l3-device-group | PLB L3 device group                  |
|                           | <i>name</i>     | PLB L3 device group name             |

## Command Mode

- /exec/configure/plb



# l3vm event-history

```
[no] l3vm event-history { pss | errors | mts | reinit | cli | vrf | topology } { size { <size_in_text> | <size_in_Kbytes> } }
```

## Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| l3vm                  | Debug L3VM information                          |  |
| event-history         | log debug events into event history buffer      |  |
| pss                   | L3VM pss operation                              |  |
| errors                | L3VM errors                                     |  |
| mts                   | L3VM MTS messages                               |  |
| reinit                | L3VM reinit events                              |  |
| cli                   | Log L3VM CLI related events                     |  |
| vrf                   | Log VRF related events                          |  |
| topology              | Log Topology related events                     |  |
| size                  | Configure the size of the event-hist buffer     |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_Kbytes</i> | Size of the file in kbytes                      |  |

## Command Mode

- /exec

# label-allocation-mode per-vrf

[no] label-allocation-mode per-vrf

## Syntax Description

| Syntax Description    |   |
|-----------------------|---|
| no                    | (Optional) Negate a command or set its defaults |
| label-allocation-mode | Configure label allocation mode                 |
| per-vrf               | per VRF label allocation mode                   |

## Command Mode

- /exec/configure/router-bgp/router-bgp-vrf-af-ipv4 /exec/configure/router-bgp/router-bgp-vrf-af-ipv6 /exec/configure/router-bgp/router-bgp-af-ipv6 /exec/configure/router-bgp/router-bgp-af-ipv4

# label allocate global

[no] label allocate global { all-routes | host-routes | prefix-list <px-list> }

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults      |
| label              | LDP label configuration                              |
| allocate           | Allocate local labels                                |
| global             | Specify default VPN Routing/Forwarding instance      |
| all-routes         | Allocate local labels for all routes                 |
| host-routes        | Allocate local labels for host routes only (default) |
| prefix-list        | Specify a prefix-list for local label filtering      |
| <i>px-list</i>     | IP prefix-list for destination prefixes              |

## Command Mode

- /exec/configure/ldp

# lacp fast-select-hot-standby

lacp fast-select-hot-standby | no lacp fast-select-hot-standby

## Syntax Description

---

### Syntax Description

|                         |   |
|-------------------------|---|
| no                      | Negate a command or set its defaults  |
| lacp                    | Set LACP parameters for the interface   |
| fast-select-hot-standby | Configure fast select for hot standby ports. Enabling this feature will allow fast selection of hot standby port when last active port in the port-channel is going down. |

---

## Command Mode

- /exec/configure/if-eth-port-channel-switch /exec/configure/if-eth-port-channel /exec/configure/if-eth-port-channel-p2p

# lacp mode delay

[no] lacp mode delay

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <code>no</code> (Optional) Negate a command or set its defaults |
|                           | <code>lacp</code> Set LACP parameters for the interface         |
|                           | <code>mode</code> Enter the LACP mode                           |
|                           | <code>delay</code> Configure delayed lacp on the port-channel   |

## Command Mode

- /exec/configure/if-eth-port-channel-switch /exec/configure/if-eth-port-channel /exec/configure/if-eth-port-channel-p2p

# lacp port-priority

lacp port-priority <port-pri> | no lacp port-priority

## Syntax Description

| Syntax Description |  |                                       |
|--------------------|--|---------------------------------------|
| no                 |  | Negate a command or set its defaults  |
| lacp               |  | Set LACP parameters for the interface |
| port-priority      |  | Set LACP port priority                |
| <i>port-pri</i>    |  | Enter port priority                   |

## Command Mode

- /exec/configure/if-eth-base /exec/configure/if-ethernet-all

# lacp rapid-transition

lacp rapid-transition | no lacp rapid-transition

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults                             |
| lacp               |  | Set LACP parameters for the interface                            |
| rapid-transition   |  | Optimizes LACP timers for rapid transition from P->I, I->P state |

## Command Mode

- /exec/configure

# lacp rate

lacp rate <rate\_type>

## Syntax Description

---

### Syntax Description

---

|                  |   |
|------------------|---|
| lacp             | Set LACP parameters for the interface         |
| rate             | Configure rate at which PDUs are sent by LACP |
| <i>rate_type</i> | Rate type                                     |

---

## Command Mode

- /exec/configure/if-ethernet /exec/configure/if-ethernet-switch /exec/configure/if-ethernet-all /exec/configure/if-ethernet-m /exec/configure/if-ethernet-switch-m /exec/configure/if-remote-ethernet /exec/configure/if-remote-ethernet-switch



# lacp rate

[no] lacp rate

## Syntax Description

---

### Syntax Description

---

**no** Negate a command or set its defaults

---

**lp** Set LACP parameters for the interface

---

**rate** Configure rate at which PDUs are sent by LACP

---

## Command Mode

- /exec/configure/if-ethernet /exec/configure/if-ethernet-switch /exec/configure/if-ethernet-all /exec/configure/if-ethernet-m /exec/configure/if-ethernet-switch-m /exec/configure/if-remote-ethernet /exec/configure/if-remote-ethernet-switch

# lacp system-priority

lacp system-priority <sys-pri> | no lacp system-priority

## Syntax Description

| Syntax Description |  |                                       |
|--------------------|--|---------------------------------------|
| no                 |  | Negate a command or set its defaults  |
| lacp               |  | Set LACP parameters for the interface |
| system-priority    |  | Set LACP system priority              |
| <i>sys-pri</i>     |  | Enter System Priority                 |

## Command Mode

- /exec/configure

# last

| last [ <lines> ]

## Syntax Description

---

### Syntax Description

---

| Pipe command output to filter

---

last Display last lines

---

*lines* (Optional) number of lines to print

---

## Command Mode

- /output

# layer2-switched flow monitor input

[no] layer2-switched flow monitor <monitorname> input [ sampler <samplername> ]

## Syntax Description

### Syntax Description

|                    |   |
|--------------------|---|
| layer2-switched    | Configure L2 features                                     |
| flow               | NetFlow related commands                                  |
| monitor            | Apply a Flow Monitor to this interface                    |
| <i>monitorname</i> | Name of Flow Monitor                                      |
| input              | Apply Flow Monitor on input traffic                       |
| sampler            | (Optional) Optional Sampler to apply to this Flow Monitor |
| <i>samplername</i> | (Optional) Name of Sampler                                |

## Command Mode

- /exec/configure/if-switching

# layer3 peer-router

layer3 peer-router | no layer3 peer-router

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | Negate a command or set its defaults              |
| layer3             | Enable layer 3 functionality                      |
| peer-router        | no change for TTL of packets destined to the peer |

## Command Mode

- /exec/configure/vpc-domain

## layer3 peer-router syslog

layer3 peer-router syslog [ interval <syslog-interval> ] | no layer3 peer-router syslog

### Syntax Description

#### Syntax Description

|                        |   |
|------------------------|---|
| no                     | Negate a command or set its defaults              |
| layer3                 | Enable layer 3 functionality                      |
| peer-router            | no change for TTL of packets destined to the peer |
| syslog                 | print layer 3 protocol syslog                     |
| interval               | (Optional) how frequent to print the syslog       |
| <i>syslog-interval</i> | (Optional) how many seconds to print a syslog     |

### Command Mode

- /exec/configure/vpc-domain

# ldap-search-map

[no] ldap-search-map

## Syntax Description

---

### Syntax Description

---

|    |                                      |
|----|--------------------------------------|
| no | Negate a command or set its defaults |
|----|--------------------------------------|

---

|                 |  |
|-----------------|--|
| ldap-search-map | Set one of the configured search-map as active |
|-----------------|--|

---

## Command Mode

- /exec/configure/ldap

# ldap-search-map

ldap-search-map <s0>

## Syntax Description

---

### Syntax Description

ldap-search-map Set one of the configured search-map as active

---

*s0* Name of the search-map

---

## Command Mode

- /exec/configure/ldap



# ldap-server deadtime

[no] ldap-server deadtime <i0>

## Syntax Description

|                           |             |   |
|---------------------------|-------------|---|
| <b>Syntax Description</b> | no          | (Optional) Negate a command or set its defaults                   |
|                           | ldap-server | Configure LDAP related parameters                                 |
|                           | deadtime    | Global LDAP server deadtime period in seconds                     |
|                           | i0          | LDAP server deadtime period in minutes (default 0 mins -disabled) |

## Command Mode

- /exec/configure

# ldap-server host

```
[no] ldap-server host { <hostname> } [ { enable-ssl | port <i1> [ timeout <i2> ] | rootDN <s0> [ password
{ 7 <s1> { { [ port1 <i3> [ timeout1 <i4> ] } } | [ timeout5 <i9> ] } } | <s2> { { [ port2 <i5> [ timeout2 <i6>
] } } | [ timeout4 <i8> ] } } } | timeout3 <i7> } ]
```

## Syntax Description

### Syntax Description

|                 |  |
|-----------------|--|
| no              | (Optional) Negate a command or set its defaults                    |
| ldap-server     | Configure LDAP related parameters                                  |
| host            | LDAP server's DNS name or IP address                               |
| <i>hostname</i> | IPV4/IPV6 address or DNS name                                      |
| enable-ssl      | (Optional) LDAP server enable ssl                                  |
| port            | (Optional) LDAP server's port (default: global config)             |
| <i>i1</i>       | (Optional) port number   |
| timeout         | (Optional) LDAP server timeout period in seconds                   |
| <i>i2</i>       | (Optional) LDAP server timeout in seconds (default: global config) |
| rootDN          | (Optional) LDAP server root DN                                     |
| <i>s0</i>       | (Optional) root DN   |
| password        | (Optional) LDAP server root password                               |
| 7               | (Optional) LDAP root password (encrypted)                          |
| <i>s1</i>       | (Optional) password (encrypted)                                    |
| port1           | (Optional) LDAP server's port (default: global config)             |
| <i>i3</i>       | (Optional) port number   |
| timeout1        | (Optional) LDAP server timeout period in seconds                   |
| <i>i4</i>       | (Optional) LDAP server timeout in seconds (default: global config) |
| <i>s2</i>       | (Optional) password (clear text)                                   |
| port2           | (Optional) LDAP server's port (default: global config)             |
| <i>i5</i>       | (Optional) port number   |
| timeout2        | (Optional) LDAP server timeout period in seconds                   |
| <i>i6</i>       | (Optional) LDAP server timeout in seconds (default: global config) |
| timeout3        | (Optional) LDAP server timeout period in seconds                   |

---

|           |  |
|-----------|--|
| <i>i7</i> | (Optional) LDAP server timeout in seconds (default: global config) |
| timeout4  | (Optional) LDAP server timeout period in seconds                   |
| <i>i8</i> | (Optional) LDAP server timeout in seconds (default: global config) |
| timeout5  | (Optional) LDAP server timeout period in seconds                   |
| <i>i9</i> | (Optional) LDAP server timeout in seconds (default: global config) |

**Command Mode**

- /exec/configure

# ldap-server host test rootDN

```
[no] ldap-server host { <hostipname> } test rootDN <r1> { { [ username <s0> { [ password { [ 7 <s2> | <s1> ] } [ idle-time <i1> ] ] } | [ idle-time <i1> ] } ] } | { [ password { [ 7 <s2> | <s1> ] } [ idle-time <i1> ] ] } | { [ idle-time <i1> ] } }
```

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| <i>username</i>    | (Optional) <s0>                                    |
| no                 | (Optional) Negate a command or set its defaults    |
| ldap-server        | Configure LDAP related parameters                  |
| host               | LDAP server's IP address                           |
| <i>hostipname</i>  | IPV4/IPV6 address or DNS name                      |
| test               | Parameters to send test packets                    |
| 7                  | (Optional) LDAP test password (encrypted)          |
| <i>s0</i>          | (Optional) user name                               |
| password           | (Optional) user password in test packets           |
| <i>s1</i>          | (Optional) test password                           |
| <i>s2</i>          | (Optional) test password (encrypted)               |
| rootDN             | rootDN in test packets                             |
| <i>r1</i>          | root DN  |
| idle-time          | (Optional) time interval for monitoring the server |
| <i>i1</i>          | (Optional) time period in minutes                  |

## Command Mode

- /exec/configure

# ldap-server port

[no] ldap-server port <i0>

## Syntax Description

|                           |             |   |
|---------------------------|-------------|---|
| <b>Syntax Description</b> | no          | (Optional) Negate a command or set its defaults |
|                           | ldap-server | Configure LDAP related parameters               |
|                           | port        | Global LDAP server's port (default 389)         |
|                           | <i>i0</i>   | port number                                     |

## Command Mode

- /exec/configure

# ldap-server timeout

[no] ldap-server timeout <i0>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults       |
| ldap-server        | Configure LDAP related parameters                     |
| timeout            | Global LDAP server timeout period in seconds          |
| <i>i0</i>          | LDAP server timeout period in seconds (default 5 sec) |

## Command Mode

- /exec/configure

# ldap search-map

[no] ldap search-map <s0>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ldap               | Configure information about ldap                |
| search-map         | Configure the search-map                        |
| s0                 | Search Map Name                                 |

## Command Mode

- /exec/configure

# less

| less [ -d | -E ] +

## Syntax Description

---

### Syntax Description

---

| Pipe command output to filter

---

ks Filter for paging

---

-d (Optional) dumb terminal

---

-E (Optional) quit at end of file

---

## Command Mode

- /output



# license expiry check\_interval

license expiry check\_interval <i0>

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| license            |  | Enter the license configuration mode                 |
| expiry             |  | Configure the expiry check interval                  |
| check_interval     |  | Configure the expiry check interval                  |
| <i>i0</i>          |  | Specify the license expiry check interval in seconds |

## Command Mode

- /exec

# license grace-period

[no] license grace-period

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| license            | Modify license features                         |
| grace-period       | Configure grace period support for licenses     |

## Command Mode

- /exec/configure

# license grace-period days

license grace-period days <i0>

## Syntax Description

| Syntax Description |                                      |  |
|--------------------|--------------------------------------|--|
| license            | Enter the license configuration mode |  |
| grace-period       | Configure the grace period           |  |
| days               | Configure the grace period in days   |  |
| <i>i0</i>          | Number of days                       |  |

## Command Mode

- /exec

# license grace-period seconds

license grace-period seconds <i0>

## Syntax Description

| Syntax Description |                                       |  |
|--------------------|---------------------------------------|--|
| license            | Enter license configuration mode      |  |
| grace-period       | Configure the grace period            |  |
| seconds            | Configure the grace period in seconds |  |
| <i>i0</i>          | Specify the grace period in seconds   |  |

## Command Mode

- /exec

# license grace period

license grace period <*i0*>

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | license Enter the license configuration mode |
|                           | grace Configure the grace period             |
|                           | period Specify the grace period in days      |
|                           | <i>i0</i>                                    |

## Command Mode

- /exec

# license reserve count package module

[no] license reserve count <i0> package <license-feature> module <i1>

## Syntax Description

| Syntax Description |                        |   |
|--------------------|------------------------|---|
|                    | no                     | (Optional) Negate a command or set its defaults |
|                    | license                | Display licensing information                   |
|                    | reserve                | Reserve the licenses for the specified module   |
|                    | count                  | Count of licenses to reserve                    |
|                    | <i>i0</i>              | Count of licenses                               |
|                    | package                | Name of the license package to reserve          |
|                    | <i>license-feature</i> | Name of the license package                     |
|                    | module                 | Module number                                   |
|                    | <i>i1</i>              | Module number                                   |

## Command Mode

- /exec/configure

## limit-resource m4route-mem maximum equal-to-min

```
{ limit-resource m4route-mem [ minimum { <min> | <min-hi> } ] maximum { <max-lo> | <max> | <max-hi>
| equal-to-min } } | { no limit-resource m4route-mem [ [ minimum { <min> | <min-hi> } ] maximum {
<max-lo> | <max> | <max-hi> | equal-to-min } ] }
```

### Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults        |
| limit-resource     |  | Resource configuration                      |
| m4route-mem        |  | set ipv4 route memory limits                |
| minimum            |  | (Optional) minimum route memory to allocate |
| <i>min</i>         |  | (Optional) minimum route memory value       |
| <i>min-hi</i>      |  | (Optional) minimum route memory value       |
| maximum            |  | maximum route memory to allocate            |
| <i>max-lo</i>      |  | maximum route memory value                  |
| <i>max</i>         |  | maximum route memory value                  |
| <i>max-hi</i>      |  | maximum route memory value                  |
| equal-to-min       |  | maximum value equal to min                  |

### Command Mode

- /exec/configure/vdc-template /exec/configure/vdc

## limit-resource m6route-mem maximum

```
{ limit-resource m6route-mem [ minimum { <min> | <min-hi> } ] maximum { <max-lo> | <max> | <max-hi>
} } | { no limit-resource m6route-mem [ [ minimum { <min> | <min-hi> } ] maximum { <max-lo> | <max>
| <max-hi> } ] }
```

### Syntax Description

#### Syntax Description

|                |   |
|----------------|---|
| no             | Negate a command or set its defaults        |
| limit-resource | Resource configuration                      |
| m6route-mem    | set ipv6 route memory limits                |
| minimum        | (Optional) minimum route memory to allocate |
| <i>min</i>     | (Optional) minimum route memory value       |
| <i>min-hi</i>  | (Optional) minimum route memory value       |
| maximum        | maximum route memory to allocate            |
| <i>max-lo</i>  | maximum route memory value                  |
| <i>max</i>     | maximum route memory value                  |
| <i>max-hi</i>  | maximum route memory value                  |

### Command Mode

- /exec/configure/vdc-template /exec/configure/vdc



# limit-resource module-type

{ limit-resource module-type <card-type> + } | { no limit-resource module-type }

## Syntax Description

|                           |                  |  |
|---------------------------|------------------|--|
| <b>Syntax Description</b> | no               | Negate a command or set its defaults                   |
|                           | limit-resource   | Resource configuration                                 |
|                           | module-type      | Controls which type of modules are allowed in this vdc |
|                           | <i>card-type</i> | Allowed module types                                   |

## Command Mode

- /exec/configure/vdc

# limit-resource monitor-session-erspan-dst minimum maximum equal-to-min

```
{ limit-resource monitor-session-erspan-dst minimum <min-val> maximum { <max-val> | equal-to-min } }
| { no limit-resource monitor-session-erspan-dst [ minimum <min-val> maximum { <max-val> | equal-to-min
} ] }
```

## Syntax Description

### Syntax Description

|                            |  |
|----------------------------|--|
| limit-resource             | Resource configuration                         |
| monitor-session-erspan-dst | Monitor erspan destination session             |
| minimum                    | minimum monitor erspan-dst session to allocate |
| <i>min-val</i>             | minimum monitor erspan-dst session value       |
| maximum                    | maximum monitor erspan-dst session to allocate |
| <i>max-val</i>             | maximum monitor erspan-dst session value       |
| equal-to-min               | set maximum value equal to min                 |

## Command Mode

- /exec/configure/vdc-template /exec/configure/vdc

# limit-resource monitor-session-inband-src minimum maximum equal-to-min

```
{ limit-resource monitor-session-inband-src minimum <min-val> maximum { <max-val> | equal-to-min } }
| { no limit-resource monitor-session-inband-src [ minimum <min-val> maximum { <max-val> | equal-to-min
} ] }
```

## Syntax Description

### Syntax Description

|                            |   |
|----------------------------|---|
| limit-resource             | Resource configuration                    |
| monitor-session-inband-src | Monitor inband source                     |
| minimum                    | minimum monitor inband source to allocate |
| <i>min-val</i>             | minimum monitor inband source value       |
| maximum                    | maximum monitor inband source to allocate |
| <i>max-val</i>             | maximum monitor inband source value       |
| equal-to-min               | set maximum value equal to min            |

## Command Mode

- /exec/configure/vdc-template /exec/configure/vdc

# limit-resource monitor-session minimum maximum equal-to-min

```
{ limit-resource monitor-session minimum <min-val> maximum { <max-val> | equal-to-min } } | { no
limit-resource monitor-session [ minimum <min-val> maximum { <max-val> | equal-to-min } ] }
```

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| limit-resource     | Resource configuration                    |
| monitor-session    | Monitor local/erspan-source session       |
| minimum            | minimum monitor local session to allocate |
| <i>min-val</i>     | minimum monitor local session value       |
| maximum            | maximum monitor local session to allocate |
| <i>max-val</i>     | maximum monitor local session value       |
| equal-to-min       | set maximum value equal to min            |

## Command Mode

- /exec/configure/vdc-template /exec/configure/vdc

## limit-resource port-channel minimum maximum

limit-resource port-channel minimum <min-val> maximum { <max-val> | equal-to-min } | no limit-resource port-channel [ minimum <min-val> maximum { <max-val> | equal-to-min } ]

### Syntax Description

#### Syntax Description

|                |                                      |
|----------------|--------------------------------------|
| no             | Negate a command or set its defaults |
| limit-resource | Resource configuration               |
| port-channel   | set port-channel limits              |
| minimum        | minimum port-channels to allocate    |
| <i>min-val</i> |                                      |
| maximum        | maximum port-channels to allocate    |
| <i>max-val</i> |                                      |
| equal-to-min   | set maximum value equal to min       |

### Command Mode

- /exec/configure/vdc-template /exec/configure/vdc

## limit-resource u4route-mem maximum equal-to-min

```
{ limit-resource u4route-mem [ minimum { <min-lo> | <min> | <min-hi> } ] maximum { <max-lo> | <max>
| <max-hi> | equal-to-min } } | { no limit-resource u4route-mem [ [ minimum { <min-lo> | <min> | <min-hi>
} ] maximum { <max-lo> | <max> | <max-hi> | equal-to-min } ] }
```

### Syntax Description

#### Syntax Description

|                |   |
|----------------|---|
| no             | Negate a command or set its defaults        |
| limit-resource | Resource configuration                      |
| u4route-mem    | set ipv4 route memory limits                |
| minimum        | (Optional) minimum route memory to allocate |
| <i>min-lo</i>  | (Optional) minimum route memory value       |
| <i>min</i>     | (Optional) minimum route memory value       |
| <i>min-hi</i>  | (Optional) minimum route memory value       |
| maximum        | maximum route memory to allocate            |
| <i>max-lo</i>  | maximum route memory value                  |
| <i>max</i>     | maximum route memory value                  |
| <i>max-hi</i>  | maximum route memory value                  |
| equal-to-min   | maximum value equal to min                  |

### Command Mode

- /exec/configure/vdc-template /exec/configure/vdc

## limit-resource u6route-mem maximum equal-to-min

```
{ limit-resource u6route-mem [ minimum { <min-lo> | <min> | <min-hi> } ] maximum { <max-lo> | <max>
| <max-hi> | equal-to-min } } | { no limit-resource u6route-mem [ [ minimum { <min-lo> | <min> | <min-hi>
} ] maximum { <max-lo> | <max> | <max-hi> | equal-to-min } ] }
```

### Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | Negate a command or set its defaults        |
| limit-resource     | Resource configuration                      |
| u6route-mem        | set ipv6 route memory limits                |
| minimum            | (Optional) minimum route memory to allocate |
| <i>min-lo</i>      | (Optional) minimum route memory value       |
| <i>min</i>         | (Optional) minimum route memory value       |
| <i>min</i>         | (Optional) minimum route memory value       |
| <i>min-hi</i>      | (Optional) minimum route memory value       |
| maximum            | maximum route memory to allocate            |
| <i>max-lo</i>      | maximum route memory value                  |
| <i>max</i>         | maximum route memory value                  |
| <i>max-hi</i>      | maximum route memory value                  |
| equal-to-min       | maximum value equal to min                  |

### Command Mode

- /exec/configure/vdc-template /exec/configure/vdc

## limit-resource vlan minimum maximum equal-to-min

{ limit-resource vlan minimum <min-val> maximum { <max-val> | equal-to-min } } | { no limit-resource vlan [ minimum <min-val> maximum { <max-val> | equal-to-min } ] }

### Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| limit-resource     |  | Resource configuration               |
| vlan               |  | set VLAN limits                      |
| minimum            |  | minimum VLANs to allocate            |
| <i>min-val</i>     |  | minimum VLANs value                  |
| maximum            |  | maximum VLANs to allocate            |
| <i>max-val</i>     |  | maximum VLANs value                  |
| equal-to-min       |  | set maximum value equal to min       |

### Command Mode

- /exec/configure/vdc-template /exec/configure/vdc



# limit-resource vrf minimum maximum equal-to-min

```
{ limit-resource vrf minimum <number1> maximum { <number2> | equal-to-min } } | { no limit-resource vrf [ minimum <number1> maximum { <number2> | equal-to-min } ] }
```

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| limit-resource     |  | Resource configuration               |
| vrf                |  | set vrf resource limits              |
| minimum            |  | minimum vrf resources to allocate    |
| <i>number1</i>     |  | minimum vrf resource value           |
| maximum            |  | maximum vrf resources to allocate    |
| <i>number2</i>     |  | maximum vrf resource value           |
| equal-to-min       |  | set maximum value equal to min       |

## Command Mode

- /exec/configure/vdc-template /exec/configure/vdc

# line console

[no] line console

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| line               | Configure a terminal line                       |
| console            | Primary terminal line                           |

## Command Mode

- /exec/configure

# line console

[no] line console

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| line               | Configure a terminal line                       |
| console            | Primary terminal line                           |

## Command Mode

- /exec/configure

# line vty

line vty

## Syntax Description

---

### Syntax Description

---

**line** Configure a terminal line

---

**vt** Virtual terminal line

---

## Command Mode

- /exec/configure

# line vty

[no] line vty

## Syntax Description

---

### Syntax Description

---

**no** Negate a command or set its defaults

---

**line** Configure a terminal line

---

**vty** Virtual terminal line

---

## Command Mode

- /exec/configure

## link-management timers bandwidth

```
[no] link-management timers { bandwidth-hold | periodic-flooding } | link-management timers { bandwidth-hold
<bw_seconds> | periodic-flooding <flood_seconds> }
```

### Syntax Description

| Syntax Description   |  |  |
|----------------------|--|--|
| no                   |  | Negate a command or set its defaults       |
| link-management      |  | Link Management configuration              |
| timers               |  | Link Management timers configuration       |
| bandwidth-hold       |  | Link Management bandwidth hold timer       |
| <i>bw_seconds</i>    |  | seconds                                    |
| periodic-flooding    |  | Link Management periodic flooding interval |
| <i>flood_seconds</i> |  | seconds [0 to disable, minimum set to 30]  |

### Command Mode

- /exec/configure/te

# link debounce

link debounce [ time <time\_val> ] | no link debounce [ time <time\_val> ]

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 |            | Negate a command or set its defaults |
| link               |            | Configure link                       |
| debounce           |            | Configure link debounce timer        |
| time               | (Optional) | Link debounce time                   |
| <i>time_val</i>    | (Optional) | Timer value (in milliseconds)        |

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-eth-base

# lisp

```
{ lisp-lig | lig } { version | self | self6 | <hostname> | { <eid> | <eid6> } } [ source { <seid> | <seid6> } ] [ to
{ <mr-hostname> | { <mr> | <mr6> } } ] [ count <count> ] [ probe ] [ vrf { <vrf-name> | <vrf-known-name>
} ]
```

## Syntax Description

### Syntax Description

|                       |   |
|-----------------------|---|
| <i>lisp-lig</i>       | LISP Internet Groper  |
| <i>lig</i>            | LISP Internet Groper  |
| <i>eid</i>            | LIG on a IPv4 Endpoint ID (EID)                             |
| <i>version</i>        | Display Internet Draft version lig supports                 |
| <i>self</i>           | Test if IPv4 EID-prefix registered in mapping database      |
| <i>self6</i>          | Test if IPv6 EID-prefix registered in mapping database      |
| <i>hostname</i>       | DNS name for Endpoint ID (EID)                              |
| <i>source</i>         | (Optional) Provide source EID for Map-Request               |
| <i>seid</i>           | (Optional) Source IPv4 Endpoint ID (EID)                    |
| <i>to</i>             | (Optional) Where to send the Map-Request                    |
| <i>mr-hostname</i>    | (Optional) DNS name for Map-Resolver                        |
| <i>mr</i>             | (Optional) Map-Resolver IPv4 address to send Map-Request to |
| <i>count</i>          | (Optional) Map-Requests to send before Map-Reply returned   |
| <i>count</i>          | (Optional) Number of Map-Requests                           |
| <i>probe</i>          | (Optional) RLOC-probe each locator                          |
| <i>vrf</i>            | (Optional) LIGing for specific VRF                          |
| <i>vrf-name</i>       | (Optional) VRF name   |
| <i>vrf-known-name</i> | (Optional) Known VRF name                                   |

## Command Mode

- /exec



# lisp ddt

{ [ no ] lisp ddt }

## Syntax Description

---

### Syntax Description

---

**no** (Optional) Negate a command or set its defaults

---

**lp** LISP global configuration commands

---

**dt** Configures a LISP-DDT mapping system functionality

---

## Command Mode

- /exec/configure /exec/configure/vrf

## lisp ddt authoritative-prefix eid-prefix

```
{ [ no ] lisp ddt authoritative-prefix eid-prefix { <eid-prefix> | <eid-prefix6> } } | { [ no ] lisp ddt
authoritative-prefix instance-id <iid> [ eid-prefix { <eid-prefix> | <eid-prefix6> } ] } | { [ no ] lisp ddt
authoritative-prefix <star> } | { [ no ] lisp ddt authoritative-prefix instance-id { <iidp> | <range> } }
```

### Syntax Description

#### Syntax Description

|                      |  |
|----------------------|--|
| no                   | (Optional) Negate a command or set its defaults              |
| lisp                 | LISP global configuration commands                           |
| ddt                  | Configure LISP-DDT parameters                                |
| authoritative-prefix | Configure EID-prefix this LISP-DDT node is authoritative for |
| instance-id          | Instance ID of VPN for EID-prefix                            |
| <i>iid</i>           | Instance-ID value  |
| star                 | Authoritative prefix on root for all address space           |
| <i>iidp</i>          | Instance-ID in prefix format                                 |
| <i>range</i>         | Instance-ID range in 'x-y' format where y > x                |
| eid-prefix           | Authoritative IPv4 or IPv6 EID-prefix                        |
| <i>eid-prefix</i>    | EID-prefix in IPv4 slash format                              |

### Command Mode

- /exec/configure /exec/configure/vrf

## lisp ddt delegate eid-prefix

```
{ [ no ] lisp ddt delegate { <node> | <node6> } { eid-prefix { <eid-prefix> | <eid-prefix6> } } [ priority
<priority> weight <weight> ] [ public-key <key> ] [ map-server ] } | { [ no ] lisp ddt delegate { <node> |
<node6> } instance-id <iid> [ eid-prefix { <eid-prefix> | <eid-prefix6> } ] [ priority <priority> weight <weight>
] [ public-key <key> ] [ map-server ] } | { [ no ] lisp ddt delegate { <node> | <node6> } instance-id { <iidp>
| <range> } [ priority <priority> weight <weight> ] [ public-key <key> ] [ map-server ] }
```

### Syntax Description

#### Syntax Description

|                    |  |
|--------------------|--|
| <i>no</i>          | (Optional) Negate a command or set its defaults                        |
| <i>lisp</i>        | LISP global configuration commands                                     |
| <i>ddt</i>         | Configure LISP-DDT parameters  |
| <i>delegate</i>    | Configure LISP-DDT child in delegation hierarchy                       |
| <i>node</i>        | IPv4 locator address of DDT node                                       |
| <i>instance-id</i> | Instance ID of VPN for EID-prefix                                      |
| <i>iid</i>         | Instance-ID value  |
| <i>iidp</i>        | Instance-ID in prefix format   |
| <i>range</i>       | Instance-ID range in 'x-y' format where y > x                          |
| <i>eid-prefix</i>  | Child delegation for IPv4 or IPv6 EID-prefix                           |
| <i>eid-prefix</i>  | EID-prefix in IPv4 slash format  |
| <i>priority</i>    | (Optional) Configures which Locators from a set are preferred          |
| <i>priority</i>    | (Optional) Lower priority Locator takes preference                     |
| <i>weight</i>      | (Optional) Traffic load-spreading among Locators                       |
| <i>weight</i>      | (Optional) Specified in a percentage from 0 to 100                     |
| <i>map-server</i>  | (Optional) Child delegate is a Map-Server                              |
| <i>public-key</i>  | (Optional) DDT child's public key this DDT-node supplies for referrals |
| <i>key</i>         | (Optional) RSA public-key  |

### Command Mode

- /exec/configure /exec/configure/vrf

# lisp ddt inherit-referrals

```
{ [ no ] lisp ddt inherit-referrals }
```

## Syntax Description

| Syntax Description |                   |   |
|--------------------|-------------------|---|
|                    | no                | (Optional) Negate a command or set its defaults   |
|                    | lisp              | LISP global configuration commands                |
|                    | ddt               | Configure LISP-DDT parameters                     |
|                    | inherit-referrals | Inherit map-server referrals from parent DDT-node |

## Command Mode

- /exec/configure /exec/configure/vrf

## lisp ddt map-server-peer eid-prefix

```
{ [ no ] lisp ddt map-server-peer { <node> | <node6> } { eid-prefix { <eid-prefix> | <eid-prefix6> } } [ priority <priority> weight <weight> ] [ public-key <key> ] } | { [ no ] lisp ddt map-server-peer { <node> | <node6> } instance-id <iid> [ eid-prefix { <eid-prefix> | <eid-prefix6> } ] [ priority <priority> weight <weight> ] [ public-key <key> ] } | { [ no ] lisp ddt map-server-peer { <node> | <node6> } instance-id { <iidp> | <range> } [ priority <priority> weight <weight> ] [ public-key <key> ] }
```

### Syntax Description

#### Syntax Description

|                        |  |
|------------------------|--|
| <i>no</i>              | (Optional) Negate a command or set its defaults                        |
| <i>lisp</i>            | LISP global configuration commands                                     |
| <i>ddt</i>             | Configure LISP-DDT parameters  |
| <i>map-server-peer</i> | Configure other map-server peers                                       |
| <i>node</i>            | IPv4 locator address of DDT node                                       |
| <i>instance-id</i>     | Instance ID of VPN for EID-prefix                                      |
| <i>iid</i>             | Instance-ID value  |
| <i>iidp</i>            | Instance-ID in prefix format   |
| <i>range</i>           | Instance-ID range in 'x-y' format where y > x                          |
| <i>eid-prefix</i>      | Child delegation for IPv4 or IPv6 EID-prefix                           |
| <i>eid-prefix</i>      | EID-prefix in IPv4 slash format  |
| <i>priority</i>        | (Optional) Configures which Locators from a set are preferred          |
| <i>priority</i>        | (Optional) Lower priority Locator takes preference                     |
| <i>weight</i>          | (Optional) Traffic load-spreading among Locators                       |
| <i>weight</i>          | (Optional) Specified in a percentage from 0 to 100                     |
| <i>public-key</i>      | (Optional) DDT child's public key this DDT-node supplies for referrals |
| <i>key</i>             | (Optional) RSA public-key  |

### Command Mode

- /exec/configure /exec/configure/vrf

# lisp ddt private-key

[no] lisp ddt private-key <key>

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults                   |  |
| lisp               | LISP global configuration commands                                |  |
| ddt                | Configure LISP-DDT parameters                                     |  |
| private-key        | Configures LISP-DDT private-key for signing Map-Referral messages |  |
| key                | RSA private-key   |  |

## Command Mode

- /exec/configure /exec/configure/vrf

# lisp ddt root

[no] lisp ddt root { <root> | <root6> } [ public-key <key> ]

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 | (Optional) Negate a command or set its defaults                      |  |
| lisp               | LISP global configuration commands                                   |  |
| ddt                | Configure LISP-DDT parameters  |  |
| root               | Configure LISP-DDT root of tree in Map-Resolver                      |  |
| root               | IPv4 locator address of DDT root                                     |  |
| public-key         | (Optional) DDT root's public key used to verify signed Map-Referrals |  |
| key                | (Optional) RSA public-key  |  |

## Command Mode

- /exec/configure /exec/configure/vrf

# lisp dont-prime-map-cache

{ [ no ] lisp dont-prime-map-cache }

## Syntax Description

| Syntax Description   |            |  |
|----------------------|------------|--|
| no                   | (Optional) | Negate a command or set its defaults                           |
| lisp                 |            | LISP global configuration commands                             |
| dont-prime-map-cache |            | Do not send Map-Requests for arbitrary EIDs to prime map-cache |

## Command Mode

- /exec/configure /exec/configure/vrf



# lisp dynamic-eid

```
{ [ no ] lisp dynamic-eid <dyn-eid-name> }
```

## Syntax Description

|                           |                     |   |
|---------------------------|---------------------|---|
| <b>Syntax Description</b> | no                  | (Optional) Negate a command or set its defaults |
|                           | lisp                | LISP global configuration commands              |
|                           | dynamic-eid         | Configure dynamic-EIDs for roaming              |
|                           | <i>dyn-eid-name</i> | Name your dynamic-EID                           |

## Command Mode

- /exec/configure

# lisp dynamic-eid

```
{ [ no ] lisp dynamic-eid <dyn-eid-name> }
```

## Syntax Description

|                           |                     |   |
|---------------------------|---------------------|---|
| <b>Syntax Description</b> | no                  | (Optional) Negate a command or set its defaults |
|                           | lisp                | LISP global configuration commands              |
|                           | dynamic-eid         | Configure dynamic-EIDs for roaming              |
|                           | <i>dyn-eid-name</i> | Name your dynamic-EID                           |

## Command Mode

- /exec/configure/vrf

# lisp explicit-locator-path

```
{ [ no ] lisp explicit-locator-path <elp-name> }
```

## Syntax Description

|                           |                       |   |
|---------------------------|-----------------------|---|
| <b>Syntax Description</b> | no                    | (Optional) Negate a command or set its defaults |
|                           | lisp                  | LISP global configuration commands              |
|                           | explicit-locator-path | Configures a LISP Explicit Locator Path (ELP)   |
|                           | <i>elp-name</i>       | Name of LISP ELP                                |

## Command Mode

- /exec/configure

# lisp explicit-locator-path

[no] lisp explicit-locator-path <elp-name>

## Syntax Description

| Syntax Description    |            |   |
|-----------------------|------------|---|
| no                    | (Optional) | Negate a command or set its defaults          |
| lisp                  |            | LISP global configuration commands            |
| explicit-locator-path |            | Configures a LISP Explicit Locator Path (ELP) |
| <i>elp-name</i>       |            | Name of LISP ELP                              |

## Command Mode

- /exec/configure/vrf

# lisp extended-subnet-mode

{ [ no ] lisp extended-subnet-mode }

## Syntax Description

| Syntax Description   |  |
|----------------------|--|
| no                   | (Optional) Negate a command or set its defaults                |
| lisp                 | LISP interface configuration commands                          |
| extended-subnet-mode | Create dynamic-EID state when EIDs reside on their home subnet |

## Command Mode

- /exec/configure/if-igp

# lisp geo-coordinates

[no] lisp geo-coordinates <latitude> <longitude> [ <altitude> ]

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 | (Optional) Negate a command or set its defaults                          |  |
| lisp               | LISP global configuration commands                                       |  |
| geo-coordinates    | Configure Geo Coordinates for this router                                |  |
| <i>latitude</i>    | Latitude in DMS format: 'degree-min-sec-N' or 'degree-min-sec-S'         |  |
| <i>longitude</i>   | Longitude in DMS format: 'degree-min-sec-E' or 'degree-min-sec-W' format |  |
| <i>altitude</i>    | (Optional) Altitude in meters above sea-level                            |  |

## Command Mode

- /exec/configure /exec/configure/vrf

# lisp ignore-smr

[no] lisp ignore-smr

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults       |
| lisp               | LISP global configuration commands                    |
| ignore-smr         | Do not respond to SMRs when no map-cache entry exists |

## Command Mode

- /exec/configure

# lisp instance-id

[no] lisp instance-id <iid>

## Syntax Description

|                           |             |   |
|---------------------------|-------------|---|
| <b>Syntax Description</b> | no          | (Optional) Negate a command or set its defaults |
|                           | lisp        | LISP global configuration commands              |
|                           | instance-id | Configures Instance-ID for global data-mappings |
|                           | <i>iid</i>  | 24-bit instance-ID value                        |

## Command Mode

- /exec/configure /exec/configure/vrf



# lisp internal event-history size

[no] lisp internal event-history <lisp-event-hist> size <size\_in\_text>

## Syntax Description

| Syntax Description     |   |
|------------------------|---|
| no                     | (Optional) Negate a command or set its defaults |
| lisp                   | LISP debug commands                             |
| internal               | LISP internal configuration commands            |
| event-history          | Configure LISP event log                        |
| <i>lisp-event-hist</i> | Configure LISP event log                        |
| size                   | Size of buffer                                  |
| <i>size_in_text</i>    | Buffer size                                     |

## Command Mode

- /exec/configure

## lisp loc-reach-algorithm

```
[no] lisp loc-reach-algorithm { count-tcp | echo-nonce | { rloc-probing [ map-request-on-failure ] } }
```

### Syntax Description

#### Syntax Description

|                        |   |
|------------------------|---|
| no                     | (Optional) Negate a command or set its defaults   |
| lisp                   | LISP global configuration commands  |
| loc-reach-algorithm    | Configure locator reachability algorithm  |
| count-tcp              | Count TCP SYNs and ACKs   |
| echo-nonce             | Request for nonce to echo back in data-plane  |
| rloc-probing           | Probe each high-priority RLOC with Map-Request as last resort   |
| map-request-on-failure | (Optional) Send Map-Request to database mapping system when any RLOC for a map-cache entry becomes RLOC-probing unreachable |

### Command Mode

- /exec/configure /exec/configure/vrf

# lisp merge-registrations site-id

[no] lisp merge-registrations site-id <site-id>

## Syntax Description

| Syntax Description  |   |  |
|---------------------|---|--|
| no                  | (Optional) Negate a command or set its defaults   |  |
| lisp                | LISP global configuration commands                |  |
| merge-registrations | ETRs merge registrations from Map-Notify messages |  |
| site-id             | Configure site-id value for each xTR at site      |  |
| <i>site-id</i>      | Site-ID to group xTRs together                    |  |

## Command Mode

- /exec/configure /exec/configure/vrf

# lisp mobility

[no] lisp mobility <dyn-eid-name>

## Syntax Description

| Syntax Description  |            |   |
|---------------------|------------|---|
| no                  | (Optional) | Negate a command or set its defaults          |
| lisp                |            | LISP interface configuration commands         |
| mobility            |            | Configures to allow EID mobility on interface |
| <i>dyn-eid-name</i> |            | Name of the dynamic-EID to use                |

## Command Mode

- /exec/configure/if-igp

# lisp mobility test-liveness

[no] lisp mobility test-liveness

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults   |
| lisp               | LISP interface configuration commands   |
| mobility           | Configures to allow EID mobility on interface   |
| test-liveness      | Ping discovered dyn-eid hosts on this interface periodically to determine host liveness |

## Command Mode

- /exec/configure/if-igp

# lisp mtu

[no] lisp mtu <mtu>

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

lisp LISP global configuration commands

---

mtu Configure the Max MTU value that LISP path will support

---

*mtu* mtu

---

## Command Mode

- /exec/configure

# lisp security

[no] lisp security [ strong ]

## Syntax Description

|                           |          |  |
|---------------------------|----------|--|
| <b>Syntax Description</b> | no       | (Optional) Negate a command or set its defaults                    |
|                           | lisp     | LISP global configuration commands                                 |
|                           | security | Configure LISP-SEC on ITR or PITR                                  |
|                           | strong   | (Optional) Reject Map-Replies without LISP-SEC signatures included |

## Command Mode

- /exec/configure /exec/configure/vrf

# lisp site

```
{ [ no ] lisp site <site-name> }
```

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| lisp               | LISP global configuration commands              |
| site               | Configures LISP sites in a map-server           |
| <i>site-name</i>   | Name your LISP site                             |

## Command Mode

- /exec/configure



# lisp site

```
{ [ no ] lisp site <site-name> }
```

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| lisp               | LISP global configuration commands              |
| site               | Configures LISP sites in a map-server           |
| <i>site-name</i>   | Name your LISP site                             |

## Command Mode

- /exec/configure/vrf

# lisp smr-local-locators

[no] lisp smr-local-locators

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| lisp               | LISP global configuration commands              |
| smr-local-locators | Send SMR to all locators for in local site      |

## Command Mode

- /exec/configure

# lisp smr-locators

[no] lisp smr-locators

## Syntax Description

---

**Syntax Description**

---

|              |  |
|--------------|--|
| no           | (Optional) Negate a command or set its defaults          |
| lisp         | LISP global configuration commands                       |
| smr-locators | Send SMR to all RLOCs in locator-set for map-cache entry |

---

## Command Mode

- /exec/configure

# lisp to

```
{ lisp-rig | rig } [ instance-id <iid> ] { <hostname> | { <eid> | <eid6> } } to { <ddt-hostname> | { <ddt> | <ddt6> } }
```

## Syntax Description

| Syntax Description  |            |  |
|---------------------|------------|--|
| <i>lisp-rig</i>     |            | LISP-DDT Referral Internet Groper            |
| <i>rig</i>          |            | LISP-DDT Referral Internet Groper            |
| <i>instance-id</i>  | (Optional) | Instance-ID of VPN EID resides in            |
| <i>iid</i>          |            | (Optional) 24-bit instance-ID value          |
| <i>eid</i>          |            | RIG on a IPv4 Endpoint ID (EID)              |
| <i>hostname</i>     |            | DNS name for Endpoint ID (EID)               |
| <i>to</i>           |            | Where to send the Map-Request                |
| <i>ddt-hostname</i> |            | DNS name for DDT-node                        |
| <i>ddt</i>          |            | DDT-node IPv4 address to send Map-Request to |

## Command Mode

- /exec

# list

list [ <index> ]

## Syntax Description

---

### Syntax Description

list Re-list all or part of the explicit path entries

---

*index* (Optional) List starting at entry index number

---

## Command Mode

- /exec/configure/te/expl-path

# list

list

## Syntax Description

---

### Syntax Description

---

✎ Re-list all of the attribute list entries

---

## Command Mode

- /exec/configure/te/lsp-attr

# listobject-boolean not

listobject-boolean <object-id> not

## Syntax Description

|                           |                    |   |
|---------------------------|--------------------|---|
| <b>Syntax Description</b> | listobject-boolean | Configure Object as member of tracking list |
|                           | <i>object-id</i>   | Tracked object                              |
|                           | not                | Negate Up status                            |

## Command Mode

- /exec/configure/tr-list-bool

## listobject-weight weight threshold-weight

```
listobject-weight { <object-id> weight <weight-val> } | threshold-weight { weight-thresh { weightup
<up-weight> [ weightdown <down-weight> ] | weightdown <down-weight> [ weightup <up-weight> ] } } |
no threshold-weight weight-thresh
```

### Syntax Description

#### Syntax Description

|                    |   |
|--------------------|---|
| no                 | Negate a command or set its defaults        |
| listobject-weight  | Configure Object as member of tracking list |
| <i>object-id</i>   | Tracked Object                              |
| weight             | Assign a weight to object                   |
| <i>weight-val</i>  | Assign a weight to object                   |
| threshold-weight   | Threshold parameters                        |
| weight-thresh      | Weight threshold                            |
| weightup           | Up threshold                                |
| <i>up-weight</i>   | Up threshold weight                         |
| weightdown         | (Optional) Down threshold                   |
| <i>down-weight</i> | (Optional) Down threshold weight            |

### Command Mode

- /exec/configure/tr-list-thrw



# listobject

[no] listobject <object-id>

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

listobject Configure Object as member of tracking list

---

*object-id* Tracked Object

---

## Command Mode

- /exec/configure/tr-list-thrw /exec/configure/tr-list-thrp /exec/configure/tr-list-bool

# lldp

[no] lldp { holdtime <i0> | reinit <i1> | timer <i2> | portid-subtype <i3> | tlv-select { management-address | port-description | port-vlan | system-capabilities | system-description | system-name | dcbxp } }

## Syntax Description

| Syntax Description  |   |  |
|---------------------|---|--|
| no                  | (Optional) Negate a command or set its defaults           |  |
| lldp                | Configure global LLDP parameters                          |  |
| holdtime            | Specify the holdtime (in sec) to be sent in packets       |  |
| <i>i0</i>           | holdtime in sec   |  |
| reinit              | Delay (in sec) for LLDP initialisation on any interface   |  |
| <i>i1</i>           | reinit in sec   |  |
| timer               | Specify the rate at which LLDP packets are sent (in sec)  |  |
| <i>i2</i>           | rate of packets in sec                                    |  |
| portid-subtype      | config portid subtype for LLDP TLV and SNMP MIBs          |  |
| <i>i3</i>           | 0: long interface name (default), 1: short interface name |  |
| tlv-select          | Selection of LLDP to send                                 |  |
| management-address  | Management Address TLV                                    |  |
| port-description    | Port Description TLV                                      |  |
| port-vlan           | Port Vlan ID TLV  |  |
| system-capabilities | System Capabilities TLV                                   |  |
| system-description  | System Description TLV                                    |  |
| system-name         | System Name TLV   |  |
| dcbxp               | DCBXP TLVs  |  |

## Command Mode

- /exec/configure

## lldp eee rx\_wake\_time

[no] lldp eee { rx\_wake\_time <i0> | tx\_wake\_time <i1> }

### Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| lldp               | Configure LLDP parameters                       |  |
| eee                | Configure LLDP EEE parameters                   |  |
| rx_wake_time       | Specify the EEE rx wake time                    |  |
| <i>i0</i>          | EEE rx wake time                                |  |
| tx_wake_time       | Specify the EEE tx wake time                    |  |
| <i>i1</i>          | EEE tx wake time                                |  |

### Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-gig-ether-all /exec/configure/if-gig-ether /exec/configure/if-eth-base /exec/configure/if-mgmt-ether

# lldp receive

[no] lldp receive

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| lldp               | Configure Interface LLDP parameters             |
| receive            | Enable LLDP reception on interface              |

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-gig-ether-all /exec/configure/if-gig-ether /exec/configure/if-eth-base /exec/configure/if-mgmt-ether

# lldp tlv-select eee

[no] lldp tlv-select eee

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| lldp               | Configure Interface LLDP parameters             |
| tlv-select         | Configure EEE parameter                         |
| eee                | Enable/Disable LLDP EEE TLV                     |

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-gig-ether-all /exec/configure/if-gig-ether /exec/configure/if-eth-base /exec/configure/if-mgmt-ether

## lldp tlv-select management-address v4

[no] lldp tlv-select management-address { v4 | v6 }

### Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| lldp               |            | Configure global LLDP parameters     |
| tlv-select         |            | Selection of LLDP to send            |
| management-address |            | Management Address TLV               |
| v4                 |            | Management Address TLV v4            |
| v6                 |            | Management Address TLV v6            |

### Command Mode

- /exec/configure

# lldp tlv-set management-address

[no] lldp tlv-set management-address <ip-addr>

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 | (Optional) Negate a command or set its defaults            |  |
| lldp               | Configure Interface LLDP parameters                        |  |
| tlv-set            | LLDP TLV configuration for interface                       |  |
| management-address | Management address to be sent in management-tlv of LLDPDU. |  |
| <i>ip-addr</i>     | IP address in dotted decimal format i.i.i.i                |  |

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-gig-ether-all /exec/configure/if-gig-ether /exec/configure/if-eth-base /exec/configure/if-mgmt-ether

## lldp tlv-set management-address ipv6

[no] lldp tlv-set management-address <ipv6-addr> ipv6

### Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults                       |
| lldp               |            | Configure Interface LLDP parameters                        |
| tlv-set            |            | LLDP TLV configuration for interface                       |
| management-address |            | Management address to be sent in management-tlv of LLDPDU. |
| ipv6               |            | IPV6   |

### Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-gig-ether-all /exec/configure/if-gig-ether /exec/configure/if-eth-base /exec/configure/if-mgmt-ether



# lldp tlv-set vlan

[no] lldp tlv-set vlan [ <vlan-id> ]

## Syntax Description

### Syntax Description

|                |  |
|----------------|--|
| no             | (Optional) Negate a command or set its defaults  |
| lldp           | Configure Interface LLDP parameters  |
| tlv-set        | LLDP TLV configuration for interface   |
| vlan           | VLAN-id whose SVI IP address should be used as management address in management-tlv of LLDPDU. Default is native VLAN. |
| <i>vlan-id</i> | (Optional) vlan-id within range of 1-4094  |

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-gig-ether-all /exec/configure/if-gig-ether /exec/configure/if-eth-base /exec/configure/if-mgmt-ether

# lldp transmit

[no] lldp transmit

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| lldp               | Configure Interface LLDP parameters             |
| transmit           | Enable LLDP transmission on interface           |

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-gig-ether-all /exec/configure/if-gig-ether /exec/configure/if-eth-base /exec/configure/if-mgmt-ether

# load-balance

```
[no] load-balance { [ method { src { ip | ip-l4port <src-protocol> range <src-x> <src-y> } | dst { ip-dst | ip-l4port <dst-protocol> range <dst-x> <dst-y> } } | buckets <num> | mask-position <mask> ] + }
```

## Syntax Description

### Syntax Description

|                     |   |
|---------------------|---|
| no                  | (Optional) Negate a command or set its defaults   |
| load-balance        | ITD Loadbalance   |
| method              | (Optional) ITD Loadbalance method   |
| src                 | (Optional) Source based parameters  |
| dst                 | (Optional) Destination based parameters   |
| ip                  | (Optional) IP   |
| ip-l4port           | (Optional) IP and L4 port   |
| <i>src-protocol</i> | (Optional) Protocol   |
| range               | (Optional) Match only packets in the range of port numbers                                      |
| <i>src-x</i>        | (Optional)  |
| <i>src-y</i>        | (Optional)  |
| ip-dst              | (Optional) IP   |
| <i>dst-protocol</i> | (Optional) Protocol   |
| <i>dst-x</i>        | (Optional)  |
| <i>dst-y</i>        | (Optional)  |
| buckets             | (Optional) Used to create the buckets for traffic distribution, and it should be in powers of 2 |
| <i>num</i>          | (Optional) Loadbalance bucket number  |
| mask-position       | (Optional) Loadbalance mask position  |
| <i>mask</i>         | (Optional) Loadbalance mask position number range 0-31 for IPv4 and 0-127 for IPv6              |

## Command Mode

- /exec/configure/itd

# load-balance

```
[no] load-balance { [ method { src { ip | ip-l4port <src-protocol> range <src-x> <src-y> } | dst { ip-dst | ip-l4port <dst-protocol> range <dst-x> <dst-y> } } | buckets <num> | mask-position <mask> ] + }
```

## Syntax Description

### Syntax Description

|                     |   |
|---------------------|---|
| no                  | (Optional) Negate a command or set its defaults   |
| load-balance        | ITD Loadbalance   |
| method              | (Optional) ITD Loadbalance method   |
| src                 | (Optional) Source based parameters  |
| dst                 | (Optional) Destination based parameters   |
| ip                  | (Optional) IP   |
| ip-l4port           | (Optional) IP and L4 port   |
| <i>src-protocol</i> | (Optional) Protocol   |
| range               | (Optional) Match only packets in the range of port numbers                                      |
| <i>src-x</i>        | (Optional)  |
| <i>src-y</i>        | (Optional)  |
| ip-dst              | (Optional) IP   |
| <i>dst-protocol</i> | (Optional) Protocol   |
| <i>dst-x</i>        | (Optional)  |
| <i>dst-y</i>        | (Optional)  |
| buckets             | (Optional) Used to create the buckets for traffic distribution, and it should be in powers of 2 |
| <i>num</i>          | (Optional) Loadbalance bucket number  |
| mask-position       | (Optional) Loadbalance mask position  |
| <i>mask</i>         | (Optional) Loadbalance mask position number range 0-31 for IPv4 and 0-127 for IPv6              |

## Command Mode

- /exec/configure/itd

# load-balance

```
[no] load-balance { [ method { src { ip | ip-l4port <src-protocol> range <src-x> <src-y> } | dst { ip-dst | ip-l4port <dst-protocol> range <dst-x> <dst-y> } } | buckets <num> | mask-position <mask> ] + }
```

## Syntax Description

### Syntax Description

|                     |   |
|---------------------|---|
| no                  | (Optional) Negate a command or set its defaults   |
| load-balance        | PLB Loadbalance   |
| method              | (Optional) PLB Loadbalance method   |
| src                 | (Optional) Source based parameters  |
| dst                 | (Optional) Destination based parameters   |
| ip                  | (Optional) IP   |
| ip-l4port           | (Optional) IP and L4 port   |
| <i>src-protocol</i> | (Optional) Protocol   |
| range               | (Optional) Match only packets in the range of port numbers                                      |
| <i>src-x</i>        | (Optional)  |
| <i>src-y</i>        | (Optional)  |
| ip-dst              | (Optional) IP   |
| <i>dst-protocol</i> | (Optional) Protocol   |
| <i>dst-x</i>        | (Optional)  |
| <i>dst-y</i>        | (Optional)  |
| buckets             | (Optional) Used to create the buckets for traffic distribution, and it should be in powers of 2 |
| <i>num</i>          | (Optional) Loadbalance bucket number  |
| mask-position       | (Optional) Loadbalance mask position  |
| <i>mask</i>         | (Optional) Loadbalance mask position number range 0-31 for IPv4 and 0-127 for IPv6              |

## Command Mode

- /exec/configure/plb

# load-balance

```
[no] load-balance { [ method { src { ip | ip-l4port <src-protocol> range <src-x> <src-y> } | dst { ip-dst | ip-l4port <dst-protocol> range <dst-x> <dst-y> } } | buckets <num> | mask-position <mask> ] + }
```

## Syntax Description

| Syntax Description  |   |
|---------------------|---|
| no                  | (Optional) Negate a command or set its defaults   |
| load-balance        | Loadbalance   |
| method              | (Optional) Loadbalance method   |
| src                 | (Optional) Source based parameters  |
| dst                 | (Optional) Destination based parameters   |
| ip                  | (Optional) IP   |
| ip-l4port           | (Optional) IP and L4 port   |
| <i>src-protocol</i> | (Optional) Protocol   |
| range               | (Optional) Match only packets in the range of port numbers                                      |
| <i>src-x</i>        | (Optional)  |
| <i>src-y</i>        | (Optional)  |
| ip-dst              | (Optional) IP   |
| <i>dst-protocol</i> | (Optional) Protocol   |
| <i>dst-x</i>        | (Optional)  |
| <i>dst-y</i>        | (Optional)  |
| buckets             | (Optional) Used to create the buckets for traffic distribution, and it should be in powers of 2 |
| <i>num</i>          | (Optional) Loadbalance bucket number  |
| mask-position       | (Optional) Loadbalance mask position  |
| <i>mask</i>         | (Optional) Loadbalance mask position number range 0-31 for IPv4 and 0-127 for IPv6              |

## Command Mode

- /exec/configure/smarte

# load-balancing

load-balancing <load-bal> | no load-balancing [ <load-bal> ]

## Syntax Description

|                           |                 |                                      |
|---------------------------|-----------------|--------------------------------------|
| <b>Syntax Description</b> | no              | Negate a command or set its defaults |
|                           | load-balancing  | Load balancing method                |
|                           | <i>load-bal</i> | Load balancing method                |

## Command Mode

- /exec/configure/if-eth-any/glbp

# load-interval

load-interval <interval> | no load-interval [ <interval1> ]

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 |            | Negate a command or set its defaults                   |
| load-interval      |            | Specify interval for load calculation for an interface |
| <i>interval</i>    |            | Load interval delay in seconds                         |
| <i>interval1</i>   | (Optional) | Load interval delay in seconds                         |

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-eth-non-member /exec/configure/if-port-channel



# load-interval

load-interval <interval> | no load-interval [ <interval1> ]

## Syntax Description

|                           |                  |  |
|---------------------------|------------------|--|
| <b>Syntax Description</b> | no               | Negate a command or set its defaults                   |
|                           | load-interval    | Specify interval for load calculation for an interface |
|                           | <i>interval</i>  | Load interval delay in seconds                         |
|                           | <i>interval1</i> | (Optional) Load interval delay in seconds              |

## Command Mode

- /exec/configure/if-vlan-common

## load-interval counter

load-interval counter <counter\_val> <interval> | no load-interval counter <counter\_val> [ <interval1> ]

### Syntax Description

#### Syntax Description

|                    |  |
|--------------------|--|
| no                 | Negate a command or set its defaults                   |
| load-interval      | Specify interval for load calculation for an interface |
| counter            | Specify counter for this load interval                 |
| <i>counter_val</i> | Specify counter for this load interval                 |
| <i>interval</i>    | Load interval delay in seconds                         |
| <i>interval1</i>   | (Optional) Load interval delay in seconds              |

### Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-eth-non-member /exec/configure/if-port-channel

# load-interval counter

load-interval counter <counter\_val> <interval> | no load-interval counter <counter\_val> [ <interval1> ]

## Syntax Description

### Syntax Description

|                    |  |
|--------------------|--|
| no                 | Negate a command or set its defaults                   |
| load-interval      | Specify interval for load calculation for an interface |
| counter            | Specify counter for this load interval                 |
| <i>interval</i>    | Load interval delay in seconds                         |
| <i>counter_val</i> | Specify counter for this load interval                 |
| <i>interval1</i>   | (Optional) Load interval delay in seconds              |

## Command Mode

- /exec/configure/if-vlan-common

# load

```
load <uri0> [ <s0> ]
```

## Syntax Description

---

### Syntax Description

---

|      |                   |
|------|-------------------|
| load | Load system image |
|------|-------------------|

---

|             |                 |
|-------------|-----------------|
| <i>uri0</i> | Enter image URI |
|-------------|-----------------|

---

|           |                       |
|-----------|-----------------------|
| <i>s0</i> | (Optional)<br>Options |
|-----------|-----------------------|

---

## Command Mode

- /exec

# load

load <uri0>

## Syntax Description

---

### Syntax Description

---

load Load system image

---

*uri0* Enter image URI

---

## Command Mode

- /exec

# load

```
load <uri0> [ <s0> ]
```

## Syntax Description

---

**Syntax Description**

---

load Load system image

---

*uri0* Enter image URI

---

*s0* (Optional)  
Options

---

## Command Mode

- /exec

# local-as

local-as <asn> | no local-as [ <asn> ]

## Syntax Description

| Syntax Description |                                      |
|--------------------|--------------------------------------|
| no                 | Negate a command or set its defaults |
| local-as           | Specify the local-as for this vrf    |
| asn                | AS number                            |

## Command Mode

- /exec/configure/router-bgp/router-bgp-vrf

# local-as

```
{ local-as <asn> [ no-prepend [ replace-as [ dual-as ] ] ] } | { { no | default } local-as [ <asn> ] }
```

## Syntax Description

### Syntax Description

|            |   |
|------------|---|
| no         | Negate a command or set its defaults  |
| default    | Inherit values from a peer template   |
| local-as   | Specify the local-as number for the eBGP neighbor                               |
| <i>asn</i> | Autonomous System Number  |
| no-prepend | (Optional) Do not prepend the local-as number to updates from the eBGP neighbor |
| replace-as | (Optional) Prepend only the local-as number to updates to eBGP neighbor         |
| dual-as    | (Optional) Connect using either the local-as number or the real as              |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor-sess



# local-label prefix

```
[no] { [ vrf { <vrf-name> | <vrf-known-name> } ] local-label <static-inlabel> prefix { <prefix> <mask> | <prefix-mask> } }
```

## Syntax Description

| Syntax Description    |            |   |
|-----------------------|------------|---|
| no                    | (Optional) | Negate a command or set its defaults            |
| vrf                   | (Optional) | VPN Routing/Forwarding instance name            |
| <i>vrf-name</i>       | (Optional) | VRF name  |
| <i>vrf-known-name</i> | (Optional) | Known VRF name                                  |
| local-label           |            | Configure local label assignment and forwarding |
| <i>static-inlabel</i> |            | Label Value                                     |
| prefix                |            | For a given prefix                              |
| <i>prefix</i>         |            | Destination prefix                              |
| <i>mask</i>           |            | Destination prefix mask                         |
| <i>prefix-mask</i>    |            | Destination prefix/mask                         |

## Command Mode

- /exec/configure/mpls\_static/ipv4

# local-label prefix

```
[no] { [ vrf { <vrf-name> | <vrf-known-name> } ] local-label <static-inlabel> prefix { <ipv6-prefix-mask> } }
```

## Syntax Description

| Syntax Description    |            |   |
|-----------------------|------------|---|
| no                    | (Optional) | Negate a command or set its defaults            |
| vrf                   | (Optional) | VPN Routing/Forwarding instance name            |
| <i>vrf-name</i>       | (Optional) | VRF name  |
| <i>vrf-known-name</i> | (Optional) | Known VRF name                                  |
| local-label           |            | Configure local label assignment and forwarding |
| <i>static-inlabel</i> |            | Label Value                                     |
| prefix                |            | For a given prefix                              |

## Command Mode

- /exec/configure/mpls\_static/ipv6

# locator-led

[no] locator-led { chassis | module <module> | fan <fan\_num> }

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| locator-led        | blink locator led on device                     |
| chassis            | blink chassis led                               |
| module             | blink module led                                |
| <i>module</i>      | please enter the module number                  |
| fan                | blink Fan led                                   |
| <i>fan_num</i>     | fan number                                      |

## Command Mode

- /exec

# lockdown

[no] lockdown

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| lockdown           | Lockdown the LSP--disable reoptimization        |

## Command Mode

- /exec/configure/te/lsp-attr

# log-adjacency-changes

[no] log-adjacency-changes

## Syntax Description

|                           |                       |   |
|---------------------------|-----------------------|---|
| <b>Syntax Description</b> | no                    | (Optional) Negate a command or set its defaults |
|                           | log-adjacency-changes | Log changes in adjacency state                  |

## Command Mode

- /exec/configure/otv-isis/otv-isis-vrf-common

# log-adjacency-changes

[no] log-adjacency-changes [ detail ]

## Syntax Description

|                           |                       |   |
|---------------------------|-----------------------|---|
| <b>Syntax Description</b> | no                    | (Optional) Negate a command or set its defaults |
|                           | log-adjacency-changes | Log changes in adjacency state                  |
|                           | detail                | (Optional) Notify all state changes             |

## Command Mode

- /exec/configure/router-ospf /exec/configure/router-ospf/vrf

# log-adjacency-changes

[no] log-adjacency-changes

## Syntax Description

|                           |                       |   |
|---------------------------|-----------------------|---|
| <b>Syntax Description</b> | no                    | (Optional) Negate a command or set its defaults |
|                           | log-adjacency-changes | Log changes in adjacency state                  |

## Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

# log-adjacency-changes

[no] log-adjacency-changes [ detail ]

## Syntax Description

| Syntax Description    |   |
|-----------------------|---|
| no                    | (Optional) Negate a command or set its defaults |
| log-adjacency-changes | Log changes in adjacency state                  |
| detail                | (Optional) Notify all state changes             |

## Command Mode

- /exec/configure/router-ospf3 /exec/configure/router-ospf3/vrf



# log-adjacency-changes

{ [ no ] log-adjacency-changes } | { [ no ] [ eigrp ] log-neighbor-changes }

## Syntax Description

| Syntax Description    |                |                                      |
|-----------------------|----------------|--------------------------------------|
| no                    | (Optional)     | Negate a command or set its defaults |
| eigrp                 | (Optional)     | EIGRP router configuration commands  |
| log-adjacency-changes |                | Log changes in adjacency state       |
| log-neighbor-changes  | Enable/Disable | IP-EIGRP neighbor logging            |

## Command Mode

- /exec/configure/router-eigrp/router-eigrp-vrf-common /exec/configure/router-eigrp/router-eigrp-af-common

# log-event-type

[no] [ eigrp ] log-event-type [ dual ] [ xmit ] [ transport ]

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| eigrp              | (Optional) | EIGRP router configuration commands  |
| log-event-type     |            | Set event types logged               |
| dual               | (Optional) | Log DUAL events                      |
| xmit               | (Optional) | Log transmission events              |
| transport          | (Optional) | Log transport events                 |

## Command Mode

- /exec/configure/router-eigrp/router-eigrp-vrf-common /exec/configure/router-eigrp/router-eigrp-af-common

# log-neighbor-changes

[no] log-neighbor-changes

## Syntax Description

|                           |                      |   |
|---------------------------|----------------------|---|
| <b>Syntax Description</b> | no                   | (Optional) Negate a command or set its defaults |
|                           | log-neighbor-changes | Log a message for neighbor up/down event        |

## Command Mode

- /exec/configure/router-bgp/vrf-cmds

# log-neighbor-changes

[ no | default ] log-neighbor-changes [ disable ]

## Syntax Description

| Syntax Description   |            |   |
|----------------------|------------|---|
| no                   | (Optional) | Negate a command or set its defaults      |
| default              | (Optional) | Inherit values from a peer template       |
| log-neighbor-changes |            | Log message for neighbor up/down event    |
| disable              | (Optional) | Disable logging of neighbor up/down event |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor-sess

# log-neighbor-warnings

```
{ { [ eigrp ] log-neighbor-warnings [ <interval> ] } | { no [ eigrp ] log-neighbor-warnings [ <interval> ] } }
```

## Syntax Description

| Syntax Description    |  |   |
|-----------------------|--|---|
| no                    |  | Negate a command or set its defaults            |
| eigrp                 |  | (Optional) EIGRP router configuration commands  |
| log-neighbor-warnings |  | Enable/Disable IP-EIGRP neighbor warnings       |
| <i>interval</i>       |  | (Optional) Neighbor warning interval in seconds |

## Command Mode

- /exec/configure/router-eigrp/router-eigrp-vrf-common /exec/configure/router-eigrp/router-eigrp-af-common

# logging

[no] logging { neighbor-changes |

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| logging            | Enable LDP logging                              |
| neighbor-changes   | Log LDP neighbor state changes                  |

## Command Mode

- /exec/configure/ldp

# logging

```
[no] logging { lsp { path-errors | preemption | reservation-errors | setups | teardowns } | tunnel { lsp-selection | path change } } | logging { lsp { path-errors | preemption | reservation-errors | setups | teardowns } | tunnel { lsp-selection | path change } }
```

## Syntax Description

### Syntax Description

|                    |   |
|--------------------|---|
| no                 | Negate a command or set its defaults        |
| logging            | Trap logging configuration                  |
| lsp                | LSP-specific traps logging configuration    |
| path-errors        | Log LSP Path Error traps                    |
| preemption         | Log LSP Preemption traps                    |
| reservation-errors | Log LSP Reservation Error traps             |
| setups             | Log LSP Establishment Traps                 |
| teardowns          | Log LSP Teardown Traps                      |
| tunnel             | Tunnel-specific traps logging configuration |
| lsp-selection      | Log Tunnel LSP Selection traps              |
| path               | Log Tunnel Path-related traps               |
| change             | Log Tunnel Path change traps                |

## Command Mode

- /exec/configure/te

# logging abort

logging abort

## Syntax Description

---

### Syntax Description

---

logging Modify message logging facilities

---

abort Flushes cached data without committing and releases the lock

---

## Command Mode

- /exec/configure



# logging clear\_console

logging clear\_console

## Syntax Description

| Syntax Description |               |                       |
|--------------------|---------------|-----------------------|
|                    | logging       | Exec logging commands |
|                    | clear_console | Clear Console         |

## Command Mode

- /exec

# logging commit

logging commit

## Syntax Description

---

### Syntax Description

---

logging Modify message logging facilities

---

commit Commits cached data (of all msg types) and releases the lock

---

## Command Mode

- /exec/configure

# logging console

[no] logging console [ <i0> ]

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <b>no</b> (Optional) Negate a command or set its defaults                         |
|                           | <b>logging</b> Modify message logging facilities                                  |
|                           | <b>console</b> Set console logging  |
|                           | <b>i0</b> (Optional) 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging debug

logging debug

## Syntax Description

---

### Syntax Description

---

logging Exec logging  
commands

---

debug Debug logging

---

## Command Mode

- /exec

# logging distribute

[no] logging distribute

## Syntax Description

|                           |            |   |
|---------------------------|------------|---|
| <b>Syntax Description</b> | no         | (Optional) Negate a command or set its defaults |
|                           | logging    | Modify message logging facilities               |
|                           | distribute | Enables/disables fabric distribution using cfs. |

## Command Mode

- /exec/configure

# logging drop threshold

```
logging drop { threshold-packets <threshold-in-packets> | threshold-bytes <threshold-in-bytes> } [ level
<level-value> ]
```

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| logging            | set logging for copp class                       |  |
| drop               | logging for copp drops                           |  |
| threshold-packets  | threshold value for dropped packets              |  |
| threshold-bytes    | threshold value for dropped bytes                |  |
| level              | (Optional) syslog level                          |  |
| <i>level-value</i> | (Optional) specify the logging level between 1-7 |  |

## Command Mode

- /exec/configure/pmap/class

# logging drop threshold

[no] logging drop { threshold-packets <threshold-in-packets> | threshold-bytes <threshold-in-bytes> } [ level <level-value> ]

## Syntax Description

### Syntax Description

|                    |  |
|--------------------|--|
| no                 | Negate a command or set its defaults             |
| logging            | set logging for copp class                       |
| drop               | logging for copp drops                           |
| threshold-packets  | threshold value for dropped packets              |
| threshold-bytes    | threshold value for dropped bytes                |
| level              | (Optional) syslog level                          |
| <i>level-value</i> | (Optional) specify the logging level between 1-7 |

## Command Mode

- /exec/configure/pmap/class

## logging event link enable

[no] logging event { link-status | trunk-status } { enable | default }

### Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults                            |
| logging            | Configure logging for interface  |
| event              | Interface events   |
| link-status        | UPDOWN and CHANGE messages   |
| trunk-status       | TRUNK status messages  |
| enable             | To enable logging overriding port level configuration                      |
| default            | default logging configuration used by interfaces not explicitly configured |

### Command Mode

- /exec/configure



# logging event port link-status

logging event port link-status

## Syntax Description

|                           |             |                                 |
|---------------------------|-------------|---------------------------------|
| <b>Syntax Description</b> | logging     | Configure logging for interface |
|                           | event       | Interface events                |
|                           | port        | Port level events               |
|                           | link-status | UPDOWN and CHANGE messages      |

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-eth-base /exec/configure/if-port-channel

# logging event port link-status

[no] logging event port link-status

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| logging            |  | Configure logging for interface      |
| event              |  | Interface events                     |
| port               |  | Port level events                    |
| link-status        |  | UPDOWN and CHANGE messages           |

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-eth-base /exec/configure/if-port-channel

# logging event port link-status

logging event port link-status [ default ] | no logging event port link-status

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | Negate a command or set its defaults    |
| logging            | Configure logging for interface         |
| event              | Interface events                        |
| port               | Port level events                       |
| link-status        | UPDOWN and CHANGE messages              |
| default            | (Optional) Use the global default value |

## Command Mode

- /exec/configure/if-ether-sub /exec/configure/if-port-channel-sub /exec/configure/if-gig-ether-sub /exec/configure/if-loopback /exec/configure/if-remote-ethernet-sub /exec/configure/if-ether-sub-p2p

# logging event port link-status default

logging event port link-status default

## Syntax Description

| Syntax Description |                                 |
|--------------------|---------------------------------|
| logging            | Configure logging for interface |
| event              | Interface events                |
| port               | Port level events               |
| link-status        | UPDOWN and CHANGE messages      |
| default            | Use the global default value    |

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-eth-base /exec/configure/if-port-channel

# logging event port trunk-status

logging event port trunk-status

## Syntax Description

| Syntax Description |                                 |  |
|--------------------|---------------------------------|--|
| logging            | Configure logging for interface |  |
| event              | Interface events                |  |
| port               | Port level events               |  |
| trunk-status       | TRUNK status messages           |  |

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-eth-base /exec/configure/if-port-channel

# logging event port trunk-status

[no] logging event port trunk-status

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| logging            |  | Configure logging for interface      |
| event              |  | Interface events                     |
| port               |  | Port level events                    |
| trunk-status       |  | TRUNK status messages                |

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-eth-base /exec/configure/if-port-channel

# logging event port trunk-status default

logging event port trunk-status default

## Syntax Description

| Syntax Description |                                 |  |
|--------------------|---------------------------------|--|
| logging            | Configure logging for interface |  |
| event              | Interface events                |  |
| port               | Port level events               |  |
| trunk-status       | TRUNK status messages           |  |
| default            | Use the global default value    |  |

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-eth-base /exec/configure/if-port-channel

# logging flow-mod

[no] logging flow-mod

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| logging            | Enable logging                                  |
| flow-mod           | Enable logging for flow-modify                  |

## Command Mode

- /exec/configure/openflow/switch



# logging flow-mod

[no] logging flow-mod

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| logging            | Enable logging                                  |
| flow-mod           | Enable logging for flow-modify                  |

## Command Mode

- /exec/configure/openflow/switch/sub-switch

# logging flush

logging flush

## Syntax Description

---

### Syntax Description

---

|         |                       |
|---------|-----------------------|
| logging | Exec logging commands |
|---------|-----------------------|

---

|       |                  |
|-------|------------------|
| flush | Flushing logging |
|-------|------------------|

---

## Command Mode

- /exec

# logging invalid-username

[no] logging invalid-username

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| logging            | One Platform logging                            |
| invalid-username   | Display invalid usernames in ONE-P log messages |

## Command Mode

- /exec/configure/onep

# logging level

[no] logging level { { ipv6 icmp } | icmpv6 } <level>

## Syntax Description

### Syntax Description

**no** (Optional) Negate a command or set its defaults

**logging** Modify message logging facilities

**level** Facility parameter for syslog messages

**ipv6** Configure IPv6 features

**icmp** ICMPv6 Commands

**icmpv6** ICMPv6 Commands

**level** 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug

## Command Mode

- /exec/configure

# logging level

```
{ logging level { auth <i1> | authpriv <i2> | cron <i3> | daemon <i4> | ftp <i5> | kernel <i6> | local0 <i7> |
local1 <i8> | local2 <i9> | local3 <i10> | local4 <i11> | local5 <i12> | local6 <i13> | local7 <i14> | lpr <i15>
| mail <i16> | news <i17> | syslog <i18> | user <i19> | uucp <i20> } | no logging level { auth [ <i1> ] | authpriv
[ <i2> ] | cron [ <i3> ] | daemon [ <i4> ] | ftp [ <i5> ] | kernel [ <i6> ] | local0 [ <i7> ] | local1 [ <i8> ] | local2
[ <i9> ] | local3 [ <i10> ] | local4 [ <i11> ] | local5 [ <i12> ] | local6 [ <i13> ] | local7 [ <i14> ] | lpr [ <i15>
] | mail [ <i16> ] | news [ <i17> ] | syslog [ <i18> ] | user [ <i19> ] | uucp [ <i20> ] } }
```

## Syntax Description

### Syntax Description

|           |  |
|-----------|--|
| no        | Negate a command or set its defaults                         |
| logging   | Modify message logging facilities                            |
| level     | Facility parameter for syslog messages                       |
| auth      | Set level for Authorization System                           |
| <i>i1</i> | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |
| authpriv  | Set level for Authorization (Private) system                 |
| <i>i2</i> | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |
| cron      | Set level for Cron/at facility                               |
| <i>i3</i> | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |
| daemon    | Set level for System daemons                                 |
| <i>i4</i> | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |
| ftp       | Set level for File Transfer System                           |
| <i>i5</i> | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |
| kernel    | Set level for kernel   |
| <i>i6</i> | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |
| local0    | Set level for Local use daemons                              |
| <i>i7</i> | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |
| local1    | Set level for Local use daemons                              |
| <i>i8</i> | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |
| local2    | Set level for Local use daemons                              |
| <i>i9</i> | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |
| local3    | Set level for Local use daemons                              |

|            |  |
|------------|--|
| <i>i10</i> | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |
| local4     | Set level for Local use daemons                              |
| <i>i11</i> | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |
| local5     | Set level for Local use daemons                              |
| <i>i12</i> | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |
| local6     | Set level for Local use daemons                              |
| <i>i13</i> | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |
| local7     | Set level for Local use daemons                              |
| <i>i14</i> | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |
| lpr        | Set level for Line Printer System                            |
| <i>i15</i> | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |
| mail       | Set level for Mail system                                    |
| <i>i16</i> | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |
| news       | Set level for USENET news                                    |
| <i>i17</i> | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |
| syslog     | Set level for Internal Syslog Messages                       |
| <i>i18</i> | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |
| user       | Set level for User Process                                   |
| <i>i19</i> | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |
| uucp       | Set level for Unix-to-Unix copy system                       |
| <i>i20</i> | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

### Command Mode

- /exec/configure

# logging level

[no] logging level { { otv isis } | isis\_otv } <level>

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults              |
| logging            | Modify message logging facilities                            |
| level              | Facility parameter for syslog messages                       |
| otv                | Set syslog filter level for OTV                              |
| isis               | Set syslog filter level for IS-IS                            |
| isis_otv           | Show OTV ISIS logging configuration                          |
| level              | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level

[no] logging level { xml server | xmlma } <i>0</i>

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults              |
| logging            | Modify message logging facilities                            |
| level              | Facility parameter for syslog messages                       |
| xml                | xml agent  |
| server             | xml agent server   |
| xmlma              | xml master agent. Same as combination of keywords xml server |
| <i>i0</i>          | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure



# logging level aaa

logging level aaa <i0> | no logging level aaa [ <i0> ]

## Syntax Description

---

**Syntax Description**

---

no     Negate a command or set its defaults

---

logging     Modify message logging facilities

---

level     Facility parameter for syslog messages

---

aaa     Set level for aaa syslog messages

---

i0     0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug

---

## Command Mode

- /exec/configure

# logging level aclmgr

[no] logging level aclmgr <i0>

## Syntax Description

|                           |         |  |
|---------------------------|---------|--|
| <b>Syntax Description</b> | no      | (Optional) Negate a command or set its defaults              |
|                           | logging | Modify message logging facilities                            |
|                           | level   | Facility parameter for syslog messages                       |
|                           | aclmgr  | Set level for aclmgr syslog messages                         |
|                           | i0      | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level adbm

[no] logging level adbm <i0>

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | <b>no</b> (Optional) Negate a command or set its defaults              |
|                           | <b>logging</b> Modify message logging facilities                       |
|                           | <b>level</b> Facility parameter for syslog messages                    |
|                           | <b>adbm</b> Set level for adbm syslog messages                         |
|                           | <b>i0</b> 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level adjmgr

[no] logging level adjmgr <level>

## Syntax Description

---

### Syntax Description

---

**no** (Optional) Negate a command or set its defaults

---

**logging** Modify message logging facilities

---

**level** Facility parameter for syslog messages

---

**adjmgr** Set syslog filter level for Adjacency Manager

---

**level** 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug

---

## Command Mode

- /exec/configure

# logging level all

{ logging level { all <i0> } | no logging level { all [ <i0> ] } }

## Syntax Description

### Syntax Description

**no** Negate a command or set its defaults

**logging** Modify message logging facilities

**level** Facility parameter for syslog messages

**all** Set level for all facilities

**i0** 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug

## Command Mode

- /exec/configure

# logging level amt

[no] logging level amt <level>

## Syntax Description

---

### Syntax Description

---

**no** (Optional) Negate a command or set its defaults

---

**logging** Modify message logging facilities

---

**level** Facility parameter for syslog messages

---

**amt** Set syslog filter level for AMT

---

**level** 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug

---

## Command Mode

- /exec/configure

# logging level arp

```
{ logging level arp <level> } | { no logging level arp [ <level> ] }
```

## Syntax Description

|                           |                |  |
|---------------------------|----------------|--|
| <b>Syntax Description</b> | <b>no</b>      | Negate a command or set its defaults                         |
|                           | <b>logging</b> | Modify message logging facilities                            |
|                           | <b>level</b>   | Facility parameter for syslog messages                       |
|                           | <b>arp</b>     | Set syslog filter level for ARP                              |
|                           | <b>level</b>   | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level ascii-cfg

[no] logging level ascii-cfg <i0>

## Syntax Description

|                           |           |  |
|---------------------------|-----------|--|
| <b>Syntax Description</b> | no        | (Optional) Negate a command or set its defaults              |
|                           | logging   | Modify message logging facilities                            |
|                           | level     | Facility parameter for syslog messages                       |
|                           | ascii-cfg | Set logging level for ascii-cfg                              |
|                           | i0        | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure



# logging level bfd

[no] logging level bfd <i0>

## Syntax Description

|                           |           |  |
|---------------------------|-----------|--|
| <b>Syntax Description</b> | no        | (Optional) Negate a command or set its defaults              |
|                           | logging   | Modify message logging facilities                            |
|                           | level     | Facility parameter for syslog messages                       |
|                           | bfd       | Set level for bfd syslog messages                            |
|                           | <i>i0</i> | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level bgp

[no] logging level bgp <level>

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <b>no</b> (Optional) Negate a command or set its defaults                 |
|                           | <b>logging</b> Modify message logging facilities                          |
|                           | <b>level</b> Facility parameter for syslog messages                       |
|                           | <b>bgp</b> Set syslog filter level for BGP                                |
|                           | <b>level</b> 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level bloggerd

[no] logging level bloggerd <i0>

## Syntax Description

|                           |           |  |
|---------------------------|-----------|--|
| <b>Syntax Description</b> | no        | (Optional) Negate a command or set its defaults              |
|                           | logging   | Modify message logging facilities                            |
|                           | level     | Facility parameter for syslog messages                       |
|                           | bloggerd  | Set level for BloggerD syslog messages                       |
|                           | <i>i0</i> | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level bootvar

[no] logging level bootvar <i0>

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults              |
| logging            | Modify message logging facilities                            |
| level              | Facility parameter for syslog messages                       |
| bootvar            | Set level for bootvar  |
| i0                 | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level callhome

logging level callhome <i0> | no logging level callhome [ <i0> ]

## Syntax Description

|                           |           |  |
|---------------------------|-----------|--|
| <b>Syntax Description</b> | no        | Negate a command or set its defaults                         |
|                           | logging   | Modify message logging facilities                            |
|                           | level     | Facility parameter for syslog messages                       |
|                           | callhome  | Callhome syslog level  |
|                           | <i>i0</i> | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level capability

[no] logging level capability <i0>

## Syntax Description

|                           |            |  |
|---------------------------|------------|--|
| <b>Syntax Description</b> | no         | (Optional) Negate a command or set its defaults              |
|                           | logging    | Modify message logging facilities                            |
|                           | level      | Facility parameter for syslog messages                       |
|                           | capability | Set syslog level for mig utils daemon                        |
|                           | <i>i0</i>  | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level catena

[no] logging level catena <i0>

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | <b>no</b> (Optional) Negate a command or set its defaults              |
|                           | <b>logging</b> Modify message logging facilities                       |
|                           | <b>level</b> Facility parameter for syslog messages                    |
|                           | <b>catena</b> Set level for catena syslog messages                     |
|                           | <b>i0</b> 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level cdp

logging level cdp <i0> | no logging level cdp [ <i0> ]

## Syntax Description

|                           |         |  |
|---------------------------|---------|--|
| <b>Syntax Description</b> | no      | Negate a command or set its defaults                         |
|                           | logging | Modify message logging facilities                            |
|                           | level   | Facility parameter for syslog messages                       |
|                           | cdp     | Set level for CDP syslog messages                            |
|                           | i0      | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure



# logging level cert

[no] logging level { cert-enroll <i0> | cert\_enroll <i1> }

## Syntax Description

### Syntax Description

|             |  |
|-------------|--|
| no          | (Optional) Negate a command or set its defaults              |
| logging     | Modify message logging facilities                            |
| level       | Facility parameter for syslog messages                       |
| cert-enroll | Cert-enroll syslog level                                     |
| <i>i0</i>   | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |
| cert_enroll | Cert-enroll syslog level                                     |
| <i>i1</i>   | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level cfs

[no] logging level cfs <i0>

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

logging Modify message logging facilities

---

level Facility parameter for syslog messages

---

i0 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug

---

## Command Mode

- /exec/configure

# logging level clis

[no] logging level clis <level>

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <i>no</i> (Optional) Negate a command or set its defaults                 |
|                           | <i>logging</i> Modify message logging facilities                          |
|                           | <i>level</i> Facility parameter for syslog messages                       |
|                           | <i>clis</i> Set syslog filter level for CLIS                              |
|                           | <i>level</i> 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level clk\_mgr

[no] logging level clk\_mgr <i0>

## Syntax Description

|                           |         |  |
|---------------------------|---------|--|
| <b>Syntax Description</b> | no      | (Optional) Negate a command or set its defaults              |
|                           | logging | Modify message logging facilities                            |
|                           | level   | Facility parameter for syslog messages                       |
|                           | clk_mgr | Set level for clock manager syslog messages                  |
|                           | i0      | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level confcheck

{ logging level confcheck <i0> | no logging level confcheck [ <i0> ] }

## Syntax Description

---

**Syntax Description**

---

no     Negate a command or set its defaults

---

logging     Modify message logging facilities

---

level     Facility parameter for syslog messages

---

*i0*     0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug

---

## Command Mode

- /exec/configure

# logging level copp

logging level copp <i0> | no logging level copp [ <i0> ]

## Syntax Description

---

### Syntax Description

---

no Negate a command or set its defaults

---

logging Modify message logging facilities

---

level Facility parameter for syslog messages

---

copp Set level for copp syslog messages

---

*i0* 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug

---

## Command Mode

- /exec/configure

# logging level core

{ logging level core <i0> | no logging level core [ <i0> ] }

## Syntax Description

|                           |         |  |
|---------------------------|---------|--|
| <b>Syntax Description</b> | no      | Negate a command or set its defaults                         |
|                           | logging | Modify message logging facilities                            |
|                           | level   | Facility parameter for syslog messages                       |
|                           | core    | core daemon syslog level                                     |
|                           | i0      | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level cts

[no] logging level cts <i0>

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

logging Modify message logging facilities

---

level Facility parameter for syslog messages

---

cts Set level for cts syslog messages

---

i0 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug

---

## Command Mode

- /exec/configure



# logging level device\_test

[no] logging level device\_test <i0>

## Syntax Description

|                           |             |  |
|---------------------------|-------------|--|
| <b>Syntax Description</b> | no          | (Optional) Negate a command or set its defaults              |
|                           | logging     | Modify message logging facilities                            |
|                           | level       | Facility parameter for syslog messages                       |
|                           | device_test | Set level for GOLD Device Test syslog messages               |
|                           | i0          | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level dhclient

[no] logging level dhclient <i>i0</i>

## Syntax Description

|                           |           |  |
|---------------------------|-----------|--|
| <b>Syntax Description</b> | no        | (Optional) Negate a command or set its defaults              |
|                           | logging   | Modify message logging facilities                            |
|                           | level     | Facility parameter for syslog messages                       |
|                           | dhclient  | Set level for dhcp client syslog messages                    |
|                           | <i>i0</i> | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level dhcp\_snoop

logging level dhcp\_snoop <level> | no logging level dhcp\_snoop [ <level> ]

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | Negate a command or set its defaults                         |
| logging            | Modify message logging facilities                            |
| level              | Facility parameter for syslog messages                       |
| dhcp_snoop         | Set level for dhcp snoop syslog messages                     |
| level              | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level diagclient

[no] logging level diagclient <i0>

## Syntax Description

|                           |            |  |
|---------------------------|------------|--|
| <b>Syntax Description</b> | no         | (Optional) Negate a command or set its defaults              |
|                           | logging    | Modify message logging facilities                            |
|                           | level      | Facility parameter for syslog messages                       |
|                           | diagclient | Set level for GOLD DiagClient syslog messages                |
|                           | <i>i0</i>  | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level diagmgr

[no] logging level diagmgr <i0>

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | <b>no</b> (Optional) Negate a command or set its defaults              |
|                           | <b>logging</b> Modify message logging facilities                       |
|                           | <b>level</b> Facility parameter for syslog messages                    |
|                           | <b>diagmgr</b> Set level for GOLD DiagMgr syslog messages              |
|                           | <b>i0</b> 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level dot1x

logging level dot1x <i0> | no logging level dot1x [ <i0> ]

## Syntax Description

---

### Syntax Description

---

no Negate a command or set its defaults

---

logging Modify message logging facilities

---

level Facility parameter for syslog messages

---

dot1x Set level for dot1x syslog messages

---

*i0* 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug

---

## Command Mode

- /exec/configure

# logging level ecp

[no] logging level ecp <level>

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <b>no</b> (Optional) Negate a command or set its defaults                 |
|                           | <b>logging</b> Modify message logging facilities                          |
|                           | <b>level</b> Facility parameter for syslog messages                       |
|                           | <b>ecp</b> Set syslog filter level for ECP                                |
|                           | <b>level</b> 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level eigrp

[no] logging level eigrp [ <eigrp-ptag> ] <level>

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults              |
| logging            | Modify message logging facilities                            |
| level              | Facility parameter for syslog messages                       |
| eigrp              | Set syslog filter level for EIGRP                            |
| <i>eigrp-ptag</i>  | (Optional) Process tag                                       |
| <i>level</i>       | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure



# logging level eltm

logging level eltm <i0> | no logging level eltm

## Syntax Description

|                           |         |  |
|---------------------------|---------|--|
| <b>Syntax Description</b> | no      | Negate a command or set its defaults                         |
|                           | logging | Modify message logging facilities                            |
|                           | level   | Facility parameter for syslog messages                       |
|                           | eltm    | Set level for eltm syslog messages                           |
|                           | i0      | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level ethdstats

[no] logging level { ethdstats <i0> | eth\_dstats <i0> }

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults              |
| logging            | Modify message logging facilities                            |
| level              | Facility parameter for syslog messages                       |
| ethdstats          | delta statistics syslog level                                |
| eth_dstats         | delta statistics syslog level                                |
| i0                 | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level ethpm

[no] logging level ethpm <i0>

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | <b>no</b> (Optional) Negate a command or set its defaults              |
|                           | <b>logging</b> Modify message logging facilities                       |
|                           | <b>level</b> Facility parameter for syslog messages                    |
|                           | <b>ethpm</b> Set level for ethpm syslog messages                       |
|                           | <b>i0</b> 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level ethpm link

[no] logging level ethpm { link-up | link-down } <level>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults       |
| logging            | Modify message logging facilities                     |
| level              | Facility parameter for syslog messages                |
| ethpm              | Set level for ethpm syslog messages                   |
| link-up            | Configure logging level for link up syslog messages   |
| link-down          | Configure logging level for link down syslog messages |
| <i>level</i>       | Logging Level   |

## Command Mode

- /exec/configure

# logging level evb

[no] logging level evb <level>

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <i>no</i> (Optional) Negate a command or set its defaults                 |
|                           | <i>logging</i> Modify message logging facilities                          |
|                           | <i>level</i> Facility parameter for syslog messages                       |
|                           | <i>evb</i> Set syslog filter level for EVB                                |
|                           | <i>level</i> 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level evmc

[no] logging level evmc <i0>

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults              |
| logging            | Modify message logging facilities                            |
| level              | Facility parameter for syslog messages                       |
| evmc               | Set level for evmc syslog messages                           |
| i0                 | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level evmed

[no] logging level evmed <i0>

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | <b>no</b> (Optional) Negate a command or set its defaults              |
|                           | <b>logging</b> Modify message logging facilities                       |
|                           | <b>level</b> Facility parameter for syslog messages                    |
|                           | <b>evmed</b> Set level for evmed syslog messages                       |
|                           | <b>i0</b> 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level evms

[no] logging level evms <i0>

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

logging Modify message logging facilities

---

level Facility parameter for syslog messages

---

evms Set level for evms syslog messages

---

i0 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug

---

## Command Mode

- /exec/configure



# logging level fabric forwarding

[no] logging level fabric forwarding <level>

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults              |
| logging            | Modify message logging facilities                            |
| level              | Facility parameter for syslog messages                       |
| fabric             | Fabric   |
| forwarding         | Fabric Forwarding Protocol: Host Mobility Manager (HMM)      |
| <i>level</i>       | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level feature-mgr

```
{ logging level feature-mgr <i0> | no logging level feature-mgr [ <i0> ] }
```

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults                         |
| logging            |  | Modify message logging facilities                            |
| level              |  | Facility parameter for syslog messages                       |
| feature-mgr        |  | Set feature manager syslog level                             |
| <i>i0</i>          |  | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level fs-daemon

```
{ logging level fs-daemon <i0> | no logging level fs-daemon [ <i0> ] }
```

## Syntax Description

|                           |           |  |
|---------------------------|-----------|--|
| <b>Syntax Description</b> | no        | Negate a command or set its defaults                         |
|                           | logging   | Modify message logging facilities                            |
|                           | level     | Facility parameter for syslog messages                       |
|                           | fs-daemon | fs daemon syslog level                                       |
|                           | <i>i0</i> | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level glbp

[no] logging level glbp <i0>

## Syntax Description

|                           |         |  |
|---------------------------|---------|--|
| <b>Syntax Description</b> | no      | (Optional) Negate a command or set its defaults              |
|                           | logging | Modify message logging facilities                            |
|                           | level   | Facility parameter for syslog messages                       |
|                           | glbp    | Set level for glbp syslog messages                           |
|                           | i0      | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level gpixm

[no] logging level gpixm <i0>

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | <b>no</b> (Optional) Negate a command or set its defaults              |
|                           | <b>logging</b> Modify message logging facilities                       |
|                           | <b>level</b> Facility parameter for syslog messages                    |
|                           | <b>gpixm</b> Set level for global-pixm syslog messages                 |
|                           | <b>i0</b> 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level hsrp

[no] logging level hsrp <i0>

## Syntax Description

|                           |           |  |
|---------------------------|-----------|--|
| <b>Syntax Description</b> | no        | (Optional) Negate a command or set its defaults              |
|                           | logging   | Modify message logging facilities                            |
|                           | level     | Facility parameter for syslog messages                       |
|                           | hsrp      | Set level for hsrp syslog messages                           |
|                           | <i>i0</i> | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level icam

[no] logging level icam <i0>

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | <b>no</b> (Optional) Negate a command or set its defaults              |
|                           | <b>logging</b> Modify message logging facilities                       |
|                           | <b>level</b> Facility parameter for syslog messages                    |
|                           | <b>icam</b> Set level for icam syslog messages                         |
|                           | <b>i0</b> 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level igmp

[no] logging level [ ip ] igmp <level>

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults              |
| logging            | Modify message logging facilities                            |
| level              | Facility parameter for syslog messages                       |
| ip                 | (Optional) Configure IP features                             |
| igmp               | IGMP global configuration commands                           |
| <i>level</i>       | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure



# logging level im

[no] logging level { im <i0> | ifmgr <i0> }

## Syntax Description

|                           |         |  |
|---------------------------|---------|--|
| <b>Syntax Description</b> | no      | (Optional) Negate a command or set its defaults              |
|                           | logging | Modify message logging facilities                            |
|                           | level   | Facility parameter for syslog messages                       |
|                           | im      | Set level for im syslog messages                             |
|                           | ifmgr   | Set level for im syslog messages                             |
|                           | i0      | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level imp

[no] logging level imp <i0>

## Syntax Description

|                           |         |  |
|---------------------------|---------|--|
| <b>Syntax Description</b> | no      | (Optional) Negate a command or set its defaults              |
|                           | logging | Modify message logging facilities                            |
|                           | level   | Facility parameter for syslog messages                       |
|                           | imp     | Set level for imp syslog messages                            |
|                           | i0      | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level interface-vlan

[no] logging level interface-vlan <i0>

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults              |
| logging            | Modify message logging facilities                            |
| level              | Facility parameter for syslog messages                       |
| interface-vlan     | Set level for interface vlan syslog messages                 |
| <i>i0</i>          | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level ip msdp

[no] logging level ip msdp <level>

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults              |
| logging            | Modify message logging facilities                            |
| level              | Facility parameter for syslog messages                       |
| ip                 | Configure IP features  |
| msdp               | Set syslog filter level for MSDP                             |
| <i>level</i>       | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level ip pim

[no] logging level ip pim <level>

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <b>no</b> (Optional) Negate a command or set its defaults                 |
|                           | <b>logging</b> Modify message logging facilities                          |
|                           | <b>level</b> Facility parameter for syslog messages                       |
|                           | <b>ip</b> Configure IP features   |
|                           | <b>pim</b> Set syslog filter level for PIM                                |
|                           | <b>level</b> 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level ip sla responder

[no] logging level ip sla responder <i0>

## Syntax Description

### Syntax Description

|           |  |
|-----------|--|
| no        | (Optional) Negate a command or set its defaults              |
| logging   | Modify message logging facilities                            |
| level     | Facility parameter for syslog messages                       |
| ip        |  |
| sla       | Service Level Agreement (SLA)                                |
| responder | Set level for sla-responder syslog messages                  |
| i0        | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level ip sla sender

[no] logging level ip sla sender <i0>

## Syntax Description

|                           |           |  |
|---------------------------|-----------|--|
| <b>Syntax Description</b> | no        | (Optional) Negate a command or set its defaults              |
|                           | logging   | Modify message logging facilities                            |
|                           | level     | Facility parameter for syslog messages                       |
|                           | ip        |  |
|                           | sla       | Service Level Agreement (SLA)                                |
|                           | sender    | Set level for sla-sender syslog messages                     |
|                           | <i>i0</i> | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level ipconf

[no] logging level ipconf { ipv6 <i0> | <i1> }

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults              |
| logging            | Modify message logging facilities                            |
| level              | Facility parameter for syslog messages                       |
| ipconf             | Set level for ipconf syslog messages                         |
| ipv6               | Set level for ipconf syslog messages                         |
| <i>i0</i>          | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |
| <i>i1</i>          | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure



# logging level ipfib

logging level ipfib <i0> | no logging level ipfib

## Syntax Description

|                           |                |  |
|---------------------------|----------------|--|
| <b>Syntax Description</b> | <b>no</b>      | Negate a command or set its defaults                         |
|                           | <b>logging</b> | Modify message logging facilities                            |
|                           | <b>level</b>   | Facility parameter for syslog messages                       |
|                           | <b>ipfib</b>   | Set level for ipfib syslog messages                          |
|                           | <b>i0</b>      | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level ipqos

[no] logging level { ipqos | IPQOSMGR } <i0>

## Syntax Description

|                           |           |  |
|---------------------------|-----------|--|
| <b>Syntax Description</b> | no        | (Optional) Negate a command or set its defaults              |
|                           | logging   | Modify message logging facilities                            |
|                           | level     | Facility parameter for syslog messages                       |
|                           | <i>i0</i> | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level ipv6 pim

[no] logging level ipv6 pim <level>

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <b>no</b> (Optional) Negate a command or set its defaults                 |
|                           | <b>logging</b> Modify message logging facilities                          |
|                           | <b>level</b> Facility parameter for syslog messages                       |
|                           | <b>ipv6</b> Configure IPv6 features                                       |
|                           | <b>pim</b> Set syslog filter level for PIM6                               |
|                           | <b>level</b> 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level iscm

[no] logging level iscm <i0>

## Syntax Description

|                           |         |  |
|---------------------------|---------|--|
| <b>Syntax Description</b> | no      | (Optional) Negate a command or set its defaults              |
|                           | logging | Modify message logging facilities                            |
|                           | level   | Facility parameter for syslog messages                       |
|                           | iscm    | Set level for iscm syslog messages                           |
|                           | i0      | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level iscm

[no] logging level iscm <i0>

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | <b>no</b> (Optional) Negate a command or set its defaults              |
|                           | <b>logging</b> Modify message logging facilities                       |
|                           | <b>level</b> Facility parameter for syslog messages                    |
|                           | <b>iscm</b> Set level for iscm syslog messages                         |
|                           | <b>i0</b> 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level isis

[no] logging level isis <level>

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <i>no</i> (Optional) Negate a command or set its defaults                 |
|                           | <i>logging</i> Modify message logging facilities                          |
|                           | <i>level</i> Facility parameter for syslog messages                       |
|                           | <i>isis</i> Set syslog filter level for IS-IS                             |
|                           | <i>level</i> 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level keystore

logging level { keystore | sksd } <i0> | no logging level { keystore | sksd } [ <i0> ]

## Syntax Description

|                           |           |  |
|---------------------------|-----------|--|
| <b>Syntax Description</b> | no        | Negate a command or set its defaults   |
|                           | logging   | Modify message logging facilities      |
|                           | level     | Facility parameter for syslog messages |
|                           | keystore  | Keystore syslog level                  |
|                           | sksd      | Keystore/sksd syslog level             |
|                           | <i>i0</i> |  |

## Command Mode

- /exec/configure

# logging level l3vm

[no] logging level l3vm <level>

## Syntax Description

|                           |         |  |
|---------------------------|---------|--|
| <b>Syntax Description</b> | no      | (Optional) Negate a command or set its defaults              |
|                           | logging | Modify message logging facilities                            |
|                           | level   | Facility parameter for syslog messages                       |
|                           | l3vm    | Set syslog filter level for L3VM                             |
|                           | level   | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure



# logging level lacp

[no] logging level lacp <i0>

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | <b>no</b> (Optional) Negate a command or set its defaults              |
|                           | <b>logging</b> Modify message logging facilities                       |
|                           | <b>level</b> Facility parameter for syslog messages                    |
|                           | <b>lacp</b> Set level for lacp syslog messages                         |
|                           | <b>i0</b> 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level ldap

logging level ldap <i><i></i></i> | no logging level ldap [ <i><i></i></i> ]

## Syntax Description

### Syntax Description

no Negate a command or set its defaults

logging Modify message logging facilities

level Facility parameter for syslog messages

ldap Set level for ldap syslog messages

*iO* 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug

## Command Mode

- /exec/configure

# logging level license

logging level { license | licmgr } <i0> | no logging level { license | licmgr } [ <i0> ]

## Syntax Description

|                           |           |  |
|---------------------------|-----------|--|
| <b>Syntax Description</b> | no        | Negate a command or set its defaults                         |
|                           | logging   | Modify message logging facilities                            |
|                           | level     | Facility parameter for syslog messages                       |
|                           | license   | Licensing syslog level                                       |
|                           | licmgr    | Licensing syslog level                                       |
|                           | <i>i0</i> | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level lim

[no] logging level lim <i0>

## Syntax Description

|                           |         |  |
|---------------------------|---------|--|
| <b>Syntax Description</b> | no      | (Optional) Negate a command or set its defaults              |
|                           | logging | Modify message logging facilities                            |
|                           | level   | Facility parameter for syslog messages                       |
|                           | lim     | Set level for lim syslog messages                            |
|                           | i0      | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level lisp

[no] logging level lisp <level>

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <i>no</i> (Optional) Negate a command or set its defaults                 |
|                           | <i>logging</i> Modify message logging facilities                          |
|                           | <i>level</i> Facility parameter for syslog messages                       |
|                           | <i>lisp</i> Set logging level for LISP                                    |
|                           | <i>level</i> 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level lldp

[no] logging level lldp <i0>

## Syntax Description

|                           |         |  |
|---------------------------|---------|--|
| <b>Syntax Description</b> | no      | (Optional) Negate a command or set its defaults              |
|                           | logging | Modify message logging facilities                            |
|                           | level   | Facility parameter for syslog messages                       |
|                           | lldp    | Set level for lldp syslog messages                           |
|                           | i0      | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level mmode

[no] logging level mmode <i0>

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | <b>no</b> (Optional) Negate a command or set its defaults              |
|                           | <b>logging</b> Modify message logging facilities                       |
|                           | <b>level</b> Facility parameter for syslog messages                    |
|                           | <b>mmode</b> Set level for maintenance mode syslog messages            |
|                           | <b>i0</b> 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level module

[no] logging level module <i0>

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

logging Modify message logging facilities

---

level Facility parameter for syslog messages

---

module Set level for module(linecard) manager syslog messages

---

i0 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug

---

## Command Mode

- /exec/configure



# logging level monitor

[no] logging level monitor <i0>

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | <b>no</b> (Optional) Negate a command or set its defaults              |
|                           | <b>logging</b> Modify message logging facilities                       |
|                           | <b>level</b> Facility parameter for syslog messages                    |
|                           | <b>monitor</b> Set level for ethernet span syslog messages             |
|                           | <b>i0</b> 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

## logging level mpls ldp

[no] logging level mpls ldp <level>

### Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults              |
| logging            | Modify message logging facilities                            |
| level              | Facility parameter for syslog messages                       |
| mpls               | Set level for MPLS syslog messages                           |
| ldp                | Set level for LDP syslog messages                            |
| level              | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

### Command Mode

- /exec/configure

# logging level mpls manager

[no] logging level mpls manager <level>

## Syntax Description

|                           |                |  |
|---------------------------|----------------|--|
| <b>Syntax Description</b> | <b>no</b>      | (Optional) Negate a command or set its defaults              |
|                           | <b>logging</b> | Modify message logging facilities                            |
|                           | <b>level</b>   | Facility parameter for syslog messages                       |
|                           | <b>mpls</b>    | Set level for MPLS syslog messages                           |
|                           | <b>manager</b> | Set level for MPLS manager syslog messages                   |
|                           | <b>level</b>   | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level mpls static

[no] logging level mpls static <level>

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults              |
| logging            | Modify message logging facilities                            |
| level              | Facility parameter for syslog messages                       |
| mpls               | Set level for MPLS syslog messages                           |
| static             | Set level for MPLS Static syslog messages                    |
| <i>level</i>       | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level mpls switching

[no] logging level mpls switching <level>

## Syntax Description

|                           |              |  |
|---------------------------|--------------|--|
| <b>Syntax Description</b> | no           | (Optional) Negate a command or set its defaults              |
|                           | logging      | Modify message logging facilities                            |
|                           | level        | Facility parameter for syslog messages                       |
|                           | mpls         | Set level for MPLS syslog messages                           |
|                           | switching    | Set level for mpls switching syslog messages                 |
|                           | <i>level</i> | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level mpls traffic-eng

[no] logging level mpls traffic-eng <i0>

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults              |
| logging            | Modify message logging facilities                            |
| level              | Facility parameter for syslog messages                       |
| mpls               | Set level for MPLS syslog messages                           |
| traffic-eng        | Set level for Traffic Engineering syslog messages            |
| i0                 | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level mvsh

[no] logging level mvsh <i0>

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | <b>no</b> (Optional) Negate a command or set its defaults              |
|                           | <b>logging</b> Modify message logging facilities                       |
|                           | <b>level</b> Facility parameter for syslog messages                    |
|                           | <b>mvsh</b> Set level for mvsh syslog messages                         |
|                           | <b>i0</b> 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level nat

logging level nat <i0> | no logging level nat [ <i0> ]

## Syntax Description

|                           |         |  |
|---------------------------|---------|--|
| <b>Syntax Description</b> | no      | Negate a command or set its defaults                         |
|                           | logging | Modify message logging facilities                            |
|                           | level   | Facility parameter for syslog messages                       |
|                           | nat     | Set level for NAT syslog messages                            |
|                           | i0      | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure



# logging level nbm

logging level nbm <i0> | no logging level nbm

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | Negate a command or set its defaults                         |
| logging            | Modify message logging facilities                            |
| level              | Facility parameter for syslog messages                       |
| nbm                | Set level for nbm syslog messages                            |
| i0                 | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level netstack

{ logging level netstack <level> } | { no logging level netstack [ <level> ] }

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | Negate a command or set its defaults                         |
| logging            | Modify message logging facilities                            |
| level              | Facility parameter for syslog messages                       |
| netstack           | Set syslog filter level for Netstack                         |
| level              | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level nfm

[no] logging level nfm <level>

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <b>no</b> (Optional) Negate a command or set its defaults                 |
|                           | <b>logging</b> Modify message logging facilities                          |
|                           | <b>level</b> Facility parameter for syslog messages                       |
|                           | <b>nfm</b> Set level for nfm syslog messages                              |
|                           | <b>level</b> 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level ngoam

[no] logging level ngoam <i0>

## Syntax Description

### Syntax Description

no (Optional) Negate a command or set its defaults

logging Modify message logging facilities

level Facility parameter for syslog messages

ngoam Set level for oam logging messages

i0 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug

## Command Mode

- /exec/configure handle function sdstub\_syslog sdwrap args-legacy

# logging level ntp

[no] logging level ntp <i0>

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | <b>no</b> (Optional) Negate a command or set its defaults              |
|                           | <b>logging</b> Modify message logging facilities                       |
|                           | <b>level</b> Facility parameter for syslog messages                    |
|                           | <b>ntp</b> Set syslog filter level for NTP                             |
|                           | <b>i0</b> 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level nve

[no] logging level nve <inp>

## Syntax Description

|                           |         |  |
|---------------------------|---------|--|
| <b>Syntax Description</b> | no      | (Optional) Negate a command or set its defaults              |
|                           | logging | Modify message logging facilities                            |
|                           | level   | Facility parameter for syslog messages                       |
|                           | nve     | Display NVE information                                      |
|                           | inp     | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level nxsdk

[no] logging level nxsdk <level>

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <b>no</b> (Optional) Negate a command or set its defaults                 |
|                           | <b>logging</b> Modify message logging facilities                          |
|                           | <b>level</b> Facility parameter for syslog messages                       |
|                           | <b>nxsdk</b> NXOS SDK   |
|                           | <b>level</b> 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level onep

[no] logging level onep <0-7>

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults              |
| logging            | Modify message logging facilities                            |
| level              | Facility parameter for syslog messages                       |
| onep               | One Platform   |
| 0-7                | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure



# logging level openflow

[no] logging level openflow <i0>

## Syntax Description

|                           |           |  |
|---------------------------|-----------|--|
| <b>Syntax Description</b> | no        | (Optional) Negate a command or set its defaults              |
|                           | logging   | Modify message logging facilities                            |
|                           | level     | Facility parameter for syslog messages                       |
|                           | openflow  | Set level for OpenFlow agent syslog messages                 |
|                           | <i>i0</i> | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level orib

[no] logging level orib <level>

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

logging Modify message logging facilities

---

level Facility parameter for syslog messages

---

orib Set syslog filter level for ORIB

---

level 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug

---

## Command Mode

- /exec/configure

# logging level ospf

[no] logging level ospf <level>

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <b>no</b> (Optional) Negate a command or set its defaults                 |
|                           | <b>logging</b> Modify message logging facilities                          |
|                           | <b>level</b> Facility parameter for syslog messages                       |
|                           | <b>ospf</b> Set syslog filter level for OSPF                              |
|                           | <b>level</b> 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level ospfv3

[no] logging level ospfv3 <level>

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <i>no</i> (Optional) Negate a command or set its defaults                 |
|                           | <i>logging</i> Modify message logging facilities                          |
|                           | <i>level</i> Facility parameter for syslog messages                       |
|                           | <i>ospfv3</i> Set syslog filter level for OSPFv3                          |
|                           | <i>level</i> 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level otm

[no] logging level otm <i0>

## Syntax Description

|                           |           |  |
|---------------------------|-----------|--|
| <b>Syntax Description</b> | logging   | Modify message logging facilities                            |
|                           | level     | Facility parameter for syslog messages                       |
|                           | otm       | Set level for otm syslog messages                            |
|                           | <i>i0</i> | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level otv

[no] logging level otv <level>

## Syntax Description

|                           |         |  |
|---------------------------|---------|--|
| <b>Syntax Description</b> | no      | (Optional) Negate a command or set its defaults              |
|                           | logging | Modify message logging facilities                            |
|                           | level   | Facility parameter for syslog messages                       |
|                           | otv     | Set syslog filter level for OTV                              |
|                           | level   | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level pfstat

logging level pfstat <i0> | no logging level pfstat

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | Negate a command or set its defaults                         |
| logging            | Modify message logging facilities                            |
| level              | Facility parameter for syslog messages                       |
| pfstat             | Set level for pfstat syslog messages                         |
| i0                 | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level pim6

[no] logging level pim6 <level>

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <b>no</b> (Optional) Negate a command or set its defaults                 |
|                           | <b>logging</b> Modify message logging facilities                          |
|                           | <b>level</b> Facility parameter for syslog messages                       |
|                           | <b>pim6</b> Set syslog filter level for PIM6                              |
|                           | <b>level</b> 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure



# logging level pixm

[no] logging level pixm <i0>

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | <b>no</b> (Optional) Negate a command or set its defaults              |
|                           | <b>logging</b> Modify message logging facilities                       |
|                           | <b>level</b> Facility parameter for syslog messages                    |
|                           | <b>pixm</b> Set level for vdc-local-pixm syslog messages               |
|                           | <b>i0</b> 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level pktmgr

[no] logging level pktmgr <level>

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <i>no</i> (Optional) Negate a command or set its defaults                 |
|                           | <i>logging</i> Modify message logging facilities                          |
|                           | <i>level</i> Facility parameter for syslog messages                       |
|                           | <i>pktmgr</i> Set syslog filter level for Packet manager                  |
|                           | <i>level</i> 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level platform

[no] logging level platform <i0>

## Syntax Description

|                           |                 |  |
|---------------------------|-----------------|--|
| <b>Syntax Description</b> | <b>no</b>       | (Optional) Negate a command or set its defaults              |
|                           | <b>logging</b>  | Modify message logging facilities                            |
|                           | <b>level</b>    | Facility parameter for syslog messages                       |
|                           | <b>platform</b> | platform manager syslog level                                |
|                           | <b>i0</b>       | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level plbm

[no] logging level plbm <i0>

## Syntax Description

|                           |         |  |
|---------------------------|---------|--|
| <b>Syntax Description</b> | no      | (Optional) Negate a command or set its defaults              |
|                           | logging | Modify message logging facilities                            |
|                           | level   | Facility parameter for syslog messages                       |
|                           | plbm    | Set level for plbm syslog messages                           |
|                           | i0      | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level plcmgr

[no] logging level { plcmgr | ipplc } <i0>

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | <b>no</b> (Optional) Negate a command or set its defaults              |
|                           | <b>logging</b> Modify message logging facilities                       |
|                           | <b>level</b> Facility parameter for syslog messages                    |
|                           | <b>i0</b> 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level pltfm\_config

[no] logging level pltfm\_config <i0>

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults                         |
| logging            |            | Modify message logging facilities                            |
| level              |            | Facility parameter for syslog messages                       |
| pltfm_config       |            | Set level for pltfm_config syslog messages                   |
| i0                 |            | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level plugin

{ logging level plugin <i0> | no logging level plugin [ <i0> ] }

## Syntax Description

|                           |                |  |
|---------------------------|----------------|--|
| <b>Syntax Description</b> | <b>no</b>      | Negate a command or set its defaults                         |
|                           | <b>logging</b> | Modify message logging facilities                            |
|                           | <b>level</b>   | Facility parameter for syslog messages                       |
|                           | <b>plugin</b>  | Set level for plugin syslog messages                         |
|                           | <b>i0</b>      | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level poap

[no] logging level poap <i0>

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

logging Modify message logging facilities

---

level Facility parameter for syslog messages

---

poap Set level for poap syslog messages

---

i0 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug

---

## Command Mode

- /exec/configure



# logging level port-profile

logging level port-profile <i0> | no logging level port-profile [ <i0> ]

## Syntax Description

### Syntax Description

|              |  |
|--------------|--|
| no           | Negate a command or set its defaults                         |
| logging      | Modify message logging facilities                            |
| level        | Facility parameter for syslog messages                       |
| port-profile | Set level for port-profile syslog messages                   |
| <i>i0</i>    | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level port-security

logging level port-security <i0> | no logging level port-security [ <i0> ]

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults                         |
| logging            |  | Modify message logging facilities                            |
| level              |  | Facility parameter for syslog messages                       |
| port-security      |  | Set level for port-security syslog messages                  |
| i0                 |  | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level port\_client

[no] logging level port\_client <i0>

## Syntax Description

### Syntax Description

|             |  |
|-------------|--|
| no          | (Optional) Negate a command or set its defaults              |
| logging     | Modify message logging facilities                            |
| level       | Facility parameter for syslog messages                       |
| port_client | Set level for port_client syslog messages                    |
| i0          | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level port\_lb

[no] logging level { port\_lb <i0> | diag\_port\_lb <i0> }

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 | (Optional) Negate a command or set its defaults              |  |
| logging            | Modify message logging facilities                            |  |
| level              | Facility parameter for syslog messages                       |  |
| port_lb            | Set level for Diagnostic Port Loopback Test syslog messages  |  |
| diag_port_lb       | Set level for Diagnostic Port Loopback Test syslog messages  |  |
| <i>i0</i>          | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |  |

## Command Mode

- /exec/configure

# logging level private-vlan

[no] logging level private-vlan <i0>

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults              |
| logging            | Modify message logging facilities                            |
| level              | Facility parameter for syslog messages                       |
| private-vlan       | Set level for private VLAN syslog messages                   |
| <i>i0</i>          | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level ptp

[no] logging level ptp <i0>

## Syntax Description

|                           |         |  |
|---------------------------|---------|--|
| <b>Syntax Description</b> | no      | (Optional) Negate a command or set its defaults              |
|                           | logging | Modify message logging facilities                            |
|                           | level   | Facility parameter for syslog messages                       |
|                           | ptp     | Set level for ptp syslog messages                            |
|                           | i0      | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level radius

logging level radius <i0> | no logging level radius [ <i0> ]

## Syntax Description

---

### Syntax Description

---

no Negate a command or set its defaults

---

logging Modify message logging facilities

---

level Facility parameter for syslog messages

---

radius RADIUS syslog level

---

i0 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug

---

## Command Mode

- /exec/configure

# logging level res\_mgr

[no] logging level res\_mgr <i0>

## Syntax Description

|                           |         |  |
|---------------------------|---------|--|
| <b>Syntax Description</b> | no      | (Optional) Negate a command or set its defaults              |
|                           | logging | Modify message logging facilities                            |
|                           | level   | Facility parameter for syslog messages                       |
|                           | res_mgr | Set level for res_mgr syslog messages                        |
|                           | i0      | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure



# logging level rip

[no] logging level rip <level>

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <i>no</i> (Optional) Negate a command or set its defaults                 |
|                           | <i>logging</i> Modify message logging facilities                          |
|                           | <i>level</i> Facility parameter for syslog messages                       |
|                           | <i>rip</i> Set syslog filter level for RIP                                |
|                           | <i>level</i> 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level rpm

[no] logging level rpm <level>

## Syntax Description

|                           |         |  |
|---------------------------|---------|--|
| <b>Syntax Description</b> | no      | (Optional) Negate a command or set its defaults              |
|                           | logging | Modify message logging facilities                            |
|                           | level   | Facility parameter for syslog messages                       |
|                           | rpm     | Set syslog filter level for RPM                              |
|                           | level   | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level rsvp

[no] logging level rsvp <i0>

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | <b>no</b> (Optional) Negate a command or set its defaults              |
|                           | <b>logging</b> Modify message logging facilities                       |
|                           | <b>level</b> Facility parameter for syslog messages                    |
|                           | <b>rsvp</b> Set level for RSVP syslog messages                         |
|                           | <b>i0</b> 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level scheduler

[no] logging level scheduler <i>0</i>

## Syntax Description

|                           |           |  |
|---------------------------|-----------|--|
| <b>Syntax Description</b> | no        | (Optional) Negate a command or set its defaults              |
|                           | logging   | Modify message logging facilities                            |
|                           | level     | Facility parameter for syslog messages                       |
|                           | scheduler | Set logging level for scheduler                              |
|                           | <i>i0</i> | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level security

logging level { security | securityd } <i0> | no logging level { security | securityd } [ <i0> ]

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | Negate a command or set its defaults                         |
| logging            | Modify message logging facilities                            |
| level              | Facility parameter for syslog messages                       |
| security           | Security syslog level  |
| securityd          | Security syslog level  |
| <i>i0</i>          | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level session-mgr

logging level session-mgr <i0> | no logging level session-mgr [ <i0> ]

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults                         |
| logging            |  | Modify message logging facilities                            |
| level              |  | Facility parameter for syslog messages                       |
| session-mgr        |  | Set level for session-manager syslog messages                |
| i0                 |  | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level sflow

[no] logging level sflow <i0>

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | <b>no</b> (Optional) Negate a command or set its defaults              |
|                           | <b>logging</b> Modify message logging facilities                       |
|                           | <b>level</b> Facility parameter for syslog messages                    |
|                           | <b>sflow</b> Set level for sFlow syslog messages                       |
|                           | <b>i0</b> 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level smartc

[no] logging level smartc <i>i0</i>

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

logging Modify message logging facilities

---

level Facility parameter for syslog messages

---

smartc Set level for smartc syslog messages

---

*i0* 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug

---

## Command Mode

- /exec/configure



# logging level smm

[no] logging level smm <level>

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <i>no</i> (Optional) Negate a command or set its defaults                 |
|                           | <i>logging</i> Modify message logging facilities                          |
|                           | <i>level</i> Facility parameter for syslog messages                       |
|                           | <i>smm</i> Set logging level for Shared Memory Manager                    |
|                           | <i>level</i> 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level snmpd

[no] logging level snmpd <i0>

## Syntax Description

|                           |           |  |
|---------------------------|-----------|--|
| <b>Syntax Description</b> | no        | (Optional) Negate a command or set its defaults              |
|                           | logging   | Modify message logging facilities                            |
|                           | level     | Facility parameter for syslog messages                       |
|                           | snmpd     | Set level for SNMP syslog messages                           |
|                           | <i>i0</i> | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level snmpmib\_proc

[no] logging level snmpmib\_proc <i0>

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults              |
| logging            | Modify message logging facilities                            |
| level              | Facility parameter for syslog messages                       |
| snmpmib_proc       | Set level for snmpmib_proc syslog messages                   |
| i0                 | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level spanning

[no] logging level { spanning-tree } <i0>

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults              |
| logging            | Modify message logging facilities                            |
| level              | Facility parameter for syslog messages                       |
| spanning-tree      | Set level for stp syslog messages                            |
| i0                 | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level stripcl

[no] logging level stripcl <log-level>

## Syntax Description

|                           |                  |  |
|---------------------------|------------------|--|
| <b>Syntax Description</b> | no               | (Optional) Negate a command or set its defaults              |
|                           | logging          | Modify message logging facilities                            |
|                           | level            | Facility parameter for syslog messages                       |
|                           | stripcl          | Set level for stripcl syslog messages                        |
|                           | <i>log-level</i> | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level sysmgr

```
{ logging level sysmgr <i0> | no logging level sysmgr [ <i0> ] }
```

## Syntax Description

---

**Syntax Description**

---

no     Negate a command or set its defaults

---

logging     Modify message logging facilities

---

level     Facility parameter for syslog messages

---

*i0*     0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug

---

## Command Mode

- /exec/configure

# logging level tacacs

logging level tacacs <i0> | no logging level tacacs [ <i0> ]

## Syntax Description

|                           |                |  |
|---------------------------|----------------|--|
| <b>Syntax Description</b> | <b>no</b>      | Negate a command or set its defaults                         |
|                           | <b>logging</b> | Modify message logging facilities                            |
|                           | <b>level</b>   | Facility parameter for syslog messages                       |
|                           | <b>tacacs</b>  | TACACS+ syslog level   |
|                           | <b>i0</b>      | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level tamnw

[no] logging level tamnw <i0>

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

logging Modify message logging facilities

---

level Facility parameter for syslog messages

---

tamnw Set level for tamnw syslog messages

---

*i0* 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug

---

## Command Mode

- /exec/configure



# logging level telemetry

[no] logging level telemetry <level>

## Syntax Description

|                           |              |  |
|---------------------------|--------------|--|
| <b>Syntax Description</b> | no           | (Optional) Negate a command or set its default               |
|                           | logging      | Modify message logging facilities                            |
|                           | level        | Facility parameter for syslog messages                       |
|                           | telemetry    | Set syslog filter level for telemetry                        |
|                           | <i>level</i> | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level track

[no] logging level track <i0>

## Syntax Description

---

### Syntax Description

---

logging Modify message logging facilities

---

level Facility parameter for syslog messages

---

track Set level for track syslog messages

---

*i0* 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug

---

## Command Mode

- /exec/configure

# logging level tunnel

logging level tunnel <i0> | no logging level tunnel [ <i0> ]

## Syntax Description

|                           |                |  |
|---------------------------|----------------|--|
| <b>Syntax Description</b> | <b>no</b>      | Negate a command or set its defaults                         |
|                           | <b>logging</b> | Modify message logging facilities                            |
|                           | <b>level</b>   | Facility parameter for syslog messages                       |
|                           | <b>tunnel</b>  | Set level for tunnel syslog messages                         |
|                           | <b>i0</b>      | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level u6rib

[no] logging level u6rib <level>

## Syntax Description

|                           |         |  |
|---------------------------|---------|--|
| <b>Syntax Description</b> | no      | (Optional) Negate a command or set its defaults              |
|                           | logging | Modify message logging facilities                            |
|                           | level   | Facility parameter for syslog messages                       |
|                           | u6rib   | Set syslog filter level for U6RIB                            |
|                           | level   | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level udd

[no] logging level udd <*i0*>

## Syntax Description

|                           |           |  |
|---------------------------|-----------|--|
| <b>Syntax Description</b> | no        | (Optional) Negate a command or set its defaults              |
|                           | logging   | Modify message logging facilities                            |
|                           | level     | Facility parameter for syslog messages                       |
|                           | udd       | Set level for udd syslog messages                            |
|                           | <i>i0</i> | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level urib

[no] logging level urib <level>

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <b>no</b> (Optional) Negate a command or set its defaults                 |
|                           | <b>logging</b> Modify message logging facilities                          |
|                           | <b>level</b> Facility parameter for syslog messages                       |
|                           | <b>urib</b> Set syslog filter level for URIB                              |
|                           | <b>level</b> 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level vdc\_mgr

[no] logging level vdc\_mgr <i0>

## Syntax Description

|                           |           |  |
|---------------------------|-----------|--|
| <b>Syntax Description</b> | logging   | Modify message logging facilities                            |
|                           | level     | Facility parameter for syslog messages                       |
|                           | vdc_mgr   | Set level for vdc_mgr syslog messages                        |
|                           | <i>i0</i> | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level virtual-service

[no] logging level virtual-service <i0>

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 | (Optional) Negate a command or set its defaults              |  |
| logging            | Modify message logging facilities                            |  |
| level              | Facility parameter for syslog messages                       |  |
| virtual-service    | Set level for virtual service syslog messages                |  |
| i0                 | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |  |

## Command Mode

- /exec/configure



# logging level vmm

[no] logging level vmm <i0>

## Syntax Description

|                           |           |  |
|---------------------------|-----------|--|
| <b>Syntax Description</b> | no        | (Optional) Negate a command or set its defaults              |
|                           | logging   | Modify message logging facilities                            |
|                           | level     | Facility parameter for syslog messages                       |
|                           | vmm       | Set level for vmm syslog messages                            |
|                           | <i>i0</i> | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level vmtracker

[no] logging level vmtracker <i0>

## Syntax Description

|                           |           |  |
|---------------------------|-----------|--|
| <b>Syntax Description</b> | no        | (Optional) Negate a command or set its defaults              |
|                           | logging   | Modify message logging facilities                            |
|                           | level     | Facility parameter for syslog messages                       |
|                           | vmtracker | Set level for vmtracker syslog messages                      |
|                           | i0        | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level vpc

[no] logging level vpc <i0>

## Syntax Description

|                           |           |  |
|---------------------------|-----------|--|
| <b>Syntax Description</b> | no        | (Optional) Negate a command or set its defaults              |
|                           | logging   | Modify message logging facilities                            |
|                           | level     | Facility parameter for syslog messages                       |
|                           | vpc       | Set level for vPC syslog messages                            |
|                           | <i>i0</i> | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level vrrp

[no] logging level { vrrp-cfg <cfg\_level\_num> | vrrp-eng <eng\_level\_num> }

## Syntax Description

| Syntax Description   |            |  |
|----------------------|------------|--|
| no                   | (Optional) | Negate a command or set its defaults                         |
| logging              |            | Modify message logging facilities                            |
| level                |            | Facility parameter for syslog messages                       |
| vrrp-cfg             |            | Set level for vrrp configuration                             |
| <i>cfg_level_num</i> |            | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |
| vrrp-eng             |            | Set level for vrrp engine                                    |
| <i>eng_level_num</i> |            | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level vrrpv3

[no] logging level { vrrpv3 <level> }

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <i>no</i> (Optional) Negate a command or set its defaults                 |
|                           | <i>logging</i> Modify message logging facilities                          |
|                           | <i>level</i> Facility parameter for syslog messages                       |
|                           | <i>vrrpv3</i> Set level for vrrpv3 configuration                          |
|                           | <i>level</i> 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging level vshd

[no] logging level vshd <i0>

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

logging Modify message logging facilities

---

level Facility parameter for syslog messages

---

*i0* 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug

---

## Command Mode

- /exec/configure

# logging level xbar

[no] logging level xbar <i0>

## Syntax Description

|                           |         |  |
|---------------------------|---------|--|
| <b>Syntax Description</b> | no      | (Optional) Negate a command or set its defaults              |
|                           | logging | Modify message logging facilities                            |
|                           | level   | Facility parameter for syslog messages                       |
|                           | xbar    | xbar syslog level  |
|                           | i0      | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

# logging logfile

```
{ logging logfile <s0> <i0> [ size <i1> ] | no logging logfile [ <s0> <i0> [ size <i1> ] ] }
```

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | Negate a command or set its defaults                         |
| logging            | Modify message logging facilities                            |
| logfile            | Set File logging   |
| <i>s0</i>          | Enter the logfile name                                       |
| <i>i0</i>          | 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |
| size               | (Optional) Set logfile size                                  |
| <i>i1</i>          | (Optional) Enter the logfile size in bytes                   |

## Command Mode

- /exec/configure



# logging max\_filesize

logging max\_filesize <i0>

## Syntax Description

| Syntax Description |                                     |
|--------------------|-------------------------------------|
| logging            | Exec logging commands               |
| max_filesize       | Increase default debug logfile size |
| <i>i0</i>          |                                     |

## Command Mode

- /exec

# logging max\_messages

logging max\_messages <i0>

## Syntax Description

---

### Syntax Description

---

logging      Exec logging commands

---

max\_messages    Increase maximum syslogd message buffer size

---

*i0*

---

## Command Mode

- /exec

# logging message interface type ethernet

logging message interface type ethernet <info> | no logging message interface type ethernet <info>

## Syntax Description

|                           |             |   |
|---------------------------|-------------|---|
| <b>Syntax Description</b> | no          | Negate a command or set its defaults        |
|                           | logging     | Configure logging for interface             |
|                           | message     | Interface events                            |
|                           | interface   | Interface level events                      |
|                           | type        | Interface type                              |
|                           | ethernet    | Ethernet interfaces                         |
|                           | <i>info</i> | Field Names to be added to interface syslog |

## Command Mode

- /exec/configure

# logging module

[no] logging module [ <i0> ]

## Syntax Description

---

### Syntax Description

---

**no** (Optional) Negate a command or set its defaults

---

**logging** Modify message logging facilities

---

**module** Set module(linecard) logging

---

**i0** (Optional) 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug

---

## Command Mode

- /exec/configure

# logging monitor

[no] logging monitor [ <i0> ]

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <b>no</b> (Optional) Negate a command or set its defaults                         |
|                           | <b>logging</b> Modify message logging facilities                                  |
|                           | <b>monitor</b> Set terminal line(monitor) logging level                           |
|                           | <b>i0</b> (Optional) 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |

## Command Mode

- /exec/configure

## logging origin-id

```
[no] logging origin-id { hostname | ip <ip0> | string <s0> }
```

### Syntax Description

#### Syntax Description

|            |  |
|------------|--|
| no         | (Optional) Negate a command or set its defaults    |
| logging    | Modify message logging facilities                  |
| origin-id  | Enable origin information for Remote Syslog Server |
| hostname   | Use hostname as origin-id of logging messages      |
| ip         | Use ip address as origin-id of logging messages    |
| <i>ip0</i> | Hostname/IPv4/IPv6 address                         |
| string     | Use text string as origin-id of logging messages   |
| <i>s0</i>  | Enter string to append to the front of syslog msgs |

### Command Mode

- /exec/configure

# logging reconcile

```
logging reconcile { all [ force ] | files <i0> | vtys <i1> | dev <s0> }
```

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| logging            | Modify message logging facilities  |
| reconcile          | Reconcile the internal data structures in syslogd, only use in console connection when all VTYS are closed |
| all                | Reconcile all VTY elements in Files array and VTY list - only supported in console                         |
| force              | (Optional) Reconcile all VTY elements in Files array and VTY list - force to run in VTYS or console        |
| files              | Reconcile specific element in Files array  |
| <i>i0</i>          | Enter Files array index to reconcile   |
| vtys               | Reconcile specific element in VTY list   |
| <i>i1</i>          | Enter VTY list index to reconcile  |
| dev                | Reconcile specific dev elements in Files array and VTY list  |
| <i>s0</i>          | Enter the dev name to reconcile  |

## Command Mode

- /exec/configure

# logging server

```
[no] logging server <host0> [ [ <i1> ] [ port <port> ] [ use-vrf { <vrf-name> | <vrf-known-name> } | facility
{ auth | authpriv | cron | daemon | ftp | kernel | local0 | local1 | local2 | local3 | local4 | local5 | local6 | local7
| lpr | mail | news | syslog | user | uucp } ] + ]
```

## Syntax Description

### Syntax Description

|                       |   |
|-----------------------|---|
| no                    | (Optional) Negate a command or set its defaults                         |
| logging               | Modify message logging facilities                                       |
| server                | Enable forwarding to Remote Syslog Server                               |
| <i>host0</i>          | Hostname/IPv4/IPv6 address of the Remote Syslog Server                  |
| <i>i1</i>             | (Optional) 0-emerg 1-alert 2-crit 3-err 4-warn 5-notif 6-inform 7-debug |
| port                  | (Optional) Destination Port when forwarding to remote server            |
| <i>port</i>           | (Optional) Range from 1 - 65535(Default 514)                            |
| use-vrf               | (Optional) Display per-VRF information                                  |
| <i>vrf-name</i>       | (Optional) VRF name   |
| <i>vrf-known-name</i> | (Optional) Known VRF name   |
| facility              | (Optional) Facility to use when forwarding to server                    |
| auth                  | (Optional) Use auth facility  |
| authpriv              | (Optional) Use authpriv facility  |
| cron                  | (Optional) Use Cron/at facility   |
| daemon                | (Optional) Use daemon facility  |
| ftp                   | (Optional) Use file transfer system facility                            |
| kernel                | (Optional) Use kernel facility  |
| local0                | (Optional) Use local0 facility  |
| local1                | (Optional) Use local1 facility  |
| local2                | (Optional) Use local2 facility  |
| local3                | (Optional) Use local3 facility  |
| local4                | (Optional) Use local4 facility  |
| local5                | (Optional) Use local5 facility  |
| local6                | (Optional) Use local6 facility  |



|        |  |
|--------|--|
| local7 | (Optional) Use local7 facility                   |
| lpr    | (Optional) Use lpr facility                      |
| mail   | (Optional) Use mail facility                     |
| news   | (Optional) Use USENET news facility              |
| syslog | (Optional) Use syslog facility                   |
| user   | (Optional) Use user facility                     |
| uucp   | (Optional) Use Unix-to-Unix copy system facility |

**Command Mode**

- /exec/configure

# logging source-interface

{ logging source-interface <interface> | no logging source-interface }

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults             |
| logging            |  | Modify message logging facilities                |
| source-interface   |  | Enable Source-Interface for Remote Syslog Server |
| <i>interface</i>   |  | Source interface name                            |

## Command Mode

- /exec/configure

# logging timestamp

[no] logging timestamp { microseconds | milliseconds | seconds }

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| logging            | Modify message logging facilities               |
| timestamp          | Set logging timestamp granularity               |
| microseconds       | Timestamp in micro-seconds                      |
| milliseconds       | Timestamp in milli-seconds                      |
| seconds            | Timestamp in seconds (Default)                  |

## Command Mode

- /exec/configure

# login on-failure log

[no] login on-failure log

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| login              | login   |
| on-failure         | Set options for failed login attempt            |
| log                | Generate syslogs on failure logins              |

## Command Mode

- /exec/configure

# login on-success log

[no] login on-success log

## Syntax Description

| Syntax     | Description                                     |
|------------|---|
| no         | (Optional) Negate a command or set its defaults |
| login      | login   |
| on-success | Set options for successful login attempt        |
| log        | Generate syslogs on successful logins           |

## Command Mode

- /exec/configure

# logit

logit <log>

## Syntax Description

---

### Syntax Description

---

*logit* Add

---

*log* Specify

---

## Command Mode

- /exec

# logout-warning

```
{ logout-warning <i0> | no logout-warning [ <i0> ] }
```

## Syntax Description

|                           |                |                                      |
|---------------------------|----------------|--------------------------------------|
| <b>Syntax Description</b> | no             | Negate a command or set its defaults |
|                           | logout-warning | Configure logout warning             |
|                           | <i>i0</i>      | Enter logout warning time in seconds |

## Command Mode

- /exec/configure/line

# low-memory exempt

[ no | default ] low-memory exempt

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| default            | (Optional) | Inherit values from a peer template  |
| low-memory         |            | Behaviour                            |
| exempt             |            | Do                                   |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor-sess



# Ishow

Ishow

## Syntax Description

---

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | <code>Ishow</code> display this instance of credential |
|---------------------------|--|

---

## Command Mode

- /exec/configure/dot1x-cred

# Ishow

Ishow

## Syntax Description

---

### Syntax Description

---

`show` local show: displays config of current interface

---

## Command Mode

- /exec/configure/if-igp

# lsp-gen-interval

lsp-gen-interval <max-wait> [ <initial-wait> <second-wait> ] | no lsp-gen-interval <max-wait> [ <initial-wait> <second-wait> ]

## Syntax Description

| Syntax Description  |            |  |
|---------------------|------------|--|
| no                  |            | Negate a command or set its defaults                           |
| lsp-gen-interval    |            | Configure LSP generation interval                              |
| <i>max-wait</i>     |            | Maximum wait between trigger and LSP generation (milli-secs)   |
| <i>initial-wait</i> | (Optional) | Initial wait between trigger and LSP generation (milli-secs)   |
| <i>second-wait</i>  | (Optional) | Second wait used in LSP generation (milli-secs) during backoff |

## Command Mode

- /exec/configure/otv-isis/otv-isis-vrf-common

# lsp-gen-interval

lsp-gen-interval <level> <max-wait> [ <initial-wait> <second-wait> ] | no lsp-gen-interval <level> <max-wait> [ <initial-wait> <second-wait> ]

## Syntax Description

| Syntax Description  |            |  |
|---------------------|------------|--|
| no                  |            | Negate a command or set its defaults                           |
| lsp-gen-interval    |            | Configure LSP generation interval                              |
| <i>level</i>        |            | IS-IS level  |
| <i>max-wait</i>     |            | Maximum wait between trigger and LSP generation (milli-secs)   |
| <i>initial-wait</i> | (Optional) | Initial wait between trigger and LSP generation (milli-secs)   |
| <i>second-wait</i>  | (Optional) | Second wait used in LSP generation (milli-secs) during backoff |

## Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

# lsp-mtu

lsp-mtu <mtu> | no lsp-mtu [ <mtu> ]

## Syntax Description

| Syntax Description |                                      |
|--------------------|--------------------------------------|
| no                 | Negate a command or set its defaults |
| lsp-mtu            | Set LSP MTU                          |
| mtu                | Maximum LSP size in bytes            |

## Command Mode

- /exec/configure/otv-isis/otv-isis-vrf-common

# lsp-mtu

lsp-mtu <mtu> | no lsp-mtu [ <mtu> ]

## Syntax Description

|                           |                |                                      |
|---------------------------|----------------|--------------------------------------|
| <b>Syntax Description</b> | <i>no</i>      | Negate a command or set its defaults |
|                           | <i>lsp-mtu</i> | Set LSP MTU                          |
|                           | <i>mtu</i>     | Maximum LSP size in bytes            |

## Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

# lsp

[no] lsp <lsp-name>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| lsp                | Configure the name for the label-switched path  |
| <i>lsp-name</i>    | Name for this LSP                               |

## Command Mode

- /exec/configure/mpls\_static/ipv4

# lsp

[no] lsp <lsp-name>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| lsp                | Configure the name for the label-switched path  |
| <i>lsp-name</i>    | Name for this LSP                               |

## Command Mode

- /exec/configure/mpls\_static/ipv6



# Isp attributes

[no] lsp attributes <name>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| lsp                | Configure LSP parameters                        |
| attributes         | Configure LSP attributes                        |
| <i>name</i>        | Name of LSP attribute list                      |

## Command Mode

- /exec/configure/te





## M Commands

---

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# mac-address

mac-address <macaddress> | no mac-address [ <macaddress> ]

## Syntax Description

|                           |                   |                                      |
|---------------------------|-------------------|--------------------------------------|
| <b>Syntax Description</b> | no                | Negate a command or set its defaults |
|                           | mac-address       | Virtual MAC address                  |
|                           | <i>macaddress</i> | MAC address(FORMAT:xxxx.xxxx.xxxx)   |

## Command Mode

- /exec/configure/if-eth-any/hsrp\_ipv4 /exec/configure/if-eth-any/hsrp\_ipv6



# mac-address

mac-address <mac\_address\_val> | no mac-address [ <mac\_address\_val> ]

## Syntax Description

| Syntax Description     |                                      |
|------------------------|--------------------------------------|
| no                     | Negate a command or set its defaults |
| mac-address            | Configure interface mac address (1)  |
| <i>mac_address_val</i> | Static Router MAC address (1)        |

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-ether-sub /exec/configure/if-eth-non-member /exec/configure/if-remote-ethernet-sub /exec/configure/if-port-channel /exec/configure/if-port-channel-sub /exec/configure/if-ether-sub-p2p /exec/configure/if-ethernet-p2p

# mac-address

mac-address <mac-addr> | no mac-address

## Syntax Description

|                           |                 |                                      |
|---------------------------|-----------------|--------------------------------------|
| <b>Syntax Description</b> | no              | Negate a command or set its defaults |
|                           | mac-address     | Manually set interface MAC address   |
|                           | <i>mac-addr</i> | MAC address                          |

## Command Mode

- /exec/configure/if-vlan-common

# mac-address destination

{ mac-address { destination | source } <addr> } | { no mac-address { destination | source } }

## Syntax Description

|                           |             |                                      |
|---------------------------|-------------|--------------------------------------|
| <b>Syntax Description</b> | no          | Negate a command or set its defaults |
|                           | mac-address | specify flow mac address             |
|                           | source      | specify flow source mac address      |
|                           | destination | specify flow destination mac address |
|                           | <i>addr</i> | mac address                          |

## Command Mode

- /exec/configure/configngoamprofileflow

# mac-address ipv6-extract

mac-address ipv6-extract | no mac-address ipv6-extract

## Syntax Description

---

**Syntax Description**

no Negate a command or set its defaults

---

mac-address Configure interface mac address (3)

---

ipv6-extract Extract mac-address (3) from the IPv6 address configured on the interface

---

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-ether-sub /exec/configure/if-eth-non-member /exec/configure/if-remote-ethernet-sub /exec/configure/if-port-channel-sub /exec/configure/if-port-channel

# mac-list permit

```
{ mac-list <name> [ seq <seq> ] { permit | deny } <mac-addr> [ <mac-mask> ] } | { no mac-list <name> [ seq <seq> ] [ { permit | deny } <mac-addr> [ <mac-mask> ] ] }
```

## Syntax Description

### Syntax Description

|                 |   |
|-----------------|---|
| no              | Negate a command or set its defaults                |
| mac-list        | Build a mac list                                    |
| <i>name</i>     | Name of prefix list                                 |
| seq             | (Optional) Sequence number of an entry              |
| <i>seq</i>      | (Optional) Sequence number                          |
| permit          | Specify routes to forward                           |
| deny            | Specify routes to reject                            |
| <i>mac-addr</i> | MAC address   |
| <i>mac-mask</i> | (Optional) MAC Mask. Default Mask is ffff.ffff.ffff |

## Command Mode

- /exec/configure

# mac access-list

[no] mac access-list <name> [ client <clienttype> <clientID> ]

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| mac                | MAC configuration commands                      |
| access-list        | Configure access list                           |
| <i>name</i>        | List name                                       |
| client             | (Optional) set client type                      |
| <i>clienttype</i>  | (Optional) CLI/ONEP                             |
| <i>clientID</i>    | (Optional) client appID                         |

## Command Mode

- /exec/configure

# mac address

[no] mac address { <macaddr> }

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| mac                | Configure vMAC address options for Pathway      |
| address            | Pathway will use a specified vMAC address       |
| <i>macaddr</i>     | 48-bit MAC address in HEX                       |

## Command Mode

- /exec/configure/if-eth-any/vrrs

# mac address inherit

mac address inherit

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| mac                | Configure vMAC address options for Pathway |
| address            | Pathway will use a specified vMAC address  |
| inherit            | Pathway will inherit vMAC                  |

## Command Mode

- /exec/configure/if-eth-any/vrrs



# mac advert interval

[no] mac advert interval | mac advert interval <macint>

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | Negate a command or set its defaults                     |
| mac                | Configure vMAC address options for Pathway               |
| advert             | Specify vMAC unsolicited advertisements                  |
| interval           | Specify interval between vMAC unsolicited advertisements |
| <i>macint</i>      | Advertisement Interval in seconds                        |

## Command Mode

- /exec/configure/if-eth-any/vrrs

# mac packet-classify

[no] mac packet-classify

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| mac                | MAC configuration commands                      |
| packet-classify    | Force mac classification of packets             |

## Command Mode

- /exec/configure/if-ethernet-switch /exec/configure/if-remote-ethernet-switch /exec/configure/if-eth-port-channel-switch /exec/configure/if-ethernet-all

# mac port access-group

[no] mac port access-group <name>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| mac                | MAC configuration commands                      |
| port               | Port policy                                     |
| access-group       | Specify access control for packets              |
| <i>name</i>        | List name                                       |

## Command Mode

- /exec/configure/if-set-acl-l2

# macsec keychain

[no] macsec keychain <keychain\_name> [ policy <policy\_name> ]

## Syntax Description

| Syntax Description   |  |   |
|----------------------|--|---|
| macsec               |  | Specify MKA keychain and MACsec policy              |
| keychain             |  | key chain   |
| <i>keychain_name</i> |  | name of the keychain specified as a string          |
| policy               |  | (Optional) policy                                   |
| <i>policy_name</i>   |  | (Optional) name of the policy specified as a string |

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-eth-non-member /exec/configure/if-port-channel

# macsec policy

[no] macsec policy <policy\_name>

## Syntax Description

| Syntax Description |                    |                            |
|--------------------|--------------------|----------------------------|
|                    | macsec             | Configure MACSEC           |
|                    | policy             | Configure MACSEC<br>policy |
|                    | <i>policy_name</i> | Name of Policy             |

## Command Mode

- /exec/configure

# management

[no] management

## Syntax Description

---

**Syntax Description**

no (Optional) Negate a command or set its defaults

---

management Allow in-band management access to VLAN Interface IP address

---

## Command Mode

- /exec/configure/if-vlan-common

# map-notify-group

```
{ [ no ] map-notify-group { <addr> | <addr6> } }
```

## Syntax Description

|                           |                         |   |
|---------------------------|-------------------------|---|
| <b>Syntax Description</b> | <b>no</b>               | (Optional) Negate a command or set its defaults                     |
|                           | <b>map-notify-group</b> | Group address to send and receive site specific Map-Notify messages |
|                           | <i>addr</i>             | IPv4 group address  |

## Command Mode

- /exec/configure/lisp-dynamic-eid /exec/configure/vrf/lisp-dynamic-eid

# map-server key

```
{ { [ no ] map-server { <ms> | <ms6> } [ key-type { sha1 | sha2 } ] key <key> } | { [ no ] map-server { <ms> | <ms6> } proxy-reply } }
```

## Syntax Description

| Syntax Description       |   |
|--------------------------|---|
| <code>no</code>          | (Optional) Negate a command or set its defaults                 |
| <code>map-server</code>  | To interact with Map-Server                                     |
| <code>ms</code>          | Address of IPv4 map-server                                      |
| <code>key-type</code>    | (Optional) Authentication key type, either sha1 or sha2         |
| <code>sha1</code>        | (Optional) Use sha1 authentication in Map-Register messages     |
| <code>sha2</code>        | (Optional) Use sha2 authentication in Map-Register messages     |
| <code>key</code>         | Authentication key used with Map-Server                         |
| <code>key</code>         | SHA-1 password key  |
| <code>proxy-reply</code> | Request Map-Server to send Map-Replies on behalf of dynamic-EID |

## Command Mode

- /exec/configure/lisp-dynamic-eid /exec/configure/vrf/lisp-dynamic-eid



# master ipv4

[no] master ipv4 <ip>

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <i>no</i> (Optional) Negate a command or set its defaults |
|                           | <del>master</del> master                                  |
|                           | ipv4 ipv4   |
|                           | <i>ip</i> IPv4 address (A.B.C.D) of slave                 |

## Command Mode

- /exec/configure/ptp-ucast-slave

# match-address

[no] match-address

## Syntax Description

---

### Syntax Description

---

|    |   |
|----|---|
| no | (Optional) Negate a command or set its defaults |
|----|---|

---

|               |  |
|---------------|--|
| match-address | Match addresses in advertisement packets |
|---------------|--|

---

## Command Mode

- /exec/configure/if-eth-any/vrrpv3

# match

```
[no] match { { access-group name <acl-name> } | [ not ] { { cos <cos-value> } | any | { eth-src <mac_src>
<mac_src_wild> } | { eth-dest <mac_dest> <mac_dest_wild> } | { eth-type <eth-value> } | { vlan
<vlan-number> } | { ip-tos <tos-value> <tos-mask> } | { ip-protocol <ip-protocol-value> } | { ip-src-addr
<ip-s-addr> <ip-s-mask> } | { ip-dst-addr <ip-d-addr> <ip-d-mask> } | { tcp-src-port <tcp-src-port-addr> } |
{ tcp-dst-port <tcp-dest-port-addr> } | { udp-src-port <udp-src-port-addr> } | { udp-dst-port
<udp-dest-port-addr> } | { input-interface <ifnum> } | { ipv6-src-addr <ipv6-s-addr> <ipv6-s-mask> } | {
ipv6-dst-addr <ipv6-d-addr> <ipv6-d-mask> } | { ipv6-protocol <ipv6-protocol-value> } | { ipv6-flowlabel
<ipv6-flowlabel-value> } | { icmpv6-type <icmpv6-type-value> } | { icmpv6-code <icmpv6-code-value> } |
{ ipv4-dscp <ipv4-dscp-list> } | { ipv6-dscp <ipv6-dscp-list> } | { dscp { <dscp-list> | <dscp-enum> } + } |
{ precedence { <precedence-list> | <prec-enum> } + } | { discard-class <discard-class-list> } | { qos-group
<qos-group-list> } | { class-map <cmap-name-plc> } | { protocol <protocol-enum> } | { packet length <len-list>
} | { ip rtp <port-list> } | { mpls experimental topmost <exp-list> } } }
```

## Syntax Description

### Syntax Description

|                           |   |
|---------------------------|---|
| no                        | (Optional) Negate a command or set its defaults |
| match                     | Classification criteria                         |
| not                       | (Optional) Negate this match result             |
| access-group              | Access group                                    |
| name                      | Named Access List                               |
| <i>acl-name</i>           | Access List name                                |
| cos                       | IEEE 802.1Q class of service                    |
| dscp                      | DSCP in IP(v4) and IPv6 packets                 |
| <i>dscp-list</i>          | List of DSCP values                             |
| <i>dscp-enum</i>          |   |
| precedence                | Precedence in IP(v4) and IPv6 packets           |
| <i>precedence-list</i>    | List of precedence values                       |
| <i>prec-enum</i>          |   |
| discard-class             | Discard class                                   |
| <i>discard-class-list</i> | List of discard-class values                    |
| qos-group                 | Qos-group                                       |
| <i>qos-group-list</i>     | List of qos-group values                        |
| class-map                 | Class map                                       |
| <i>cmap-name-plc</i>      | Match class-map name                            |

|                      |  |
|----------------------|--|
| protocol             | Protocol                                 |
| <i>protocol-enum</i> |  |
| packet               | Packet                                   |
| length               | Length of IP datagram                    |
| <i>len-list</i>      | list of IP packet length                 |
| ip                   | IP                                       |
| rtp                  | Real Time Protocol                       |
| <i>port-list</i>     | UDP port list that are using RTP         |
| mpls                 | Match on MPLS label                      |
| experimental         | Match on MPLS Experimental label         |
| topmost              | Match on topmost MPLS label              |
| <i>exp-list</i>      | List of MPLS exp values                  |
| any                  | Match on Any Filter                      |
| eth-dest             | Match on Layer 2 destination MAC address |
| eth-src              | Match on Layer 2 source MAC address      |
| eth-type             | Match on Ether type                      |
| vlan                 | Match on 802.1Q vlan                     |
| ip-tos               | Match on IPv4 TOS                        |
| ip-protocol          | Match on IP protocol                     |
| ip-src-addr          | Match on IPv4 source address             |
| ip-dst-addr          | Match on IPv4 destination address        |
| ipv6-src-addr        | Match on IPv6 source address             |
| ipv6-dst-addr        | Match on IPv6 destination address        |
| tcp-src-port         | Match on TCP source port                 |
| tcp-dst-port         | Match on TCP source port                 |
| udp-src-port         | Match on UDP source port                 |
| udp-dst-port         | Match on UDP source port                 |
| input-interface      | Match on physical input interface        |
| ipv6-protocol        | Match on IPv6 Protocol Value             |

|                             |                                     |
|-----------------------------|-------------------------------------|
| <i>ipv6-flowlabel</i>       | Match on IPv6 Flowlabel             |
| <i>icmpv6-type</i>          | Match on ICMPv6 Message Type        |
| <i>icmpv6-code</i>          | Match on ICMPv6 Message Code        |
| <i>ipv4-dscp</i>            | Match on DSCP for IPV4 Packets      |
| <i>ipv6-dscp</i>            | Match on DSCP for IPV6 Packets      |
| <i>cos-value</i>            | class of service Value              |
| <i>mac_src</i>              | Source MAC address                  |
| <i>mac_src_wild</i>         | Source MAC mask                     |
| <i>mac_dest</i>             | Destination MAC address             |
| <i>mac_dest_wild</i>        | Destination MAC mask                |
| <i>eth-value</i>            | Ethernet type                       |
| <i>vlan-number</i>          | Vlan number                         |
| <i>tos-value</i>            | IPv4 TOS                            |
| <i>tos-mask</i>             | IPV4 TOS Mask for DSCP              |
| <i>ip-protocol-value</i>    | IPV4 protocol                       |
| <i>ip-s-addr</i>            | IPV4 address in format a.b.c.d      |
| <i>ip-d-addr</i>            | IPV4 address in format a.b.c.d      |
| <i>ip-s-mask</i>            | IPV4 address Mask in format a.b.c.d |
| <i>ip-d-mask</i>            | IPV4 address Mask in format a.b.c.d |
| <i>tcp-src-port-addr</i>    | Transport layer port number         |
| <i>tcp-dest-port-addr</i>   | Transport layer port number         |
| <i>udp-src-port-addr</i>    | Transport layer port number         |
| <i>udp-dest-port-addr</i>   | Transport layer port number         |
| <i>ifnum</i>                | Physical interface Name and Number  |
| <i>ipv6-protocol-value</i>  | IPv6 Protocol Value                 |
| <i>ipv6-flowlabel-value</i> | IPv6 Flowlabel                      |
| <i>icmpv6-type-value</i>    | ICMPv6 Message Type                 |
| <i>icmpv6-code-value</i>    | ICMPv6 Message Code                 |
| <i>ipv4-dscp-list</i>       | List of IPV4 DSCP values            |

---

*ipv6-dscp-list*      List of IPV6 DSCP values

---

**Command Mode**

- /exec/configure/class-map/type/plc

# match

```
[no] match { { access-group name <acl-name> } | [ not ] { dscp { <dscp-list> | { <dscp-enum> } + } | { {
packet length <len-list> | ip rtp <port-list> } [ replace ] } | { cos <cos-list> } | { qos-group <qos-group-list>
} | { precedence { <precedence-list> | { <prec-enum> } + } } | { protocol <protocol-enum> } | { mpls
experimental topmost <exp-list> } } }
```

## Syntax Description

| Syntax Description     |   |
|------------------------|---|
| <i>dscp-list</i>       | <dscp-enum>   |
| <i>cos-list</i>        |   |
| <i>precedence-list</i> | <prec-enum>   |
| no                     | (Optional) Negate a command or set its defaults                 |
| replace                | (Optional) Replace current ip rtp / packet length configuration |
| match                  | Classification criteria   |
| not                    | (Optional) Negate this match result                             |
| access-group           | Access group  |
| name                   | Named Access List   |
| <i>acl-name</i>        | Access List name  |
| dscp                   | DSCP in IP(v4) and IPv6 packets                                 |
| <i>dscp-enum</i>       |   |
| cos                    | IEEE 802.1Q Class of Service                                    |
| qos-group              | Qos-group   |
| <i>qos-group-list</i>  | List of qos-group values  |
| precedence             | Precedence in IP(v4) and IPv6 packets                           |
| <i>prec-enum</i>       |   |
| protocol               | Protocol  |
| <i>protocol-enum</i>   |   |
| packet                 | Packet  |
| length                 | Length of IP datagram   |
| <i>len-list</i>        | List of IP packet length  |
| ip                     | IP  |

|                     |                                  |
|---------------------|----------------------------------|
| <i>rtp</i>          | Real Time Protocol               |
| <i>port-list</i>    | UDP port list that are using RTP |
| <i>mpls</i>         | Match on MPLS label              |
| <i>experimental</i> | Match on MPLS Experimental label |
| <i>topmost</i>      | Match on topmost MPLS label      |
| <i>exp-list</i>     | List of MPLS exp values          |

**Command Mode**

- /exec/configure/class-map



# match

```
[no] match { [ not ] { { discard-class <discard-class-list> } | { class-map <cmap-name> } } }
```

## Syntax Description

| Syntax Description        |   |  |
|---------------------------|---|--|
| no                        | (Optional) Negate a command or set its defaults |  |
| match                     | Classification criteria                         |  |
| not                       | (Optional) Negate this match result             |  |
| discard-class             | Discard class                                   |  |
| <i>discard-class-list</i> | List of discard-class values                    |  |
| class-map                 | Class map                                       |  |
| <i>cmap-name</i>          | Match class-map name                            |  |

## Command Mode

- /exec/configure/class-map

# match access-group name

[no] match access-group name <acs-grp-name>

## Syntax Description

| Syntax Description  |   |
|---------------------|---|
| no                  | (Optional) Negate a command or set its defaults |
| match               | Classification criteria                         |
| access-group        | Match with given access group                   |
| name                | Name of the access group                        |
| <i>acs-grp-name</i> | Match parameter for class-map                   |

## Command Mode

- /exec/configure/cmap

# match address

[no] match <ip\_ipv6\_mac> address <name>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| match              | Specify the match clause                        |
| <i>ip_ipv6_mac</i> | IP/IPv6/MAC                                     |
| address            | Match an access list                            |
| <i>name</i>        | List name                                       |

## Command Mode

- /exec/configure/vacl

# match as-number

[no] match as-number [ { <asnum> | <asnum\_range> } + ] { <asnum\_trail> | <asnum\_range\_trail> }

## Syntax Description

| Syntax Description       |            |                                      |
|--------------------------|------------|--------------------------------------|
| no                       | (Optional) | Negate a command or set its defaults |
| match                    |            | Match values from routing table      |
| as-number                |            | Match BGP peer AS number             |
| <i>asnum</i>             | (Optional) | <AA4> ,                              |
| <i>asnum_range</i>       | (Optional) | <AA4>-<AA4> ,                        |
| <i>asnum_trail</i>       |            | <AA4> ,                              |
| <i>asnum_range_trail</i> |            | <AA4>-<AA4> ,                        |

## Command Mode

- /exec/configure/route-map

## match as-number as-path-list

match as-number as-path-list <aspl-name> + | no match as-number as-path-list { <aspl-name> | <aspl-name> } +

### Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| match              |  | Match values from routing table      |
| as-number          |  | Match BGP peer AS number             |
| as-path-list       |  | AS-path access-list                  |
| <i>aspl-name</i>   |  | AS path access list name             |
| <i>aspl-name</i>   |  | AS path access list name             |
| <i>aspl-name</i>   |  | Known as-path access-list name       |

### Command Mode

- /exec/configure/route-map

# match as-path

match as-path <aspl-name> + | no match as-path { <aspl-name> | <aspl-name> } +

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| match              |  | Match values from routing table      |
| as-path            |  | Match BGP AS path list               |
| <i>aspl-name</i>   |  | AS path access list name             |
| <i>aspl-name</i>   |  | AS path access list name             |
| <i>aspl-name</i>   |  | Known as-path access-list name       |

## Command Mode

- /exec/configure/route-map

# match class-map

[no] match class-map <cmmap-name>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| match              | Classification criteria                         |
| class-map          | Class map                                       |
| <i>cmmap-name</i>  | class map name                                  |

## Command Mode

- /exec/configure/class-map/type/queuing

# match community

[no] match community <name> + [ exact-match ]

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| match              | Match values from routing table                 |
| community          | Match BGP community list                        |
| <i>name</i>        | Community list name                             |
| exact-match        | (Optional) Do exact matching of communities     |

## Command Mode

- /exec/configure/route-map



# match cos

[no] match cos <cos-list>

## Syntax Description

---

**Syntax Description**

---

*cos-list*

---

no (Optional) Negate a command or set its defaults

---

match Classification criteria

---

cos IEEE 802.1Q Class of Service

---

## Command Mode

- /exec/configure/class-map/type/queuing

# match cos

[no] match cos <cos-list>

## Syntax Description

|                           |                 |   |
|---------------------------|-----------------|---|
| <b>Syntax Description</b> | no              | (Optional) Negate a command or set its defaults |
|                           | match           | Classification criteria                         |
|                           | cos             | IEEE 802.1Q class of service                    |
|                           | <i>cos-list</i> | List of class-of-service values                 |

## Command Mode

- /exec/configure/class-map/type/uf

# match datalink

[no] match datalink { mac source-address | mac destination-address | ethertype | vlan }

## Syntax Description

| Syntax Description  |  |                               |
|---------------------|--|-------------------------------|
| match               |  | Specify a key field           |
| datalink            |  | datalink (Layer 2) attributes |
| mac                 |  | MAC Address                   |
| source-address      |  | Source MAC Address            |
| destination-address |  | Destination MAC Address       |
| ethertype           |  | Ethertype                     |
| vlan                |  | VLAN ID                       |

## Command Mode

- /exec/configure/nfm-record

# match dscp

[no] match dscp { <dscp-list> | <dscp-enum> } +

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| <i>dscp-list</i>   | <dscp-enum>                                     |
| no                 | (Optional) Negate a command or set its defaults |
| match              | Classification criteria                         |
| dscp               | DSCP in IP(v4) and IPv6 packets                 |
| <i>dscp-enum</i>   |   |

## Command Mode

- /exec/configure/color-cmap

# match dscp

[no] match dscp { <dscp-list> } +

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| match              | Classification criteria                         |
| dscp               | DSCP in IP(v4) packets                          |
| <i>dscp-list</i>   | List of DSCP values                             |

## Command Mode

- /exec/configure/class-map/type/queuing

## match exception

```
[no] match exception { { ip | ipv6 } { option | { icmp { redirect | unreachable } } | municast } } | ttl-failure
| glean | mtu-failure | nat-flow | { multicast { rpf-failure | sg-rpf-failure | dest-miss | ipv6-rpf-failure |
ipv6-sg-rpf-failure | ipv6-dest-miss } } }
```

### Syntax Description

| Syntax Description  |   |  |
|---------------------|---|--|
| no                  | (Optional) Negate a command or set its defaults |  |
| match               | Classification criteria                         |  |
| exception           | Match exception packets                         |  |
| ip                  | ipv4 match criteria                             |  |
| ipv6                | ipv6 match criteria                             |  |
| option              | Match ip/ipv6 option exception packets          |  |
| icmp                | Icmp redirect packets                           |  |
| redirect            | Send redirected packets back to sender          |  |
| unreachable         | Send unreachable packets back to sender         |  |
| municast            | IP unicast packets with multicast MAC           |  |
| ttl-failure         | Failed in ttl                                   |  |
| mtu-failure         | mtu-failure                                     |  |
| glean               | Glean packets                                   |  |
| multicast           | multicast packets                               |  |
| rpf-failure         | multicast rpf check failure                     |  |
| sg-rpf-failure      | multicast sg rpf check failure                  |  |
| dest-miss           | L3 multicast destination lookup failure         |  |
| ipv6-rpf-failure    | IPv6 multicast rpf check failure                |  |
| ipv6-sg-rpf-failure | IPv6 multicast sg rpf check failure             |  |
| ipv6-dest-miss      | IPv6 L3 multicast destination lookup failure    |  |
| nat-flow            | ipv4 software nat flow packets                  |  |

### Command Mode

- /exec/configure/cmap

# match extcommunity

[no] match extcommunity <name> + [ exact-match ]

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults      |
| match              | Match values from routing table                      |
| extcommunity       | Match BGP community list                             |
| <i>name</i>        | Extended Community list name                         |
| exact-match        | (Optional) Do exact matching of extended communities |

## Command Mode

- /exec/configure/route-map

# match interface

[no] match interface <name> +

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| match              | Match values from routing table                 |
| interface          | Match first hop interface of route              |
| <i>name</i>        | Interface name                                  |

## Command Mode

- /exec/configure/route-map



# match ip address

[no] match ip address <name> +

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | <b>no</b> (Optional) Negate a command or set its defaults            |
|                           | <b>match</b> Match values from routing table                         |
|                           | <b>ip</b> Configure IP features                                      |
|                           | <b>address</b> Match address of route or match packet                |
|                           | <b>name</b> IP access-list name (for use in route-maps for PBR only) |

## Command Mode

- /exec/configure/route-map

# match ip address prefix-list

match ip address prefix-list <ipv4-pfl-name> + | no match ip address prefix-list { <ipv4-pfl-name> | <ipv4-pfl-name> } +

## Syntax Description

| Syntax Description   |  |  |
|----------------------|--|--|
| no                   |  | Negate a command or set its defaults   |
| match                |  | Match values from routing table        |
| ip                   |  | Configure IP features                  |
| address              |  | Match address of route or match packet |
| prefix-list          |  | Match entries of prefix-lists          |
| <i>ipv4-pfl-name</i> |  | Name of prefix-list                    |
| <i>ipv4-pfl-name</i> |  | Name of prefix-list                    |
| <i>ipv4-pfl-name</i> |  | Known prefix-list name                 |

## Command Mode

- /exec/configure/route-map

# match ip multicast rp

```
{ match ip multicast { { rp <i>iprp</i> [ rp-type <i>iprptype</i> ] } | { group <i>gprefix</i> } | { source <i>ipsrc</i> } } + } |
{ match ip multicast { { rp <i>iprp</i> [ rp-type <i>iprptype</i> ] } | { group-range <i>gaddr_start</i> to <i>gaddr_end</i> }
| { source <i>ipsrc</i> } } + } | { no match ip multicast }
```

## Syntax Description

### Syntax Description

|                    |  |
|--------------------|--|
| no                 | Negate a command or set its defaults       |
| match              | Match values from routing table            |
| ip                 | Configure IP features                      |
| multicast          | Match multicast attributes                 |
| rp                 | Rendezvous point                           |
| <i>iprp</i>        | IPv4 rendezvous prefix                     |
| rp-type            | (Optional) Multicast rendezvous point type |
| <i>iprptype</i>    | (Optional) IPv4 rendezvous point type      |
| group              | Multicast Group prefix                     |
| <i>gprefix</i>     | IPv4 group prefix                          |
| group-range        | Multicast Group address range              |
| <i>gaddr_start</i> | First Group address                        |
| to                 | Range                                      |
| <i>gaddr_end</i>   | Last Group address                         |
| source             | Multicast source address                   |
| <i>ipsrc</i>       | IPv4 source prefix                         |

## Command Mode

- /exec/configure/route-map

# match ip next-hop prefix-list

```
match ip next-hop prefix-list <ipv4-pfl-name> + | no match ip next-hop prefix-list { <ipv4-pfl-name> |
<ipv4-pfl-name> } +
```

## Syntax Description

| Syntax Description   |  |                                      |
|----------------------|--|--------------------------------------|
| no                   |  | Negate a command or set its defaults |
| match                |  | Match values from routing table      |
| ip                   |  | Configure IP features                |
| next-hop             |  | Match next-hop address of route      |
| prefix-list          |  | Match entries of prefix-lists        |
| <i>ipv4-pfl-name</i> |  | Name of prefix-list                  |
| <i>ipv4-pfl-name</i> |  | Name of prefix-list                  |
| <i>ipv4-pfl-name</i> |  | Known prefix-list name               |

## Command Mode

- /exec/configure/route-map

# match ip protocol

[no] match ip { protocol | tos }

## Syntax Description

### Syntax Description

---

|       |                     |
|-------|---------------------|
| match | Specify a key field |
|-------|---------------------|

---

|    |               |
|----|---------------|
| ip | IP attributes |
|----|---------------|

---

|          |          |
|----------|----------|
| protocol | Protocol |
|----------|----------|

---

|     |     |
|-----|-----|
| tos | TOS |
|-----|-----|

---

## Command Mode

- /exec/configure/nfm-record

# match ip route-source prefix-list

match ip route-source prefix-list <ipv4-pfl-name> + | no match ip route-source prefix-list { <ipv4-pfl-name> | <ipv4-pfl-name> } +

## Syntax Description

| Syntax Description   |  |   |
|----------------------|--|---|
| no                   |  | Negate a command or set its defaults      |
| match                |  | Match values from routing table           |
| ip                   |  | Configure IP features                     |
| route-source         |  | Match advertising source address of route |
| prefix-list          |  | Match entries of prefix-lists             |
| <i>ipv4-pfl-name</i> |  | Name of prefix-list                       |
| <i>ipv4-pfl-name</i> |  | Name of prefix-list                       |
| <i>ipv4-pfl-name</i> |  | Known prefix-list name                    |

## Command Mode

- /exec/configure/route-map

# match ipv4 source address

[no] match ipv4 { source | destination } address

## Syntax Description

| Syntax Description |  |                     |
|--------------------|--|---------------------|
| match              |  | Specify a key field |
| ipv4               |  | IPv4 attributes     |
| source             |  | Source Address      |
| destination        |  | Destination Address |
| address            |  | Address             |

## Command Mode

- /exec/configure/nfm-record

# match ipv6

```
[no] match ipv6 { { { source | destination } address } | { flow-label | options } }
```

## Syntax Description

| Syntax Description |                     |  |
|--------------------|---------------------|--|
| match              | Specify a key field |  |
| ipv6               | IPv6 attributes     |  |
| source             | Source Address      |  |
| destination        | Destination Address |  |
| address            | Address             |  |
| flow-label         | Flow label          |  |
| options            | Options             |  |

## Command Mode

- /exec/configure/nfm-record



# match ipv6 address

[no] match ipv6 address <name>

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | <b>no</b> (Optional) Negate a command or set its defaults              |
|                           | <b>match</b> Match values from routing table                           |
|                           | <b>ipv6</b> Configure IPv6 features                                    |
|                           | <b>address</b> Match address of route or match packet                  |
|                           | <b>name</b> IPv6 access-list name (for use in route-maps for PBR only) |

## Command Mode

- /exec/configure/route-map

# match ipv6 address prefix-list

match ipv6 address prefix-list <ipv6-pfl-name> + | no match ipv6 address prefix-list { <ipv6-pfl-name> | <ipv6-pfl-name> } +

## Syntax Description

| Syntax Description   |  |  |
|----------------------|--|--|
| no                   |  | Negate a command or set its defaults   |
| match                |  | Match values from routing table        |
| ipv6                 |  | Configure IPv6 features                |
| address              |  | Match address of route or match packet |
| prefix-list          |  | Match entries of prefix-lists          |
| <i>ipv6-pfl-name</i> |  | Name of prefix-list                    |
| <i>ipv6-pfl-name</i> |  | Name of prefix-list                    |
| <i>ipv6-pfl-name</i> |  | Known prefix-list name                 |

## Command Mode

- /exec/configure/route-map

## match ipv6 multicast rp

```
{ match ipv6 multicast { { rp <ipv6rp> [ rp-type <ipv6rptype> ] } | { group <gprefix> } | { source <ipv6src>
} } + } | { match ipv6 multicast { { rp <ipv6rp> [ rp-type <ipv6rptype> ] } | { group-range <gaddr_start> to
<gaddr_end> } | { source <ipv6src> } } + } | { no match ipv6 multicast }
```

### Syntax Description

#### Syntax Description

|                   |  |
|-------------------|--|
| no                | Negate a command or set its defaults       |
| match             | Match values from routing table            |
| ipv6              | Configure IPv6 features                    |
| multicast         | Match multicast attributes                 |
| rp                | Rendezvous point                           |
| rp-type           | (Optional) Multicast rendezvous point type |
| <i>ipv6rptype</i> | (Optional) IPv6 rendezvous point type      |
| group             | Multicast group address                    |
| group-range       | Multicast Group address range              |
| to                | Range                                      |
| source            | Multicast source address                   |

### Command Mode

- /exec/configure/route-map

# match ipv6 next-hop prefix-list

```
match ipv6 next-hop prefix-list <ipv6-pfl-name> + | no match ipv6 next-hop prefix-list { <ipv6-pfl-name> | <ipv6-pfl-name> } +
```

## Syntax Description

| Syntax Description   |  |                                      |
|----------------------|--|--------------------------------------|
| no                   |  | Negate a command or set its defaults |
| match                |  | Match values from routing table      |
| ipv6                 |  | Configure IPv6 features              |
| next-hop             |  | Match next-hop address of route      |
| prefix-list          |  | Match entries of prefix-lists        |
| <i>ipv6-pfl-name</i> |  | Name of prefix-list                  |
| <i>ipv6-pfl-name</i> |  | Name of prefix-list                  |
| <i>ipv6-pfl-name</i> |  | Known prefix-list name               |

## Command Mode

- /exec/configure/route-map

# match ipv6 route-source prefix-list

```
match ipv6 route-source prefix-list <ipv6-pfl-name> + | no match ipv6 route-source prefix-list {
<ipv6-pfl-name> | <ipv6-pfl-name> } +
```

## Syntax Description

| Syntax Description   |  |   |
|----------------------|--|---|
| no                   |  | Negate a command or set its defaults      |
| match                |  | Match values from routing table           |
| ipv6                 |  | Configure IPv6 features                   |
| route-source         |  | Match advertising source address of route |
| prefix-list          |  | Match entries of prefix-lists             |
| <i>ipv6-pfl-name</i> |  | Name of prefix-list                       |
| <i>ipv6-pfl-name</i> |  | Name of prefix-list                       |
| <i>ipv6-pfl-name</i> |  | Known prefix-list name                    |

## Command Mode

- /exec/configure/route-map

# match metric

[no] match metric { <measure> [ <plus-minus> <deviation> ] } +

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| match              |            | Match values from routing table      |
| metric             |            | Match metric of route                |
| <i>plus-minus</i>  | (Optional) | +/-                                  |
| <i>measure</i>     |            | Metric value                         |
| <i>deviation</i>   | (Optional) | Deviation value                      |

## Command Mode

- /exec/configure/route-map

# match ospf-area

[no] match ospf-area <area> +

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| match              | Match values from routing table                 |
| ospf-area          | Match ospf area                                 |
| area               | area id   |

## Command Mode

- /exec/configure/route-map

# match protocol

[no] match protocol { fcoe | iscsi | tcp }

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| match              | Classification criteria                         |
| protocol           | Protocol  |
| fcoe               | FCoE  |
| iscsi              | ISCSI   |
| tcp                | TCP   |

## Command Mode

- /exec/configure/class-map/type/uf



# match protocol arp

```
[no] match protocol { arp | mpls [ router-alert | exp <exp_value> ] }
```

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults                                  |
| match              | Classification criteria  |
| protocol           | Protocol   |
| arp                | IP ARP   |
| mpls               | Multi-protocol Label Switching   |
| router-alert       | (Optional) Match packets with router-alert label set to 1 for OTV Overlay frames |
| exp                | (Optional) Match packets on MPLS exp bits  |
| <i>exp_value</i>   | (Optional) Exp bits value  |

## Command Mode

- /exec/configure/cmap

# match qos-group

[no] match qos-group { <qos-group-list> } +

## Syntax Description

| Syntax Description    |            |                                      |
|-----------------------|------------|--------------------------------------|
| no                    | (Optional) | Negate a command or set its defaults |
| match                 |            | Classification criteria              |
| qos-group             |            | QoS Group                            |
| <i>qos-group-list</i> |            | List of qos-group values             |

## Command Mode

- /exec/configure/class-map/type/queuing

# match qos-group2

[no] match qos-group2 { <qos-group-list> }

## Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| match                 | Classification criteria                         |  |
| qos-group2            | QoS Group                                       |  |
| <i>qos-group-list</i> | List of qos-group values                        |  |

## Command Mode

- /exec/configure/class-map/type/queuing

# match qos-group2

[no] match qos-group2 <qos-group-list>

## Syntax Description

| Syntax Description    |            |                                      |
|-----------------------|------------|--------------------------------------|
| no                    | (Optional) | Negate a command or set its defaults |
| match                 |            | Classification criteria              |
| qos-group2            |            | QoS Group                            |
| <i>qos-group-list</i> |            | Qos-group value                      |

## Command Mode

- /exec/configure/class-map/type/uf

# match qos-group

[no] match qos-group <qos-group-list>

## Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| match                 | Classification criteria                         |  |
| qos-group             | QoS Group                                       |  |
| <i>qos-group-list</i> | List of qos-group values                        |  |

## Command Mode

- /exec/configure/class-map/type/uf

# match redirect

[no] match redirect <opt\_match\_redirect>

## Syntax Description

| Syntax Description        |            |                                       |
|---------------------------|------------|---------------------------------------|
| no                        | (Optional) | Negate a command or set its defaults  |
| match                     |            | Classification criteria               |
| redirect                  |            | Match redirected packets              |
| <i>opt_match_redirect</i> |            | Match criteria for redirected packets |

## Command Mode

- /exec/configure/cmap

# match route-type

[no] match route-type { external | internal | level-1 | level-2 | local | nssa-external | type-1 | type-2 | inter-area | intra-area } +

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 | (Optional) Negate a command or set its defaults  |  |
| match              | Match values from routing table                  |  |
| route-type         | Match route-type of route                        |  |
| external           | external route (BGP, EIGRP and OSPF type 1/2)    |  |
| internal           | internal route (including OSPF intra/inter area) |  |
| level-1            | IS-IS level-1 route                              |  |
| level-2            | IS-IS level-2 route                              |  |
| local              | locally generated route                          |  |
| nssa-external      | nssa-external route (OSPF type 1/2)              |  |
| type-1             | OSPF external type 1 route                       |  |
| type-2             | OSPF external type 2 route                       |  |
| inter-area         | OSPF inter area route                            |  |
| intra-area         | OSPF intra area route                            |  |

## Command Mode

- /exec/configure/route-map

# match source-protocol

[no] match source-protocol <src\_prot> +

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| match              |            | Match values from routing table      |
| source-protocol    |            | Match source protocol                |
| <i>src_prot</i>    |            | Protocol instance name               |

## Command Mode

- /exec/configure/route-map



# match tag

[no] match tag <tagid> +

## Syntax Description

---

### Syntax Description

---

**no** (Optional) Negate a command or set its defaults

---

**match** Match values from routing table

---

**tag** Match tag of route

---

*tagid* Tag value

---

## Command Mode

- /exec/configure/route-map

# match transport destination

[no] match transport { destination-port | source-port }

## Syntax Description

| Syntax Description |  |                            |
|--------------------|--|----------------------------|
| match              |  | Specify a key field        |
| transport          |  | Transport layer fields     |
| destination-port   |  | Transport destination port |
| source-port        |  | Transport source port      |

## Command Mode

- /exec/configure/nfm-record

# max-backoff

max-backoff <maxbackoff-val> | no max-backoff

## Syntax Description

| Syntax Description    |  |
|-----------------------|--|
| no                    | Negate a command or set its defaults                             |
| max-backoff           | OpenFlow controller maximum backoff timer (default is 8 seconds) |
| <i>maxbackoff-val</i> | max backoff timer value in secs                                  |

## Command Mode

- /exec/configure/openflow/switch

# max-backoff

max-backoff <maxbackoff-val> | no max-backoff

## Syntax Description

---

### Syntax Description

---

|    |                                      |
|----|--------------------------------------|
| no | Negate a command or set its defaults |
|----|--------------------------------------|

---

|             |  |
|-------------|--|
| max-backoff | OpenFlow controller maximum backoff timer (default is 8 seconds) |
|-------------|--|

---

|                       |                                 |
|-----------------------|---------------------------------|
| <i>maxbackoff-val</i> | max backoff timer value in secs |
|-----------------------|---------------------------------|

---

## Command Mode

- /exec/configure/openflow/switch/sub-switch

# max-lsa

[no] max-lsa <maximum-number> [ <threshold> ] [ warning-only ] [ ignore-time <ignore-time-minutes> ] [ ignore-count <ignore-count-number> ] [ reset-time <reset-time-minutes> ] ]

## Syntax Description

| Syntax Description         |  |
|----------------------------|--|
| no                         | (Optional) Negate a command or set its defaults                            |
| max-lsa                    | Feature to limit the number of non-self-originated LSAs                    |
| <i>maximum-number</i>      | Set maximum number of non self-generated LSAs                              |
| <i>threshold</i>           | (Optional) Threshold value (%) at which to generate a warning message      |
| warning-only               | (Optional) Log a warning message when limit is exceeded                    |
| ignore-time                | (Optional) Set time during which all adjacencies are suppressed            |
| <i>ignore-time-minutes</i> | (Optional) ignore-time in minutes  |
| ignore-count               | (Optional) Set count on how many times adjacencies can be suppressed       |
| <i>ignore-count-number</i> | (Optional) ignore-count  |
| reset-time                 | (Optional) Set number of minutes after which ignore-count is reset to zero |
| <i>reset-time-minutes</i>  | (Optional) reset-time in minutes   |

## Command Mode

- /exec/configure/router-ospf /exec/configure/router-ospf/vrf

# max-lsa

[no] max-lsa <maximum-number> [ <threshold> ] [ warning-only | [ ignore-time <ignore-time-minutes> ] [ ignore-count <ignore-count-number> ] [ reset-time <reset-time-minutes> ] ]

## Syntax Description

| Syntax Description         |            |   |
|----------------------------|------------|---|
| no                         | (Optional) | Negate a command or set its defaults                            |
| max-lsa                    |            | Feature to limit the number of non-self-originated LSAs         |
| <i>maximum-number</i>      |            | Set maximum number of non self-generated LSAs                   |
| <i>threshold</i>           | (Optional) | Threshold value (%) at which to generate a warning message      |
| warning-only               | (Optional) | Log a warning message when limit is exceeded                    |
| ignore-time                | (Optional) | Set time during which all adjacencies are suppressed            |
| <i>ignore-time-minutes</i> | (Optional) | ignore-time in minutes  |
| ignore-count               | (Optional) | Set count on how many times adjacencies can be suppressed       |
| <i>ignore-count-number</i> | (Optional) | ignore-count  |
| reset-time                 | (Optional) | Set number of minutes after which ignore-count is reset to zero |
| <i>reset-time-minutes</i>  | (Optional) | reset-time in minutes   |

## Command Mode

- /exec/configure/router-ospf3 /exec/configure/router-ospf3/vrf

# max-lsp-lifetime

max-lsp-lifetime <lifetime> | no max-lsp-lifetime [ <lifetime> ]

## Syntax Description

| Syntax Description |                                      |
|--------------------|--------------------------------------|
| no                 | Negate a command or set its defaults |
| max-lsp-lifetime   | Set maximum LSP lifetime             |
| <i>lifetime</i>    | Maximum LSP lifetime in seconds      |

## Command Mode

- /exec/configure/otv-isis/otv-isis-vrf-common

# max-lsp-lifetime

max-lsp-lifetime <lifetime> | no max-lsp-lifetime [ <lifetime> ]

## Syntax Description

|                           |                  |                                      |
|---------------------------|------------------|--------------------------------------|
| <b>Syntax Description</b> | no               | Negate a command or set its defaults |
|                           | max-lsp-lifetime | Set maximum LSP lifetime             |
|                           | <i>lifetime</i>  | Maximum LSP lifetime in seconds      |

## Command Mode

- /exec/configure/router-isis/router-isis-vrf-common



## max-metric router-lsa

```
[no] max-metric router-lsa [ external-lsa [ <max-metric-extlsa> ] ] [ include-stub ] [ on-startup [ <timeout> ]
[ wait-for bgp <as> ] ] [ summary-lsa [ <max-metric-sumlsa> ] ]
```

### Syntax Description

| Syntax Description       |            |  |
|--------------------------|------------|--|
| no                       | (Optional) | Negate a command or set its defaults         |
| max-metric               |            | Maximize the cost metric                     |
| router-lsa               |            | Router LSA                                   |
| external-lsa             | (Optional) | External LSAs                                |
| <i>max-metric-extlsa</i> | (Optional) | Max metric value for external LSAs           |
| include-stub             | (Optional) | Advertise Max metric for Stub links as well  |
| on-startup               | (Optional) | Effective only at startup                    |
| <i>timeout</i>           | (Optional) | Wait period in seconds after startup         |
| wait-for                 | (Optional) | Wait for an event to advertise normal metric |
| bgp                      | (Optional) | BGP Convergence                              |
| <i>as</i>                | (Optional) | ASN of BGP to wait for                       |
| summary-lsa              | (Optional) | Summary LSAs                                 |
| <i>max-metric-sumlsa</i> | (Optional) | Max metric value for summary LSAs            |

### Command Mode

- /exec/configure/router-ospf /exec/configure/router-ospf/vrf

## max-metric router-lsa

```
[no] max-metric router-lsa [ external-lsa [ <max-metric-extlsa> ] ] [ stub-prefix-lsa ] [ on-startup [ <timeout> ] ] [ wait-for bgp <as> ] ] [ inter-area-prefix-lsa [ <max-metric-sumlsa> ] ]
```

### Syntax Description

| Syntax Description       |            |  |
|--------------------------|------------|--|
| no                       | (Optional) | Negate a command or set its defaults         |
| max-metric               |            | Maximize the cost metric                     |
| router-lsa               |            | Router LSA                                   |
| external-lsa             | (Optional) | External LSAs                                |
| <i>max-metric-extlsa</i> | (Optional) | Max metric value for external LSAs           |
| stub-prefix-lsa          | (Optional) | Advertise Max metric for Stub links as well  |
| on-startup               | (Optional) | Effective only at startup                    |
| <i>timeout</i>           | (Optional) | Wait period in seconds after startup         |
| wait-for                 | (Optional) | Wait for an event to advertise normal metric |
| bgp                      | (Optional) | BGP Convergence                              |
| <i>as</i>                | (Optional) | ASN of BGP to wait for                       |
| inter-area-prefix-lsa    | (Optional) | Inter-area-prefix LSAs                       |
| <i>max-metric-sumlsa</i> | (Optional) | Max metric value for summary LSAs            |

### Command Mode

- /exec/configure/router-ospf3 /exec/configure/router-ospf3/vrf

# max-ports

[ vmware ] max-ports <i0>

## Syntax Description

---

### Syntax Description

---

vmware (Optional) VMware configuration

---

max-ports Max ports on which this profile can be inherited

---

*i0* Enter the max-number of ports

---

## Command Mode

- /exec/configure/port-profile

# max-ports

[no] [ vmware ] max-ports

## Syntax Description

---

**Syntax Description**

---

no        Negate a command or set its defaults

---

vmware   (Optional) VMware configuration

---

max-ports Max ports on which this profile can be inherited

---

## Command Mode

- /exec/configure/port-profile

# maxas-limit

maxas-limit <as-limit> | no maxas-limit [ <as-limit> ]

## Syntax Description

---

**Syntax Description**

no Negate a command or set its defaults

---

maxas-limit Allow AS-PATH attribute from EBGP neighbor imposing a limit on number of ASes

---

*as-limit* Number of ASes in the AS-PATH attribute

---

## Command Mode

- /exec/configure/router-bgp/vrf-cmds

# maximum-paths

maximum-paths <max-paths> | no maximum-paths [ <max-paths> ]

## Syntax Description

| Syntax Description |                                      |
|--------------------|--------------------------------------|
| no                 | Negate a command or set its defaults |
| maximum-paths      | RIP set maximum paths per route      |
| <i>max-paths</i>   | Maximum paths per prefix             |

## Command Mode

- /exec/configure/router-rip/router-rip-af-common /exec/configure/router-rip/router-rip-vrf-af-common

# maximum-paths

maximum-paths [ ibgp ] <mpath-count> | no maximum-paths [ ibgp ] [ <mpath-count> ]

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | Negate a command or set its defaults          |
| maximum-paths      | Forward packets over multipath paths          |
| ibgp               | (Optional) Configure multipath for IBGP paths |
| <i>mpath-count</i> | Number of parallel paths                      |

## Command Mode

- /exec/configure/router-bgp/router-bgp-af /exec/configure/router-bgp/router-bgp-af-l2vpn-evpn

# maximum-paths

maximum-paths <max-paths> | no maximum-paths [ <max-paths> ]

## Syntax Description

|                           |                  |                                      |
|---------------------------|------------------|--------------------------------------|
| <b>Syntax Description</b> | no               | Negate a command or set its defaults |
|                           | maximum-paths    | Maximum paths per destination        |
|                           | <i>max-paths</i> | Maximum paths per destination        |

## Command Mode

- /exec/configure/router-ospf



# maximum-paths

maximum-paths <max-paths> | no maximum-paths [ <max-paths> ]

## Syntax Description

| Syntax Description |                                      |
|--------------------|--------------------------------------|
| no                 | Negate a command or set its defaults |
| maximum-paths      | Set maximum paths per destination    |
| <i>max-paths</i>   | Maximum paths per destination        |

## Command Mode

- /exec/configure/router-isis/router-isis-vrf-common /exec/configure/router-isis/router-isis-af-ipv6

# maximum-paths

maximum-paths <max-paths> | no maximum-paths [ <max-paths> ]

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| maximum-paths      |  | Maximum paths per destination        |
| <i>max-paths</i>   |  | Maximum paths per destination        |

## Command Mode

- /exec/configure/router-ospf3/router-ospf3-af-ipv6 /exec/configure/router-ospf3/vrf/router-ospf3-af-ipv6

# maximum-paths

{ { maximum-paths <num-paths> } | { no maximum-paths [ <num-paths> ] } }

## Syntax Description

|                           |                      |                                      |
|---------------------------|----------------------|--------------------------------------|
| <b>Syntax Description</b> | <i>no</i>            | Negate a command or set its defaults |
|                           | <i>maximum-paths</i> | Forward packets over multiple paths  |
|                           | <i>num-paths</i>     | Number of paths                      |

## Command Mode

- /exec/configure/router-eigrp/router-eigrp-vrf-common /exec/configure/router-eigrp/router-eigrp-af-common

# maximum-paths eibgp

maximum-paths eibgp <mpath-count> | no maximum-paths eibgp [ <mpath-count> ]

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults             |
| maximum-paths      |  | Forward packets over multipath paths             |
| eibgp              |  | Configure multipath for both EBGP and IBGP paths |
| <i>mpath-count</i> |  | Number of parallel paths                         |

## Command Mode

- /exec/configure/router-bgp/router-bgp-vrf-af-ipv4 /exec/configure/router-bgp/router-bgp-vrf-af-ipv6

# maximum-peers

{ maximum-peers <limit> | no maximum-peers [ <limit> ] }

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults    |
| maximum-peers      |  | Maximum number of peers for this prefix |
| <i>limit</i>       |  | Max. peers limit                        |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor-prefix

# maximum-prefix

maximum-prefix <limit> [ <percent> ] [ restart <restart-time> | warning-only ] | { no | default } maximum-prefix [ <limit> [ <percent> ] [ restart <restart-time> | warning-only ] ]

## Syntax Description

### Syntax Description

|                     |  |
|---------------------|--|
| no                  | Negate a command or set its defaults                           |
| default             | Inherit values from a peer template                            |
| maximum-prefix      | Maximum number of prefixes from this neighbor                  |
| <i>limit</i>        | Max. prefix limit  |
| <i>percent</i>      | (Optional) Threshold percentage at which to generate a warning |
| restart             | (Optional) Restart bgp connection after limit is exceeded      |
| <i>restart-time</i> | (Optional) Restart interval in minutes                         |
| warning-only        | (Optional) Only give a warning message when limit is exceeded  |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-l2vpn-evpn
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-vpnv4
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-vpnv6
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv4-mvpn
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv6-mvpn
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-link-state
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv4-label
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv6-label

# maximum-prefix

maximum-prefix <limit> [ <percent> ] [ restart <restart-time> | warning-only ] | { no | default } maximum-prefix [ <limit> [ <percent> ] [ restart <restart-time> | warning-only ] ]

## Syntax Description

| Syntax Description  |  |  |
|---------------------|--|--|
| no                  |  | Negate a command or set its defaults                           |
| default             |  | Inherit values from a peer template                            |
| maximum-prefix      |  | Maximum number of prefixes from this neighbor                  |
| <i>limit</i>        |  | Max. prefix limit  |
| <i>percent</i>      |  | (Optional) Threshold percentage at which to generate a warning |
| restart             |  | (Optional) Restart bgp connection after limit is exceeded      |
| <i>restart-time</i> |  | (Optional) Restart interval in minutes                         |
| warning-only        |  | (Optional) Only give a warning message when limit is exceeded  |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv4-mdt  
/exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-l2vpn-vpls

# maximum-prefix

```
{ { maximum-prefix <value> [ <threshold> ] [ warning-only ] [ restart <time1> ] [ restart-count <count> ] [
reset-time <time2> ] [ dampened ] } | { no maximum-prefix [ <value> [ <threshold> ] [ warning-only ] [ restart
<time1> ] [ restart-count <count> ] [ reset-time <time2> ] [ dampened ] } }
```

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 |            | Negate a command or set its defaults                       |
| maximum-prefix     |            | Maximum number of IP prefixes acceptable in aggregate      |
| value              |            | Number of IP prefixes for maximum-prefix limit             |
| threshold          | (Optional) | Threshold value (%) at which to generate a warning message |
| warning-only       | (Optional) | Only give warning message when limit is exceeded           |
| restart            | (Optional) | Duration for which a prefix source is ignored              |
| time1              | (Optional) | Restart interval in minutes                                |
| restart-count      | (Optional) | Number of times sessions are auto-restarted                |
| count              | (Optional) | Number of times  |
| reset-time         | (Optional) | Duration after which restart history is cleared            |
| time2              | (Optional) | Reset time in minutes                                      |
| dampened           | (Optional) | Exponentially increase restart time interval               |

## Command Mode

- /exec/configure/router-eigrp/router-eigrp-vrf-common /exec/configure/router-eigrp/router-eigrp-af-common



## maximum routes

[no] maximum routes <limit> [ { <warnlevel> [ reinstall <threshold> ] } | warning-only ]

### Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults                              |
| maximum            | Set a limit  |
| routes             | Maximum number of routes allowed in this routing table                       |
| <i>limit</i>       | Maximum number of routes allowed   |
| <i>warnlevel</i>   | (Optional) Threshold value (%) at which to generate a warning msg            |
| reinstall          | (Optional) Reinstall previous rejected route due to over maximum route limit |
| <i>threshold</i>   | (Optional) Threshold value (%) at which to reinstall routes back to VRF      |
| warning-only       | (Optional) Only give a warning message if limit is exceeded                  |

### Command Mode

- /exec/configure/vrf-af-ipv4 /exec/configure/vrf-af-ipv6

# mcast-group

mcast-group <maddr1> [ <maddr2> ] | no mcast-group

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| mcast-group        |  | NVE Multicast Group                  |
| <i>maddr1</i>      |  | Multicast IP Prefix                  |
| <i>maddr2</i>      |  | (Optional) Multicast IP Prefix       |

## Command Mode

- /exec/configure/if-nve/vni

# mdix auto

{ mdix auto | no mdix [ auto ] }

## Syntax Description

---

### Syntax Description

---

no Negate a command or set its defaults

---

~~no~~ Enable auto mdix mode

---

auto Enable auto mdix mode

---

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-eth-base

# mdt asm-use-shared-tree

[no] mdt asm-use-shared-tree

## Syntax Description

| Syntax Description  |   |
|---------------------|---|
| no                  | (Optional) Negate a command or set its defaults         |
| mdt                 | Backbone Multicast Distribution Tree                    |
| asm-use-shared-tree | Use (*,G) only state, no remote source state is created |

## Command Mode

- /exec/configure/vrf

# mdt data

[no] mdt data <prefix> [ threshold <value> ] [ route-map <policy-name> ]

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults  |
| mdt                | Backbone Multicast Distribution Tree             |
| data               | Configure settings for Data MDT                  |
| <i>prefix</i>      | List of group range prefixes                     |
| threshold          | (Optional) Data MDT switching threshold          |
| <i>value</i>       | (Optional) Threshold in kilobits per sec         |
| route-map          | (Optional) Specify policy for creating Data MDTs |
| <i>policy-name</i> | (Optional) A route-map name                      |

## Command Mode

- /exec/configure/vrf

# mdt data bidir-enable

[no] mdt data bidir-enable

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| mdt                | Backbone Multicast Distribution Tree            |  |
| data               | Configure settings for Data MDT                 |  |
| bidir-enable       | Allow creation of data mdts for bidir customers |  |

## Command Mode

- /exec/configure/vrf

# mdt data inhibit-reuse

[no] mdt data inhibit-reuse

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| mdt                | Backbone Multicast Distribution Tree            |
| data               | Configure settings for Data MDT                 |
| inhibit-reuse      | No reusing data mdts in the backbone network    |

## Command Mode

- /exec/configure/vrf

# mdt default

mdt default <mdt-default> | no mdt default [ <mdt-default> ]

## Syntax Description

| Syntax Description |                    |                                      |
|--------------------|--------------------|--------------------------------------|
|                    | no                 | Negate a command or set its defaults |
|                    | mdt                | Backbone Multicast Distribution Tree |
|                    | default            | The default group                    |
|                    | <i>mdt-default</i> | IP multicast group address           |

## Command Mode

- /exec/configure/vrf



# mdt enforce-bgp-mdt-safi

[no] mdt enforce-bgp-mdt-safi

## Syntax Description

| Syntax Description |                      |   |
|--------------------|----------------------|---|
|                    | no                   | (Optional) Negate a command or set its defaults |
|                    | mdt                  | Backbone Multicast Distribution Tree            |
|                    | enforce-bgp-mdt-safi | Depend on BGP MDT SAFI for auto-discovery       |

## Command Mode

- /exec/configure/vrf

# mdt mtu

[no] mdt mtu <mtu-value>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| mdt                | Backbone Multicast Distribution Tree            |
| mtu                | The MTU   |
| <i>mtu-value</i>   | MTU value                                       |

## Command Mode

- /exec/configure/vrf

# mdt pim hello-interval

[no] mdt pim hello-interval <interval>

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| mdt                | Backbone Multicast Distribution Tree            |  |
| pim                | PIM protocol related parameters                 |  |
| hello-interval     | Hello interval used between peers               |  |
| <i>interval</i>    | Interval in milliseconds                        |  |

## Command Mode

- /exec/configure/vrf

# mdt pim jp-interval

[no] mdt pim jp-interval <interval>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| mdt                | Backbone Multicast Distribution Tree            |
| pim                | PIM protocol related parameters                 |
| jp-interval        | Join-Prune interval used between peers          |
| <i>interval</i>    | Interval in seconds                             |

## Command Mode

- /exec/configure/vrf

# mdt source

[no] mdt source <interface>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults     |
| mdt                | Backbone Multicast Distribution Tree                |
| source             | Source interface to be used in the backbone network |
| <i>interface</i>   | Use IP address of this interface                    |

## Command Mode

- /exec/configure/vrf

# media-type auto

media-type auto

## Syntax Description

---

### Syntax Description

---

|            |                            |
|------------|----------------------------|
| media-type | Select the media-type link |
|------------|----------------------------|

---

|      |                          |
|------|--------------------------|
| auto | Select mgmt port as auto |
|------|--------------------------|

---

## Command Mode

- /exec/configure/if-mgmt-ether

# media-type rj45

media-type rj45

## Syntax Description

|                           |            |                            |
|---------------------------|------------|----------------------------|
| <b>Syntax Description</b> | media-type | Select the media-type link |
|                           | rj45       | Select mgmt port rj45      |

## Command Mode

- /exec/configure/if-mgmt-ether

# media-type sfp

media-type sfp

## Syntax Description

---

### Syntax Description

---

|            |                            |
|------------|----------------------------|
| media-type | Select the media-type link |
|------------|----------------------------|

---

|     |                      |
|-----|----------------------|
| sfp | Select mgmt port sfp |
|-----|----------------------|

---

## Command Mode

- /exec/configure/if-mgmt-ether



# medium

medium <medium-type> | no medium <medium-type>

## Syntax Description

| Syntax Description |                                      |
|--------------------|--------------------------------------|
| no                 | Negate a command or set its defaults |
| medium             | Configure Interface medium mode      |
| <i>medium-type</i> |                                      |

## Command Mode

- /exec/configure/if-vlan-common

# medium broadcast

{ medium broadcast | no medium broadcast }

## Syntax Description

|                           |           |                                      |
|---------------------------|-----------|--------------------------------------|
| <b>Syntax Description</b> | no        | Negate a command or set its defaults |
|                           | medium    | Configure Interface medium mode      |
|                           | broadcast | Broadcast medium                     |

## Command Mode

- /exec/configure/ppm-ethernet-switch /exec/configure/if-ether-sub /exec/configure/if-ether-sub-p2p

# medium broadcast

{ medium broadcast | no medium broadcast }

## Syntax Description

|                           |           |                                      |
|---------------------------|-----------|--------------------------------------|
| <b>Syntax Description</b> | no        | Negate a command or set its defaults |
|                           | medium    | Configure Interface medium mode      |
|                           | broadcast | Broadcast medium                     |

## Command Mode

- /exec/configure/if-ethernet-p2p-switch /exec/configure/if-ethernet-p2p /exec/configure/if-ethernet-all /exec/configure/if-eth-l3-non-member /exec/configure/if-port-channel /exec/configure/if-remote-ethernet-sub /exec/configure/if-eth-port-channel-p2p /exec/configure/if-ethernet-p2p-m

# medium p2p

{ medium p2p | no medium p2p }

## Syntax Description

|                           |        |                                      |
|---------------------------|--------|--------------------------------------|
| <b>Syntax Description</b> | no     | Negate a command or set its defaults |
|                           | medium | Configure Interface medium mode      |
|                           | p2p    | Point-to-Point medium                |

## Command Mode

- /exec/configure/ppm-ethernet-switch /exec/configure/if-ether-sub /exec/configure/if-ether-sub-p2p /exec/configure/if-port-channel-sub

# medium p2p

{ medium p2p | no medium p2p }

## Syntax Description

|                           |        |                                      |
|---------------------------|--------|--------------------------------------|
| <b>Syntax Description</b> | no     | Negate a command or set its defaults |
|                           | medium | Configure Interface medium mode      |
|                           | p2p    | Point-to-Point medium                |

## Command Mode

- /exec/configure/if-ethernet-p2p-switch /exec/configure/if-ethernet-p2p /exec/configure/if-ethernet-all /exec/configure/if-eth-13-non-member /exec/configure/if-port-channel /exec/configure/if-remote-ethernet-sub /exec/configure/if-eth-port-channel-p2p /exec/configure/if-ethernet-p2p-m

# member vni

[no] member vni <vni-range>

## Syntax Description

|                           |                  |   |
|---------------------------|------------------|---|
| <b>Syntax Description</b> | no               | (Optional) Negate a command or set its defaults |
|                           | member           | NVE VN-Segment Membership                       |
|                           | vni              | Virtual Network Identifier                      |
|                           | <i>vni-range</i> | vni range, Example: 5000 or 5001-5008           |

## Command Mode

- /exec/configure/if-nve

# member vni associate-vrf

[no] member vni <vni-range> associate-vrf

## Syntax Description

|                           |                  |   |
|---------------------------|------------------|---|
| <b>Syntax Description</b> | no               | (Optional) Negate a command or set its defaults |
|                           | member           | NVE VN-Segment Membership                       |
|                           | vni              | Virtual Network Identifier                      |
|                           | <i>vni-range</i> | vni range, Example: 5000 or 5001-5008           |
|                           | associate-vrf    | Associate vni with a vrf                        |

## Command Mode

- /exec/configure/if-nve

## member vni mcast-group

[no] member vni <vni-range> mcast-group <maddr1> [ <maddr2> ]

### Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| member             |            | NVE VN-Segment Membership            |
| vni                |            | Virtual Network Identifier           |
| <i>vni-range</i>   | vni range, | Example: 5000 or 5001-5008           |
| mcast-group        |            | NVE Multicast Group                  |
| <i>maddr1</i>      |            | Multicast IP Prefix                  |
| <i>maddr2</i>      | (Optional) | Multicast IP Prefix                  |

### Command Mode

- /exec/configure/if-nve



# merge config

merge config <from-file> [ show-only ]

## Syntax Description

---

### Syntax Description

---

merge    merge

---

config    merge configuration (to running-config)

---

*from-file*    the file containing the destination configuration, a patch will be created and applied to the running-config's matching section (format according to 'show run section' command output)

---

show-only    (Optional) only show the patch, don't execute it

---

## Command Mode

- /exec

## message-digest-key md5

```
{ { message-digest-key <keyid> md5 <key> } | { no message-digest-key [ <keyid> md5 <key> ] } }
```

### Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults         |
| message-digest-key |  | Message digest authentication password (key) |
| <i>keyid</i>       |  | Key ID                                       |
| md5                |  | Use MD5 algorithm                            |
| <i>key</i>         |  | The OSPF password (key)                      |

### Command Mode

- /exec/configure/router-ospf/router-ospf-vlink /exec/configure/router-ospf/vrf/router-ospf-vlink

# message-digest-key md5

```
{ { message-digest-key <keyid> md5 <key> } | { no message-digest-key [ <keyid> md5 <key> ] } }
```

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults         |
| message-digest-key |  | Message digest authentication password (key) |
| <i>keyid</i>       |  | Key ID                                       |
| md5                |  | Use MD5 algorithm                            |
| <i>key</i>         |  | OSPF password (key)                          |

## Command Mode

- /exec/configure/router-ospf/vrf/router-ospf-slink

# metric-style transition

[no] metric-style { transition }

## Syntax Description

|                           |              |   |
|---------------------------|--------------|---|
| <b>Syntax Description</b> | no           | (Optional) Negate a command or set its defaults |
|                           | metric-style | Configure metric style used in advertised LSPs  |
|                           | transition   | Use both narrow and wide metric style           |

## Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

# metric direct 0

[no] metric direct 0

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults     |
| metric             | Cost of direct routes                               |
| direct             | Cost of direct routes                               |
| 0                  | direct route cost is zero to be compatible with IOS |

## Command Mode

- /exec/configure/router-rip

# metric maximum-hops

```
{ { metric maximum-hops <hops> } | { no metric maximum-hops [ <hops> ] } }
```

## Syntax Description

### Syntax Description

|                           |   |
|---------------------------|---|
| <code>no</code>           | Negate a command or set its defaults                      |
| <code>metric</code>       | Modify EIGRP routing metrics and parameters               |
| <code>maximum-hops</code> | Advertise EIGRP routes greater than <hops> as unreachable |
| <code>hops</code>         | Hop count   |

## Command Mode

- /exec/configure/router-eigrp/router-eigrp-vrf-common /exec/configure/router-eigrp/router-eigrp-af-common

# metric rib-scale

{ { metric rib-scale <rib-scale> } | { no metric rib-scale [ <rib-scale> ] } }

## Syntax Description

|                           |                  |   |
|---------------------------|------------------|---|
| <b>Syntax Description</b> | no               | Negate a command or set its defaults        |
|                           | metric           | Modify EIGRP routing metrics and parameters |
|                           | rib-scale        | Defines RIB scaling value                   |
|                           | <i>rib-scale</i> | Rib scale                                   |

## Command Mode

- /exec/configure/router-eigrp/router-eigrp-vrf-common /exec/configure/router-eigrp/router-eigrp-af-common

# metric version 64bit

{ { metric version 64bit } | { no metric version [ 64bit ] } }

## Syntax Description

|                           |         |   |
|---------------------------|---------|---|
| <b>Syntax Description</b> | no      | Negate a command or set its defaults        |
|                           | metric  | Modify EIGRP routing metrics and parameters |
|                           | version | Modify EIGRP metric version                 |
|                           | 64bit   | 64 bit metric version                       |

## Command Mode

- /exec/configure/router-eigrp/router-eigrp-vrf-common /exec/configure/router-eigrp/router-eigrp-af-common



# metric weights

```
{ { metric weights <tos> <k1> <k2> <k3> <k4> <k5> [ <k6> ] } | { no metric weights [ <tos> <k1> <k2> <k3> <k4> <k5> [ <k6> ] ] } }
```

## Syntax Description

| Syntax Description   |   |
|----------------------|---|
| <code>no</code>      | Negate a command or set its defaults        |
| <code>metric</code>  | Modify EIGRP routing metrics and parameters |
| <code>weights</code> | Modify EIGRP metric coefficients            |
| <code>tos</code>     | Type Of Service (Only TOS 0 supported)      |
| <code>k1</code>      | K1  |
| <code>k2</code>      | K2  |
| <code>k3</code>      | K3  |
| <code>k4</code>      | K4  |
| <code>k5</code>      | K5  |
| <code>k6</code>      | (Optional) K6                               |

## Command Mode

- /exec/configure/router-eigrp/router-eigrp-vrf-common /exec/configure/router-eigrp/router-eigrp-af-common

# mgmt-policy

```
{ no mgmt-policy <policy-name> } | { mgmt-policy <policy-name> { permit | deny } [ [ ip { <ip-addr> [ <ip-mask> ] } ] | [ ip6 <ipv6-prefix> ] ] [ protocol { tcp | udp | icmp } ] [ src-port <srcport> [ <srcport-end> ] ] [ dest-port <dstport> [ <dstport-end> ] ] }
```

## Syntax Description

| Syntax Description |    |                                       |
|--------------------|----|---------------------------------------|
| no                 |    | Negate a command or set its defaults  |
| mgmt-policy        | PM | Management Policy                     |
| <i>policy-name</i> |    | Name of the policy                    |
| permit             |    | Permit access                         |
| deny               |    | Deny access                           |
| ip                 |    | (Optional) IPV4 address               |
| <i>ip-addr</i>     |    | (Optional) IPV4 source address/subnet |
| <i>ip-mask</i>     |    | (Optional) IPV4 mask                  |
| ip6                |    | (Optional) IPV6 Address               |
| protocol           |    | (Optional) Protocol                   |
| tcp                |    | (Optional) TCP protocol               |
| udp                |    | (Optional) UDP protocol               |
| icmp               |    | (Optional) ICMP protocol              |
| src-port           |    | (Optional) Source port                |
| <i>srcport</i>     |    | (Optional) Source port                |
| <i>srcport-end</i> |    | (Optional) Source Port end            |
| dest-port          |    | (Optional) Destination port           |
| <i>dstport</i>     |    | (Optional) Destination port           |
| <i>dstport-end</i> |    | (Optional) Destination Port end       |

## Command Mode

- /exec/configure

# mkdir

mkdir <uri0>

## Syntax Description

---

### Syntax Description

---

**mkdir** Create new directory

---

*uri0* Directory name

---

## Command Mode

- /exec

# mode

[no] mode <mode-id>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| mode               | Hot-standby mode                                |
| <i>mode-id</i>     | Node Mode                                       |

## Command Mode

- /exec/configure/itd-dg-node

# mode

[no] mode <mode-id>

## Syntax Description

|                           |                |   |
|---------------------------|----------------|---|
| <b>Syntax Description</b> | no             | (Optional) Negate a command or set its defaults |
|                           | mode           | Hot-standby mode                                |
|                           | <i>mode-id</i> | Node Mode                                       |

## Command Mode

- /exec/configure/itd-dg-node

# mode

[no] mode <mode-id>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| mode               | Hot-standby mode                                |
| <i>mode-id</i>     | Node Mode                                       |

## Command Mode

- /exec/configure/plb-dg-node

# mode every

[no] mode <numsample> every <period>

## Syntax Description

### Syntax Description

|                  |  |
|------------------|--|
| <i>mode</i>      | Define the Sampler mode                          |
| <i>numsample</i> | Number of samples per sampling - 64 max          |
| <i>every</i>     | Time-based sampling                              |
| <i>period</i>    | Sampling Time Period in milliseconds - 64000 max |

## Command Mode

- /exec/configure/nfm-sampler

# mode openflow

[no] mode openflow

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| mode               | Configure the interface operational mode        |
| openflow           | Disable/Enable openflow on the interface        |

## Command Mode

- /exec/configure/if-port-channel /exec/configure/if-ethernet-all /exec/configure/if-eth-base /exec/configure/if-ethernet-switch



# mode out-of

[no] mode <numsample> out-of <samples> | no mode

## Syntax Description

---

**Syntax Description**

---

mode Define the Sampler mode

---

*numsample* Number of samples per sampling - 63 max

---

out-of M out of N packets

---

*samples* Number of packets in each sampling - 8191 max

---

## Command Mode

- /exec/configure/nfm-sampler

# mode tap-aggregation

[no] mode tap-aggregation

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| mode               | Configure the interface operational mode        |
| tap-aggregation    | Disable/Enable tap aggregation on the interface |

## Command Mode

- /exec/configure/if-switching

# monitor erspan granularity

[no] monitor erspan granularity { 100\_ms | 100\_ns | 1588 | ns }

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults    |
| monitor            | Configure Ethernet SPAN sessions                   |
| erspan             | Configure Ethernet ERSPAN sessions                 |
| granularity        | Configure granularity for ERSPAN Type III sessions |
| 100_ms             | 100 microseconds                                   |
| 100_ns             | 100 nanoseconds                                    |
| 1588               | 1588 in seconds/nanoseconds                        |
| ns                 | nanoseconds  |

## Command Mode

- /exec/configure

# monitor erspan origin ip-address

[no] monitor erspan origin ip-address <ip> [ global ]

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults     |
| monitor            | Configure Ethernet SPAN sessions                    |
| erspan             | Configure Ethernet ERSPAN sessions                  |
| origin             | Configure the erspan origin ip address              |
| ip-address         | Configure global origin IP address                  |
| <i>ip</i>          |   |
| global             | (Optional) Configure in default VDC across all VDCs |

## Command Mode

- /exec/configure

# monitor erspan switch-id

[no] monitor erspan switch-id <switch\_id>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| monitor            | Configure Ethernet SPAN sessions                |
| erspan             | Configure Ethernet ERSPAN sessions              |
| switch-id          | Configure the erspan switch-id                  |
| <i>switch_id</i>   | erspan-switch-id                                |

## Command Mode

- /exec/configure

# mount slot0

mount slot0:

## Syntax Description

---

### Syntax Description

---

**mount** mount expansion flash or USB storage

---

**slot0:** mount expansion flash

---

## Command Mode

- /exec

# move

move <uri0> <uri1>

## Syntax Description

---

### Syntax Description

---

*move* Move files

---

*uri0* Source file path

---

*uri1* Destination file path

---

## Command Mode

- /exec

# mping

mping [ { broadcast | lc module <i0> | sup module <i1> } ]

## Syntax Description

| Syntax Description | Description                 |
|--------------------|-----------------------------|
| mping              | run mping                   |
| broadcast          | (Optional) mping broadcast  |
| lc                 | (Optional) mping line-cards |
| module             | (Optional) slot information |
| <i>i0</i>          | (Optional)                  |
| sup                | (Optional) mping supervisor |
| module             | (Optional) slot information |
| <i>i1</i>          | (Optional)                  |

## Command Mode

- /exec



# mpls ip

[no] mpls ip

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| mpls               | MPLS configuration commands                     |
| ip                 | Enable IP over MPLS                             |

## Command Mode

- /exec/configure/if-igp /exec/configure/if-mpls-tunnel

# mpls ip default-route

[no] mpls ip default-route

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| mpls               | MPLS configuration commands                     |
| ip                 | Dynamic MPLS forwarding for IP                  |
| default-route      | Allow MPLS forwarding for ip default route      |

## Command Mode

- /exec/configure/ldp

# mpls ip forwarding

[no] mpls ip forwarding

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| mpls               | MPLS configuration commands                     |
| ip                 | Enable IP over MPLS                             |
| forwarding         | Enable MPLS forwarding on the interface         |

## Command Mode

- /exec/configure/if-ethernet /exec/configure/if-ethernet-all /exec/configure/if-ether-sub  
/exec/configure/if-eth-port-channel /exec/configure/if-port-channel-sub  
/exec/configure/if-port-channel-range /exec/configure/if-vlan-common /exec/configure/if-mvpn  
/exec/configure/if-p2p exec/configure/ppm-ethernet-switch

# mpls ip forwarding

[no] mpls ip forwarding

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| mpls               | MPLS configuration commands                     |  |
| ip                 | Enable IP over MPLS                             |  |
| forwarding         | Enable MPLS forwarding on the interface         |  |

## Command Mode

- /exec/configure/if-gre-tunnel

# mpls ip propagate-ttl

mpls ip propagate-ttl | no mpls ip propagate-ttl [ forwarded | local ]

## Syntax Description

| Syntax Description |            |   |
|--------------------|------------|---|
| no                 |            | Negate a command or set its defaults                            |
| mpls               |            | MPLS configuration commands                                     |
| ip                 |            | Configure IP features   |
| propagate-ttl      |            | Configure IP ttl propagation over mpls                          |
| forwarded          | (Optional) | Prevent traceroute from showing the hops for forwarded packets  |
| local              | (Optional) | Prevent traceroute from showing the hops only for local packets |

## Command Mode

- /exec/configure

# mpls ip static

[no] mpls ip static

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <b>no</b> (Optional) Negate a command or set its defaults |
|                           | <b>mpls</b> MPLS configuration commands                   |
|                           | <b>ip</b> Enable IP over MPLS                             |
|                           | <b>static</b> Enable IP over MPLS statically              |

## Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel

# mpls ip static

[no] mpls ip static

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <b>no</b> (Optional) Negate a command or set its defaults |
|                           | <b>mpls</b> MPLS configuration commands                   |
|                           | <b>ip</b> Enable IP over MPLS                             |
|                           | <b>static</b> Enable IP over MPLS statically              |

## Command Mode

- /exec/configure/if-gre-tunnel

# mpls ip ttl-expiration pop

[no] mpls ip ttl-expiration pop [ <labels> ]

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| mpls               |            | MPLS configuration commands          |
| ip                 |            | Configure IP features                |
| ttl-expiration     |            | Configure ttl-expiration             |
| pop                |            | Pop                                  |
| <i>labels</i>      | (Optional) | Number of labels                     |

## Command Mode

- /exec/configure



# mpls label-space

[no] mpls label-space

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| mpls               | MPLS configuration commands                     |
| label-space        | create label space                              |

## Command Mode

- /exec/configure

# mpls label range

[no] mpls label range <min-label> <max-label> [ static <min-static-label> <max-static-label> ]

## Syntax Description

| Syntax Description      |            |   |
|-------------------------|------------|---|
| no                      | (Optional) | Negate a command or set its defaults        |
| mpls                    |            | MPLS configuration commands                 |
| label                   |            | Label properties                            |
| range                   |            | Label range                                 |
| <i>min-label</i>        |            | Minimum label value                         |
| <i>max-label</i>        |            | Maximum label value                         |
| static                  | (Optional) | Specify block of labels for static bindings |
| <i>min-static-label</i> | (Optional) | Minimum static label value                  |
| <i>max-static-label</i> | (Optional) | Maximum static label value                  |

## Command Mode

- /exec/configure

# mpls oam

[no] mpls oam

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

mpls MPLS configuration commands

---

oam OAM configuration

---

## Command Mode

- /exec/configure

## mpls static binding ipv4

```
mpls static binding ipv4 { [ vrf { <vrf-name> | <vrf-known-name> } ] { <prefix> <mask> | <prefix-mask> }
[ input ] <static-inlabel> | { <prefix> <mask> | <prefix-mask> } output <next-hop> { <static-outlabel> |
explicit-null | implicit-null } } | no mpls static binding ipv4 { [ [ vrf { <vrf-name> | <vrf-known-name> } ] [
{ <prefix> <mask> | <prefix-mask> } ] [ input [ <static-inlabel> ] ] [ <static-inlabel> ] ] ] [ { <prefix>
<mask> | <prefix-mask> } [ output [ <next-hop> [ { <static-outlabel> | explicit-null | implicit-null } ] ] ] ] }
```

### Syntax Description

#### Syntax Description

|                        |   |
|------------------------|---|
| no                     | Negate a command or set its defaults            |
| mpls                   | MPLS configuration commands                     |
| static                 | MPLS static application                         |
| binding                | Establish static label bindings                 |
| ipv4                   | Bind IPv4 destination with label                |
| vrf                    | (Optional) VPN Routing/Forwarding instance name |
| <i>vrf-name</i>        | (Optional) VRF name                             |
| <i>vrf-known-name</i>  | (Optional) Known VRF name                       |
| <i>prefix</i>          | Destination prefix                              |
| <i>mask</i>            | Destination prefix mask                         |
| <i>prefix-mask</i>     | Destination prefix/mask                         |
| input                  | (Optional) Incoming (local) label               |
| <i>static-inlabel</i>  | Label Value                                     |
| output                 | Outgoing (remote) label                         |
| <i>next-hop</i>        | Destination next hop                            |
| <i>static-outlabel</i> | Label Value                                     |
| explicit-null          | IETF MPLS IPv4 explicit null label (0)          |
| implicit-null          | IETF MPLS implicit null label (3)               |

### Command Mode

- /exec/configure/ldp

# mpls static binding ipv4 vrf per-vrf input output pop-and-lookup

mpls static binding ipv4 vrf { <vrf-name> | <vrf-known-name> } per-vrf input <static-inlabel> output pop-and-lookup | no mpls static binding ipv4 vrf { <vrf-name> | <vrf-known-name> } per-vrf input <static-inlabel> output pop-and-lookup

## Syntax Description

| Syntax Description    |  |                                      |
|-----------------------|--|--------------------------------------|
| no                    |  | Negate a command or set its defaults |
| mpls                  |  | MPLS configuration commands          |
| static                |  | MPLS static application              |
| binding               |  | Establish static label bindings      |
| ipv4                  |  | Bind IPv4 destination with label     |
| vrf                   |  | VPN Routing/Forwarding instance name |
| <i>vrf-name</i>       |  | VRF name                             |
| <i>vrf-known-name</i> |  | Known VRF name                       |
| per-vrf               |  | Per-VRF information                  |
| input                 |  | Incoming (local) label               |
| <i>static-inlabel</i> |  | Label Value                          |
| output                |  | Outgoing information                 |
| pop-and-lookup        |  | Pop label and perform a lookup       |

## Command Mode

- /exec/configure/ldp

# mpls static configuration

[no] mpls static configuration

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| mpls               | MPLS configuration commands                     |
| static             | Configure Static Label Bindings                 |
| configuration      | Enter MPLS Static global configuration submode  |

## Command Mode

- /exec/configure

# mpls strip

```
mpls strip { { poll-timer <timeout> } | { dest-mac <mac-addr> } | { threshold <low> <high> } | { label-age <age> [ sec | min | hrs | days ] } } | no mpls strip { poll-timer | dest-mac | threshold | label-age }
```

## Syntax Description

| Syntax Description |       |   |
|--------------------|-------|---|
| no                 |       | Negate a command or set its defaults      |
| mpls               |       | Configure MPLS settings                   |
| strip              |       | Stripping of MPLS headers                 |
| poll-timer         |       | Timer to poll for stats                   |
| <i>timeout</i>     |       | Time in seconds to poll for stats         |
| threshold          |       | For when to delete aged labeld            |
| <i>low</i>         |       | Lower Threshold                           |
| <i>high</i>        |       | Higher Threshold                          |
| label-age          | label | Age                                       |
| <i>age</i>         |       | Label age                                 |
| sec                |       | (Optional) Time in Seconds - default      |
| min                |       | (Optional) Time in Minutes                |
| hrs                |       | (Optional) Time in Hours                  |
| days               |       | (Optional) Time in Days                   |
| dest-mac           |       | Destination MAC address for egress frames |
| <i>mac-addr</i>    |       | MAC Address                               |

## Command Mode

- /exec/configure

# mpls strip

[no] mpls strip

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| mps                | Configure MPLS settings                         |
| strip              | Stripping of MPLS headers                       |

## Command Mode

- /exec/configure



# mpls strip label

[no] mpls strip label { <value> } [ interface <interface-name> ] | no mpls strip label all

## Syntax Description

| Syntax Description    |            |                                      |
|-----------------------|------------|--------------------------------------|
| no                    | (Optional) | Negate a command or set its defaults |
| mpls                  |            | Configure MPLS settings              |
| strip                 |            | Stripping of MPLS headers            |
| label                 |            | Add a static label in database       |
| <i>value</i>          |            | 20 bit value for label               |
| all                   |            | Delete all static labels             |
| interface             | (Optional) | Interface                            |
| <i>interface-name</i> | (Optional) | Interface name                       |

## Command Mode

- /exec/configure

# mpls traffic-eng

[no] mpls traffic-eng <level>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults             |
| mpls               | Configure MPLS parameters                                   |
| traffic-eng        | Routing protocol commands for MPLS Traffic Engineering (TE) |
| <i>level</i>       | IS-IS level   |

## Command Mode

- /exec/configure/router-isis

# mpls traffic-eng administrative-weight

mpls traffic-eng administrative-weight <num> | no mpls traffic-eng administrative-weight

## Syntax Description

| Syntax Description |                       |   |
|--------------------|-----------------------|---|
|                    | no                    | Negate a command or set its defaults            |
|                    | mpls                  | MPLS configuration commands                     |
|                    | traffic-eng           | Configure Traffic Engineering parameters        |
|                    | administrative-weight | Set the administrative weight for the interface |
|                    | <i>num</i>            | Weight  |

## Command Mode

- /exec/configure/if-igp /exec/configure/if-eth-port-channel /exec/configure/if-eth-port-channel-p2p

# mpls traffic-eng area

[no] mpls traffic-eng area <area-id-ip>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| mpls               | OSPF MPLS configuration commands                |
| traffic-eng        | OSPF MPLS Traffic Engineering commands          |
| area               | Configure area properties                       |
| <i>area-id-ip</i>  | Area Id as an integer or ip address             |

## Command Mode

- /exec/configure/router-ospf

# mpls traffic-eng attribute-flags

mpls traffic-eng attribute-flags <value> | no mpls traffic-eng attribute-flags

## Syntax Description

### Syntax Description

|                 |  |
|-----------------|--|
| no              | Negate a command or set its defaults       |
| mpls            | MPLS configuration commands                |
| traffic-eng     | Configure Traffic Engineering parameters   |
| attribute-flags | Set user-defined interface attribute flags |
| <i>value</i>    | Attribute flags                            |

## Command Mode

- /exec/configure/if-igp /exec/configure/if-eth-port-channel /exec/configure/if-eth-port-channel-p2p

## mpls traffic-eng backup-path

[no] mpls traffic-eng backup-path [ <tunnel-num> ] | mpls traffic-eng backup-path <tunnel-num>

### Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | Negate a command or set its defaults           |
| mpls               | MPLS configuration commands                    |
| traffic-eng        | Configure Traffic Engineering parameters       |
| backup-path        | Configure an MPLS TE backup for this interface |
| <i>tunnel-num</i>  | (Optional)                                     |

### Command Mode

- /exec/configure/if-igp /exec/configure/if-eth-port-channel /exec/configure/if-eth-port-channel-p2p

## mpls traffic-eng bandwidth

[no] mpls traffic-eng bandwidth | mpls traffic-eng bandwidth [ percent <percentage> | <bw-kbps> ]

### Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | Negate a command or set its defaults                   |
| mpls               | MPLS configuration commands                            |
| traffic-eng        | Configure Traffic Engineering parameters               |
| bandwidth          | RSVP Reservable Bandwidth (kbps)                       |
| percent            | (Optional) Specify a percentage of interface bandwidth |
| <i>percentage</i>  | (Optional) Percentage of bandwidth                     |
| <i>bw-kbps</i>     | (Optional) Reservable Bandwidth (kbps)                 |

### Command Mode

- /exec/configure/if-igp /exec/configure/if-eth-port-channel /exec/configure/if-eth-port-channel-p2p

# mpls traffic-eng configuration

mpls traffic-eng configuration

## Syntax Description

---

### Syntax Description

---

mpls          MPLS configuration commands

---

traffic-eng    Traffic engineering commands

---

configuration    Enter Traffic Engineering global configuration submode

---

## Command Mode

- /exec/configure



# mpls traffic-eng fast-reroute promote

[no] mpls traffic-eng fast-reroute promote

## Syntax Description

|                           |              |   |
|---------------------------|--------------|---|
| <b>Syntax Description</b> | no           | (Optional) Negate a command or set its defaults |
|                           | fast-reroute | fast-reroute command                            |
|                           | promote      | promote to a better backup tunnel               |
|                           | mpls         | MPLS configuration commands                     |
|                           | traffic-eng  | Traffic engineering commands                    |

## Command Mode

- /exec



# **mpls traffic-eng multicast-intact**

[no] mpls traffic-eng multicast-intact

## **Syntax Description**

| <b>Syntax Description</b> |   |  |
|---------------------------|---|--|
| no                        | (Optional) Negate a command or set its defaults |  |
| mpls                      | OSPF MPLS configuration commands                |  |
| traffic-eng               | OSPF MPLS Traffic Engineering commands          |  |
| multicast-intact          | MPLS TE multicast support                       |  |

## **Command Mode**

- /exec/configure/router-ospf

# mpls traffic-eng multicast-intact

[no] mpls traffic-eng multicast-intact

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults             |
| mpls               | Configure MPLS parameters                                   |
| traffic-eng        | Routing protocol commands for MPLS Traffic Engineering (TE) |
| multicast-intact   | Configure MPLS-TE multicast interaction                     |

## Command Mode

- /exec/configure/router-isis

# mpls traffic-eng reoptimize

[no] mpls traffic-eng reoptimize [ <tunnel-num> ]

## Syntax Description

|                           |                   |   |
|---------------------------|-------------------|---|
| <b>Syntax Description</b> | no                | (Optional) Negate a command or set its defaults |
|                           | reoptimize        | reoptimize traffeng tunnels                     |
|                           | <i>tunnel-num</i> | (Optional)                                      |
|                           | mpls              | MPLS configuration commands                     |
|                           | traffic-eng       | Traffic engineering commands                    |

## Command Mode

- /exec

# mpls traffic-eng router-id

[no] mpls traffic-eng router-id <interface>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| mpls               | OSPF MPLS configuration commands                |
| traffic-eng        | OSPF MPLS Traffic Engineering commands          |
| router-id          | Router ID associated with TE                    |
| <i>interface</i>   | Routable Interface                              |

## Command Mode

- /exec/configure/router-ospf

# mpls traffic-eng router-id

[no] mpls traffic-eng router-id <interface>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults             |
| mpls               | Configure MPLS parameters                                   |
| traffic-eng        | Routing protocol commands for MPLS Traffic Engineering (TE) |
| router-id          | Routing protocol commands for MPLS Traffic Engineering (TE) |
| interface          | IS-IS interface   |

## Command Mode

- /exec/configure/router-isis

# mpls traffic-eng tunnels

[no] mpls traffic-eng tunnels

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| mpls               | MPLS configuration commands                     |
| traffic-eng        | Configure Traffic Engineering parameters        |
| tunnels            | enable MPLS Traffic Engineering tunnels         |

## Command Mode

- /exec/configure/if-igp /exec/configure/if-eth-port-channel /exec/configure/if-eth-port-channel-p2p



# mst designated priority

mst <mst-id> designated priority <prio> | no mst <mst-id> designated priority [ <prio> ]

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults                     |
| mst                |  | Multiple spanning tree configuration                     |
| <i>mst-id</i>      |  | MST instance range, example: 0-3,5,7-9                   |
| designated         |  | Set the designated bridge priority for the spanning tree |
| priority           |  | Set the bridge priority for the spanning tree            |
| <i>prio</i>        |  | bridge priority in increments of 4096                    |

## Command Mode

- /exec/configure/spanning-tree/pseudo

## mst root priority

mst <mst-id> root priority <prio> | no mst <mst-id> root priority [ <prio> ]

### Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | Negate a command or set its defaults               |
| mst                | Multiple spanning tree configuration               |
| <i>mst-id</i>      | MST instance range, example: 0-3,5,7-9             |
| root               | Set the root bridge priority for the spanning tree |
| priority           | Set the bridge priority for the spanning tree      |
| <i>prio</i>        | bridge priority in increments of 4096              |

### Command Mode

- /exec/configure/spanning-tree/pseudo

# mtu

mtu <mtu\_val> | no mtu [ <mtu\_val> ]

## Syntax Description

|                           |                |                                      |
|---------------------------|----------------|--------------------------------------|
| <b>Syntax Description</b> | no             | Negate a command or set its defaults |
|                           | mtu            | Configure mtu for the port           |
|                           | <i>mtu_val</i> |                                      |

## Command Mode

- /exec/configure/if-ether-sub /exec/configure/if-ether-sub-p2p /exec/configure/if-port-channel-sub /exec/configure/if-sub /exec/configure/if-ethernet-all /exec/configure/if-eth-non-member /exec/configure/if-port-channel

# mtu1

[no] mtu1 <value>

## Syntax Description

|                           |              |   |
|---------------------------|--------------|---|
| <b>Syntax Description</b> | no           | (Optional) Negate a command or set its defaults |
|                           | mtu1         | MTU for the CoS                                 |
|                           | <i>value</i> | MTU value                                       |

## Command Mode

- /exec/configure/policy-map/type/uf/class

# mtu

mtu <mtu-val> | no mtu [ <mtu-val> ]

## Syntax Description

| Syntax Description |                                      |
|--------------------|--------------------------------------|
| no                 | Negate a command or set its defaults |
| mtu                | Configure MTU                        |
| <i>mtu-val</i>     | Bytes                                |

## Command Mode

- /exec/configure/if-any-tunnel

# mtu

[no] mtu <value>

## Syntax Description

|                           |              |   |
|---------------------------|--------------|---|
| <b>Syntax Description</b> | no           | (Optional) Negate a command or set its defaults |
|                           | mtu          | MTU for the CoS                                 |
|                           | <i>value</i> | MTU value                                       |

## Command Mode

- /exec/configure/policy-map/type/uf/class

# mtu

mtu <mtu\_val> | no mtu

## Syntax Description

---

### Syntax Description

---

|                |   |
|----------------|---|
| no             | Negate a command or set its defaults              |
| mtu            | Set the interface Maximum Transmission Unit (MTU) |
| <i>mtu_val</i> | MTU size in bytes                                 |

---

## Command Mode

- /exec/configure/if-vlan-common

# multi-topology

[no] multi-topology [ transition ]

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults    |
| multi-topology     | Enable multitopology for IPV6                      |
| transition         | (Optional) Configure multitopology transition mode |

## Command Mode

- /exec/configure/router-isis/router-isis-af-ipv6





## N Commands

---

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# name-lookup

[no] name-lookup

## Syntax Description

---

**Syntax Description**

---

no (Optional) Negate a command or set its defaults

---

name-lookup Display OSPF router ids as DNS names

---

## Command Mode

- /exec/configure/router-ospf /exec/configure/router-ospf/vrf

# name-lookup

[no] name-lookup

## Syntax Description

|                           |             |   |
|---------------------------|-------------|---|
| <b>Syntax Description</b> | no          | (Optional) Negate a command or set its defaults |
|                           | name-lookup | Enable Name Lookup for OSPF Neighbors           |

## Command Mode

- /exec/configure/router-ospf3 /exec/configure/router-ospf3/vrf

# name

name [ <name> ] | no name

## Syntax Description

---

### Syntax Description

---

no Negate a command or set its defaults

---

name Redundancy name string

---

*name* (Optional) name string

---

## Command Mode

- /exec/configure/if-eth-any/hsrp\_ipv4 /exec/configure/if-eth-any/hsrp\_ipv6

# name

name <name-val> | no name [ <name-val> ]

## Syntax Description

| Syntax Description |                                      |
|--------------------|--------------------------------------|
| no                 | Negate a command or set its defaults |
| name               | Set configuration name               |
| <i>name-val</i>    | Configuration name                   |

## Command Mode

- /exec/configuration/spanning-tree/mst/configuration

# name

name <redundancy-name> | no name [ <redundancy-name> ]

## Syntax Description

| Syntax Description     |                                      |
|------------------------|--------------------------------------|
| no                     | Negate a command or set its defaults |
| name                   | Redundancy name                      |
| <i>redundancy-name</i> | Name String                          |

## Command Mode

- /exec/configure/if-eth-any/glbp



# nat destination

{ nat destination } | { no nat destination }

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| nat                |  | Network Address Translation          |
| destination        |  | Destination NAT                      |

## Command Mode

- /exec/configure/itd

# nat destination

{ nat destination } | { no nat destination }

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| nat                |  | Network Address Translation          |
| destination        |  | Destination NAT                      |

## Command Mode

- /exec/configure/itd

# nat destination

{ nat destination } | { no nat destination }

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| nat                |  | Network Address Translation          |
| destination        |  | Destination NAT                      |

## Command Mode

- /exec/configure/plb

# nbm flow acceptance-mode guaranteed nbm flow acceptance-mode

{ nbm flow acceptance-mode { guaranteed | best-fit } } | [ no ] nbm flow acceptance-mode

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| nbm                |  | Non Blocking Multicast                    |
| flow               |  | Flow Characteristics                      |
| acceptance-mode    |  | Flow Acceptance Mode                      |
| guaranteed         |  | New flows are guaranteed to be accepted   |
| best-fit           |  | New flows are best-fit among fabric links |

## Command Mode

- /exec/configure

# nbm flow bandwidth nbm flow bandwidth

{ nbm flow bandwidth <i0> } | [ no ] nbm flow bandwidth

## Syntax Description

| Syntax Description |  |                            |
|--------------------|--|----------------------------|
| nbm                |  | Non Blocking Multicast     |
| flow               |  | Flow Characteristics       |
| bandwidth          |  | Bandwidth per flow         |
| <i>i0</i>          |  | Per Flow Bandwidth in Mbps |

## Command Mode

- /exec/configure

# nbm mode controller

[no] nbm mode controller [ \_\_readonly\_\_ <output> ]

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| nbm                |            | non blocking multicast               |
| mode               |            | set pmn mode                         |
| controller         |            | enable controller-mode for pmn       |
| __readonly__       | (Optional) |                                      |
| <i>output</i>      | (Optional) |                                      |

## Command Mode

- /exec/configure

# nbm mode flow

[no] nbm mode flow

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| nbm                | Non Blocking multicast                          |
| mode               | Set NBM flow mode                               |
| flow               | Flow Characteristics                            |

## Command Mode

- /exec/configure

# nbm multicast route add

[no] nbm multicast route add

## Syntax Description

---

**Syntax Description**

---

|     |                 |
|-----|-----------------|
| nbm | NBM<br>Commands |
|-----|-----------------|

---

|           |           |
|-----------|-----------|
| multicast | MULTICAST |
|-----------|-----------|

---

|       |       |
|-------|-------|
| route | Route |
|-------|-------|

---

|     |     |
|-----|-----|
| add | add |
|-----|-----|

---

## Command Mode

- /exec/configure



# nbm multicast route delete

[no] nbm multicast route delete

## Syntax Description

| Syntax Description |           |          |
|--------------------|-----------|----------|
| nbm                | NBM       | Commands |
| multicast          | MULTICAST |          |
| route              | Route     |          |
| delete             | delete    |          |

## Command Mode

- /exec/configure

## nbm test-rest-api secure request-type

nbm test-rest-api { secure | plain } request-type { POST | GET | PUT | DELETE }

### Syntax Description

| Syntax Description |                      |     |
|--------------------|----------------------|-----|
| nbm                |                      | nbm |
| test-rest-api      | Test REST API        |     |
| secure             | Over HTTPS           |     |
| plain              | Over plain HTTP      |     |
| request-type       | type of http request |     |
| POST               | HTTP POST            |     |
| GET                | HTTP GET             |     |
| PUT                | HTTP PUT             |     |
| DELETE             | HTTP DELETE          |     |

### Command Mode

- /exec

# nbm unit-test all

nbm unit-test all

## Syntax Description

---

**Syntax Description**

---

nbm nbm

---

unit-test unit test

---

all perform all unit tests

---

## Command Mode

- /exec/configure

# negotiate auto

negotiate auto | no negotiate auto

## Syntax Description

---

**Syntax Description**

---

no        Negate a command or set its defaults

---

negotiate    Configure link negotiation parameters

---

auto        Configure auto-negotiation

---

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-eth-non-member /exec/configure/if-port-channel

# neighbor-down fib-accelerate

[no] neighbor-down fib-accelerate

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults                      |
| neighbor-down      | Handle BGP neighbor down event, due to various reasons               |
| fib-accelerate     | Accelerate the hardware updates for IP/IPv6 adjacencies for neighbor |

## Command Mode

- /exec/configure/router-bgp/vrf-cmds

# neighbor

[no] neighbor { <neighbor-id> | <ipv6-neighbor-id> } [ remote-as <asn> ]

## Syntax Description

### Syntax Description

|                    |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults             |
| neighbor           | Configure a BGP neighbor                                    |
| <i>neighbor-id</i> | IP address of the neighbor                                  |
| remote-as          | (Optional) Specify Autonomous System Number of the neighbor |
| <i>asn</i>         | (Optional) Autonomous System Number                         |

## Command Mode

- /exec/configure/router-bgp

# neighbor

[no] neighbor { <neighbor-id> | <ipv6-neighbor-id> } [ remote-as <asn> ]

## Syntax Description

### Syntax Description

|                    |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults             |
| neighbor           | Configure a BGP neighbor                                    |
| <i>neighbor-id</i> | IP address of the neighbor                                  |
| remote-as          | (Optional) Specify Autonomous System Number of the neighbor |
| <i>asn</i>         | (Optional) Autonomous System Number                         |

## Command Mode

- /exec/configure/router-bgp/router-bgp-vrf

# neighbor

```
[no] neighbor { <neighbor-prefix> | <ipv6-neighbor-prefix> } [ remote-as [ <asn> | route-map <rmap-name> ] ]
```

## Syntax Description

| Syntax Description     |   |
|------------------------|---|
| no                     | (Optional) Negate a command or set its defaults             |
| neighbor               | Configure a BGP neighbor                                    |
| <i>neighbor-prefix</i> | IP prefix for neighbors                                     |
| remote-as              | (Optional) Specify Autonomous System Number of the neighbor |
| <i>asn</i>             | (Optional) Autonomous System Number                         |
| route-map              | (Optional) Route-map to match prefix peer AS number         |
| <i>rmap-name</i>       | (Optional) Route-map name                                   |

## Command Mode

- /exec/configure/router-bgp



# neighbor

```
[no] neighbor { <neighbor-prefix> | <ipv6-neighbor-prefix> } [ remote-as [ <asn> | route-map <rmap-name> ] ]
```

## Syntax Description

| Syntax Description     |   |
|------------------------|---|
| no                     | (Optional) Negate a command or set its defaults             |
| neighbor               | Configure a BGP neighbor                                    |
| <i>neighbor-prefix</i> | IP prefix for neighbors                                     |
| remote-as              | (Optional) Specify Autonomous System Number of the neighbor |
| <i>asn</i>             | (Optional) Autonomous System Number                         |
| route-map              | (Optional) Route-map to match prefix peer AS number         |
| <i>rmap-name</i>       | (Optional) Route-map name                                   |

## Command Mode

- /exec/configure/router-bgp/router-bgp-vrf

# neighbor

```
neighbor [ vrf { <vrf-name> | <vrf-known-name> } ] <ipaddr> { implicit-withdraw | labels accept <pfx-list>
| targeted } | no neighbor [ vrf { <vrf-name> | <vrf-known-name> } ] <ipaddr> [ implicit-withdraw | labels
accept | targeted ]
```

## Syntax Description

### Syntax Description

|                       |  |
|-----------------------|--|
| no                    | Negate a command or set its defaults                   |
| neighbor              | Configure neighbor parameters                          |
| vrf                   | (Optional) VRF Routing/Forwarding instance information |
| <i>vrf-name</i>       | (Optional) VPN Routing/Forwarding instance name        |
| <i>vrf-known-name</i> | (Optional) Known VRF name                              |
| <i>ipaddr</i>         | IP address for LDP neighbor                            |
| implicit-withdraw     | Enable LDP Implicit Withdraw Label                     |
| labels                | Configure label binding exchange controls              |
| accept                | Specify label bindings to accept                       |
| <i>pfx-list</i>       | Name of prefix list                                    |
| targeted              | Establish targeted session                             |

## Command Mode

- /exec/configure/ldp

# neighbor maximum-prefix

```
{ { neighbor <address> { <interface> | maximum-prefix <value> [ warning-only ] } } | { no neighbor <address>
[ <interface> | maximum-prefix <value> [ warning-only ] ] } } | { { neighbor maximum-prefix <value> [
<threshold> ] [ warning-only ] [ restart <time1> ] [ restart-count <count> ] [ reset-time <time2> ] [ dampened
] } | { no neighbor maximum-prefix [ <value> [ <threshold> ] [ warning-only ] [ restart <time1> ] [ restart-count
<count> ] ] } }
```

## Syntax Description

### Syntax Description

|                             |   |
|-----------------------------|---|
| <code>no</code>             | Negate a command or set its defaults                                  |
| <code>neighbor</code>       | Specify a neighbor router   |
| <i>interface</i>            | Interface   |
| <i>address</i>              | Neighbor address  |
| <code>maximum-prefix</code> | Maximum number of IP prefixes acceptable from a neighbor              |
| <i>value</i>                | Number of IP prefixes for maximum-prefix limit                        |
| <i>threshold</i>            | (Optional) Threshold value (%) at which to generate a warning message |
| <code>warning-only</code>   | (Optional) Only give warning message when limit is exceeded           |
| <code>restart</code>        | (Optional) Duration for which a prefix source is ignored              |
| <i>time1</i>                | (Optional) Restart interval in minutes                                |
| <code>restart-count</code>  | (Optional) Number of times sessions are auto-restarted                |
| <i>count</i>                | (Optional) Number of times  |
| <code>reset-time</code>     | (Optional) Duration after which restart history is cleared            |
| <i>time2</i>                | (Optional) Reset time in minutes                                      |
| <code>dampened</code>       | (Optional) Exponentially increase restart time interval               |

## Command Mode

- /exec/configure/router-eigrp/router-eigrp-vrf-common /exec/configure/router-eigrp/router-eigrp-af-common

# net

[no] net <net>

## Syntax Description

---

**Syntax Description**

no (Optional) Negate a command or set its defaults

net Configure Network Entity Title for IS-IS

*net* NET in form of XX.XXXX. ... .XXXX[.00]

---

## Command Mode

- /exec/configure/otv-isis

# net

[no] net <net>

## Syntax Description

---

### Syntax Description

---

*no* (Optional) Negate a command or set its defaults

---

*net* Configure Network Entity Title for IS-IS

---

*net* NET in form of XX.XXXX. ... .XXXX[.00]

---

## Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

# network

[no] network { <ip-dest> <ip-mask> | <ip-prefix> }

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| network            | RIP IP network                                  |
| <i>ip-dest</i>     | IP addr format                                  |
| <i>ip-mask</i>     | IP network mask format                          |
| <i>ip-prefix</i>   | Exact prefix                                    |

## Command Mode

- /exec/configure/router-rip/router-rip-af-ipv4 /exec/configure/router-rip/router-rip-vrf-af-ipv4

# network

[no] network { <ip-addr> mask <ip-mask> | <ip-prefix> } [ route-map <rmap-name> | summarize ] +

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults                |
| network            | Configure an IP prefix to advertise                            |
| <i>ip-addr</i>     | IP network to advertise  |
| mask               | Configure the mask of the IP prefix to advertise               |
| <i>ip-mask</i>     | Dotted 4-octet mask  |
| <i>ip-prefix</i>   | IP prefix in CIDR format                                       |
| route-map          | (Optional) Apply route-map to modify attributes                |
| <i>rmap-name</i>   | (Optional) Route-map name                                      |
| summarize          | (Optional) Summarize more specific prefixes from routing table |

## Command Mode

- /exec/configure/router-bgp/router-bgp-af-ipv4 /exec/configure/router-bgp/router-bgp-vrf-af-ipv4

# network

[no] network <ipv6-prefix> [ route-map <rmap-name> | summarize ] +

## Syntax Description

### Syntax Description

|                  |  |
|------------------|--|
| no               | (Optional) Negate a command or set its defaults                |
| network          | Configure an IPv6 prefix to advertise                          |
| route-map        | (Optional) Apply route-map to modify attributes                |
| <i>rmap-name</i> | (Optional) Route-map name                                      |
| summarize        | (Optional) Summarize more specific prefixes from routing table |

## Command Mode

- /exec/configure/router-bgp/router-bgp-af-ipv6 /exec/configure/router-bgp/router-bgp-vrf-af-ipv6



# network

[no] network { { <address> <mask> } | <prefix> }

## Syntax Description

### Syntax Description

*no* (Optional) Negate a command or set its defaults

*network* Enable routing on an IP network

*address* Network number

*mask* EIGRP wild card bits

*prefix* IP prefix in slash format

## Command Mode

- /exec/configure/router-eigrp/router-eigrp-vrf-common /exec/configure/router-eigrp/router-eigrp-af-ipv4

## network area

[no] network { <ip-dest> <ip-mask> | <ip-prefix> } area { <area-id-ip> | <area-id-int> }

### Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| network            |            | Enable routing on an IP network      |
| <i>ip-dest</i>     |            | IP prefix format: i.i.i.i            |
| <i>ip-mask</i>     |            | IP network mask format: m.m.m.m      |
| <i>ip-prefix</i>   |            | IP prefix format: x.x.x.x/ml         |
| area               |            | Configure area properties            |
| <i>area-id-ip</i>  |            | OSPF area ID in IP address format    |
| <i>area-id-int</i> |            | OSPF area ID as a decimal format     |

### Command Mode

- /exec/configure/router-ospf /exec/configure/router-ospf/vrf

## next-address exclude-address

```
{ next-address [ loose | strict ] <ipaddr> | exclude-address <ipaddr> }
```

### Syntax Description

---

**Syntax Description**

|                 |  |
|-----------------|--|
| next-address    | Specify the next address in the path                     |
| loose           | (Optional) Target address is loose                       |
| strict          | (Optional) Target address is strict                      |
| exclude-address | Exclude an address from subsequent partial path segments |
| <i>ipaddr</i>   | Enter IP address (A.B.C.D)                               |

---

### Command Mode

- /exec/configure/te/expl-path

# next-hop-self

[ no | default ] next-hop-self

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| default            | (Optional) Inherit values from a peer template  |
| next-hop-self      | Set our peering address as nexthop              |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af  
/exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv4-label  
/exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv6-label

# next-hop-self

[ no | default ] next-hop-self

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| default            | (Optional) Inherit values from a peer template  |
| next-hop-self      | Set our peering address as nexthop              |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv4-mdt

# next-hop-third-party

[ no | default ] next-hop-third-party

## Syntax Description

| Syntax Description   |   |
|----------------------|---|
| no                   | (Optional) Negate a command or set its defaults |
| default              | (Optional) Inherit values from a peer template  |
| next-hop-third-party | Compute a third-party nexthop if possible       |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af

# next-hop-third-party

[ no | default ] next-hop-third-party

## Syntax Description

| Syntax Description   |   |
|----------------------|---|
| no                   | (Optional) Negate a command or set its defaults |
| default              | (Optional) Inherit values from a peer template  |
| next-hop-third-party | Compute a third-party nexthop if possible       |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv4-mdt

# next-hop out-label explicit-null implicit-null next-hop auto-resolve out-label explicit-null implicit-null

```
[no] { next-hop [ backup <interface> ] <next-hop> out-label { <static-outlabel> | explicit-null | implicit-null } | next-hop auto-resolve out-label { <static-outlabel> | explicit-null | implicit-null } }
```

## Syntax Description

| Syntax Description     |            |  |
|------------------------|------------|--|
| no                     | (Optional) | Negate a command or set its defaults   |
| next-hop               |            | Nexthop                                |
| <i>next-hop</i>        |            | Destination IPv4 next hop              |
| <i>static-outlabel</i> |            | Label Value                            |
| <i>interface</i>       | (Optional) | Back up interface                      |
| out-label              |            | Output label                           |
| explicit-null          |            | IETF MPLS IPv4 explicit null label (0) |
| implicit-null          |            | IETF MPLS implicit null label (3)      |
| auto-resolve           |            | auto resolve the destination path      |
| backup                 | (Optional) | Backup destination                     |

## Command Mode

- /exec/configure/mpls\_static/ipv4/input



# next-hop out-label explicit-null implicit-null next-hop auto-resolve out-label explicit-null implicit-null

```
[no] { next-hop [ backup <interface> ] <ipv6-next-hop> out-label { <static-outlabel> | explicit-null | implicit-null } | next-hop auto-resolve out-label { <static-outlabel> | explicit-null | implicit-null } }
```

## Syntax Description

| Syntax Description     |            |  |
|------------------------|------------|--|
| no                     | (Optional) | Negate a command or set its defaults   |
| next-hop               |            | Nexthop                                |
| <i>static-outlabel</i> |            | Label Value                            |
| <i>interface</i>       | (Optional) | Back up interface                      |
| out-label              |            | Output label                           |
| explicit-null          |            | IETF MPLS IPv6 explicit null label (2) |
| implicit-null          |            | IETF MPLS implicit null label (3)      |
| auto-resolve           |            | auto resolve the destination path      |
| backup                 | (Optional) | Backup destination                     |

## Command Mode

- /exec/configure/mpls\_static/ipv6/input

# nexthop route-map

[no] nexthop route-map <rmap-name>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| nexthop            | Nexthop tracking                                |
| route-map          | Route map for valid nexthops                    |
| <i>rmap-name</i>   | Route-map name                                  |

## Command Mode

- /exec/configure/router-bgp/router-bgp-af /exec/configure/router-bgp/router-bgp-af-l2vpn-evpn  
/exec/configure/router-bgp/router-bgp-af-link-state /exec/configure/router-bgp/router-bgp-af-ipv4-mvpn  
/exec/configure/router-bgp/router-bgp-af-ipv6-mvpn

# nexthop route-map

[no] nexthop route-map <rmap-name>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| nexthop            | Nexthop tracking                                |
| route-map          | Route map for valid nexthops                    |
| <i>rmap-name</i>   | Route-map name                                  |

## Command Mode

- /exec/configure/router-bgp/router-bgp-af-ipv4-mdt /exec/configure/router-bgp/router-bgp-af-l2vpn-vpls

# nexthop trigger-delay critical non-critical

```
{ nexthop trigger-delay critical <criticaldelay> non-critical <noncriticaldelay> } | { no nexthop trigger-delay }
```

## Syntax Description

| Syntax Description      |  |   |
|-------------------------|--|---|
| no                      |  | Negate a command or set its defaults      |
| nexthop                 |  | Nexthop tracking                          |
| trigger-delay           |  | Set the delay to trigger nexthop tracking |
| critical                |  | Nexthop changes affecting reachability    |
| non-critical            |  | Other nexthop changes                     |
| <i>noncriticaldelay</i> |  | Delay value (milliseconds)                |
| <i>criticaldelay</i>    |  | Delay value (milliseconds)                |

## Command Mode

- /exec/configure/router-bgp/router-bgp-af /exec/configure/router-bgp/router-bgp-af-ipv4-mdt /exec/configure/router-bgp/router-bgp-af-ipv4-vpnv4 /exec/configure/router-bgp/router-bgp-af-ipv4-vpnv6 /exec/configure/router-bgp/router-bgp-af-link-state /exec/configure/router-bgp/router-bgp-af-l2vpn-vpls /exec/configure/router-bgp/router-bgp-af-ipv4-mvpn /exec/configure/router-bgp/router-bgp-af-ipv6-mvpn /exec/configure/router-bgp/router-bgp-af-l2vpn-evpn

# ngoam authentication-key

{ ngoam authentication-key <value> } | { no ngoam authentication-key [ <value> ] }

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| ngoam              |  | Configure ngoam                      |
| authentication-key |  | Ngoam authentication-key             |
| <i>value</i>       |  | authentication key                   |

## Command Mode

- /exec/configure

# ngoam install acl

[no] ngoam install acl

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ngoam              | Configure ngoam                                 |
| install            | Ngoam install                                   |
| acl                | Ngoam install acl                               |

## Command Mode

- /exec/configure

# ngoam install acl draft-pang action fwd

[no] ngoam install acl draft-pang action { fwd | drop }

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ngoam              | ngoam   |
| install            | Ngoam install                                   |
| acl                | Ngoam install acl                               |
| draft-pang         | Ngoam install acl based on draft pang           |
| action             | Choose the action to perform                    |
| fwd                | Copy and Forward the packet                     |
| drop               | Copy and Drop the packet                        |

## Command Mode

- /exec/configure

# ngoam probe start

ngoam probe start <hex-string>

## Syntax Description

---

### Syntax Description

---

ngoam    ngoam exec command

---

probe    ngoam probe

---

start    start ngoam probe

---

*hex-string* Specify string in hex string format: 0A1B .. starting with outer header of real draft pang probe packet

---

## Command Mode

- /exec



# ngoam profile

[no] ngoam profile <profile-id>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ngoam              | Configure ngoam                                 |
| profile            | Configure ngoam oam profile                     |
| <i>profile-id</i>  | ngoam profile id                                |

## Command Mode

- /exec/configure

# no-more

| no-more

## Syntax Description

---

### Syntax Description

---

| Pipe command output to filter

---

no-more Turn-off pagination for command output

---

## Command Mode

- /output

# no

[no] <seqno>

## Syntax Description

---

**Syntax Description**

no Negate a command or set its defaults

---

*seqno* Sequence number

---

## Command Mode

- /exec/configure/arpacl /exec/configure/ipgroup /exec/configure/ipv6group /exec/configure/portgroup /exec/configure/timerange

# no

[no] <seqno>

## Syntax Description

---

### Syntax Description

---

no     Negate a command or set its defaults

---

*seqno*   Sequence number

---

## Command Mode

- /exec/configure/macacl

# no

[no] <seqno>

## Syntax Description

---

### Syntax Description

---

no Negate a command or set its defaults

---

*seqno* Sequence number

---

## Command Mode

- /exec/configure/ipacl /exec/configure/ipv6acl

## no

```
{ [ <seqno> ] | no } <permitdeny> { { { { ethertype <ethertypeid> } | { { ip | <proto> | <ip_other_proto> } {
<src_any> | { <src_addr> <src_wild> } | <src_prefix> | { src_key_host <src_host> } | { src_key_addrgrp
<src_addrgrp_name> } } } { <dst_any> | { <dst_addr> <dst_wild> } | <dst_prefix> | { dst_key_host <dst_host>
} | { dst_key_addrgrp <dst_addrgrp_name> } } } { [ [ fragments ] | [ log ] | [ time-range <time_range_name>
] | packet-length { <plen_op> <plen0> | <plen_range> <plen1> <plen2> } | { dscp { <dscp_num> | <dscp_str>
} } } | { ttl <ttl_num> } } | { udf { <udf_name> <udf_val> <udf_mask> } + } ] } + | [ [ fragments ] | [ log ] |
time-range <time_range_name> ] | packet-length { <plen_op> <plen0> | <plen_range> <plen1> <plen2> } |
{ tos { <tos_num> | <tos_str> } } } | { precedence { <prec_num> | <prec_str> } } | { ttl <ttl_num> } | { udf {
<udf_name> <udf_val> <udf_mask> } + } ] } + } [ capture session <session-id> ] } } [ vlan <vlanid> |
ingress_intf { <intfid> | <intfname> } | vlan_priority <vlanpriorityid> ] + [ { udf { <udf_name> <udf_val>
<udf_mask> } + } ] } | { udf { <udf_name> <udf_val> <udf_mask> } + } } { [ <action> <actionid> ] } + [
log ]
```

## Syntax Description

## Syntax Description

|                       |   |
|-----------------------|---|
| <i>seqno</i>          | (Optional) Sequence number                            |
| no                    | Negate a command or set its defaults                  |
| <i>permitdeny</i>     | Permit/deny   |
| ethertype             | Configure match based on ethertype                    |
| vlan                  | (Optional) Configure match based on vlan              |
| ingress_intf          | (Optional) Configure match based on ingress interface |
| vlan_priority         | (Optional) Configure match based on priority          |
| <i>ethertypeid</i>    | Configure the ethertype value                         |
| <i>vlanid</i>         | (Optional) VLAN number                                |
| <i>intfid</i>         | (Optional) Interface index                            |
| <i>intfname</i>       | (Optional) Interface name                             |
| <i>vlanpriorityid</i> | (Optional) Vlan Priority                              |
| ip                    | Any IP protocol                                       |
| <i>proto</i>          | A protocol number                                     |
| <i>ip_other_proto</i> | ip_other_proto  |
| <i>src_any</i>        | Any   |
| <i>src_addr</i>       | Source network address                                |
| <i>src_wild</i>       | Source wildcard bits                                  |
| <i>src_prefix</i>     | Source network prefix                                 |

|                         |   |
|-------------------------|---|
| <i>src_key_host</i>     | A single source host                                    |
| <i>src_host</i>         | Source address  |
| <i>src_key_addrgrp</i>  | Source address group                                    |
| <i>src_addrgrp_name</i> | Address group name                                      |
| <i>dst_any</i>          | Any   |
| <i>dst_addr</i>         | Destination network address                             |
| <i>dst_wild</i>         | Destination wildcard bits                               |
| <i>dst_prefix</i>       | Destination network prefix                              |
| <i>dst_key_host</i>     | A single destination host                               |
| <i>dst_host</i>         | Destination address                                     |
| <i>dst_key_addrgrp</i>  | Destination address group                               |
| <i>dst_addrgrp_name</i> | Address group name                                      |
| <i>dscp</i>             | (Optional) Match packets with given dscp value          |
| <i>dscp_num</i>         | (Optional) Differentiated services codepoint value      |
| <i>dscp_str</i>         | (Optional) Differentiated services codepoint label      |
| <i>tos</i>              | (Optional) Match packets with given TOS value           |
| <i>tos_num</i>          | (Optional) Type of service value                        |
| <i>tos_str</i>          | (Optional) Type of service label                        |
| <i>precedence</i>       | (Optional) Match packets with given precedence value    |
| <i>prec_num</i>         | (Optional) Precedence value                             |
| <i>prec_str</i>         | (Optional) Precedence label                             |
| <i>fragments</i>        | (Optional) Check non-initial fragments                  |
| <i>log</i>              | (Optional) Log matches against this entry               |
| <i>time-range</i>       | (Optional) Specify a time range                         |
| <i>time_range_name</i>  | (Optional) Time range name                              |
| <i>packet-length</i>    | (Optional) Match packets based on layer 3 packet length |
| <i>plen_op</i>          | (Optional) Packet-length operator                       |
| <i>plen_range</i>       | (Optional) Packet-length range                          |
| <i>plen0</i>            | (Optional) Packet length                                |

|                   |   |
|-------------------|---|
| <i>plen1</i>      | (Optional) Lower packet length  |
| <i>plen2</i>      | (Optional) Higher packet length   |
| <i>ttl</i>        | (Optional) Match Packets with a given TTL value   |
| <i>ttl_num</i>    | (Optional)  |
| <i>capture</i>    | (Optional) Enable packet capture on this filter for session   |
| <i>session</i>    | (Optional) Session ID <1-48> for this session   |
| <i>session-id</i> | (Optional) Session ID <1-48> for this session   |
| <i>udf</i>        | (Optional) User defined field match   |
| <i>udf_name</i>   | (Optional) UDF name   |
| <i>udf_val</i>    | (Optional) UDF value to match   |
| <i>udf_mask</i>   | (Optional) Mask to apply to UDF value   |
| <i>action</i>     | (Optional) Action   |
| <i>actionid</i>   | (Optional) redirect: Ethernet1/1,port-channel1 set-erspan-dscp: <1-63><br>set-erspan-gre-proto: <1-65535> |

### Command Mode

- /exec/configure/ipacl



## no

```
{ [ <seqno> ] | no } <permitdeny> { { ethertype <ethertypeid> } | { <proto_tcp> { { { <src_any> | {
<src_addr><src_wild> } | <src_prefix> | { src_key_host <src_host> } | { src_key_addrgrp <src_addrgrp_name>
} } [ { { <src_port_op> { <src_port0> | <src_port0_str> } } | { <src_port_range> { <src_port1> |
<src_port1_str> } { <src_port2> | <src_port2_str> } } | src_portgroup <src_port_group> } ] { <dst_any> | {
<dst_addr><dst_wild> } | <dst_prefix> | { dst_key_host <dst_host> } | { dst_key_addrgrp <dst_addrgrp_name>
} } [ { { <dst_port_op> { <dst_port0> | <dst_port0_str> } } | { <dst_port_range> { <dst_port1> |
<dst_port1_str> } { <dst_port2> | <dst_port2_str> } } | dst_portgroup <dst_port_group> } ] { { [ urg | ack |
psh | rst | syn | fin | established | [ log ] [ time-range <time_range_name> ] | packet-length { <plen_op> <plen0>
| <plen_range> <plen1> <plen2> } } | { dscp { <dscp_num> | <dscp_str> } } } | { http-method { <opt_num> |
<opt_str> } } | { tcp-option-length <tcp_opt_len> } | { tcp-flags-mask <tcp_flags_mask> } | { ttl <ttl_num>
} ] } + { [ urg | ack | psh | rst | syn | fin | established | [ log ] [ time-range <time_range_name> ] | packet-length
{ <plen_op> <plen0> | <plen_range> <plen1> <plen2> } } | { tos { <tos_num> | <tos_str> } } | { precedence
{ <prec_num> | <prec_str> } } | { ttl <ttl_num> } ] } + { [ udf { <udf_name> <udf_val> <udf_mask> } +
} ] } | { { <src_any> | { <src_addr> <src_wild> } | <src_prefix> | { src_key_host <src_host> } | {
src_key_addrgrp <src_addrgrp_name> } } } { <dst_any> | { <dst_addr> <dst_wild> } | <dst_prefix> | {
dst_key_host <dst_host> } | { dst_key_addrgrp <dst_addrgrp_name> } } } { { [ fragments ] | [ log ] [ time-range
<time_range_name> ] | packet-length { <plen_op> <plen0> | <plen_range> <plen1> <plen2> } } | { dscp {
<dscp_num> | <dscp_str> } } | { ttl <ttl_num> } | { udf { <udf_name> <udf_val> <udf_mask> } + } ] } +
{ [ [ fragments ] | [ log ] [ time-range <time_range_name> ] | packet-length { <plen_op> <plen0> | <plen_range>
<plen1> <plen2> } } | { tos { <tos_num> | <tos_str> } } | { precedence { <prec_num> | <prec_str> } } | { ttl
<ttl_num> } | { udf { <udf_name> <udf_val> <udf_mask> } + } ] } + } } } [ vlan <vlanid> | ingress_intf
{ <intfid> | <intfname> } | vlan_priority <vlanpriorityid> ] + { { [ urg | ack | psh | rst | syn | fin | established |
[ log ] [ time-range <time_range_name> ] | packet-length { <plen_op> <plen0> | <plen_range> <plen1>
<plen2> } } | { dscp { <dscp_num> | <dscp_str> } } } | { http-method { <opt_num> | <opt_str> } } } | {
tcp-option-length <tcp_opt_len> } | { tcp-flags-mask <tcp_flags_mask> } | { ttl <ttl_num> } } ] } + { [ urg |
ack | psh | rst | syn | fin | established | [ log ] [ time-range <time_range_name> ] | packet-length { <plen_op>
<plen0> | <plen_range> <plen1> <plen2> } } | { tos { <tos_num> | <tos_str> } } | { precedence { <prec_num>
| <prec_str> } } | { ttl <ttl_num> } ] } + } [ udf { <udf_name> <udf_val> <udf_mask> } + } ] [ capture
session <session-id> ] { [ <action> <actionid> ] } + [ log ]
```

**Syntax Description****Syntax Description**

|                    |   |
|--------------------|---|
| <i>seqno</i>       | (Optional) Sequence number                            |
| no                 | Negate a command or set its defaults                  |
| <i>permitdeny</i>  | Permit/deny   |
| ethertype          | Configure match based on ethertype                    |
| vlan               | (Optional) Configure match based on vlan              |
| ingress_intf       | (Optional) Configure match based on ingress interface |
| vlan_priority      | (Optional) Configure match based on priority          |
| <i>ethertypeid</i> | Configure the ethertype value                         |
| <i>vlanid</i>      | (Optional) VLAN number                                |

|                         |                             |
|-------------------------|-----------------------------|
| <i>intfid</i>           | (Optional) Interface index  |
| <i>intfname</i>         | (Optional) Interface name   |
| <i>vlanpriorityid</i>   | (Optional) Vlan Priority    |
| <i>proto_tcp</i>        | Protocol                    |
| <i>src_any</i>          | Any                         |
| <i>src_addr</i>         | Source network address      |
| <i>src_wild</i>         | Source wildcard bits        |
| <i>src_prefix</i>       | Source network prefix       |
| <i>src_key_host</i>     | A single source host        |
| <i>src_host</i>         | Source address              |
| <i>src_key_addrgrp</i>  | Source address group        |
| <i>src_addrgrp_name</i> | Address group name          |
| <i>src_port_op</i>      | (Optional) Port operator    |
| <i>src_port_range</i>   | (Optional) Port range       |
| <i>src_port0</i>        | (Optional) Port number      |
| <i>src_port0_str</i>    | (Optional) TCP port         |
| <i>src_port1</i>        | (Optional) Port number      |
| <i>src_port1_str</i>    | (Optional) TCP port         |
| <i>src_port2</i>        | (Optional) Port number      |
| <i>src_port2_str</i>    | (Optional) TCP port         |
| <i>src_portgroup</i>    | (Optional) src port group   |
| <i>src_port_group</i>   | (Optional) Port group name  |
| <i>dst_any</i>          | Any                         |
| <i>dst_addr</i>         | Destination network address |
| <i>dst_wild</i>         | Destination wildcard bits   |
| <i>dst_prefix</i>       | Destination network prefix  |
| <i>dst_key_host</i>     | A single destination host   |
| <i>dst_host</i>         | Destination address         |
| <i>dst_key_addrgrp</i>  | Destination address group   |

|                         |   |
|-------------------------|---|
| <i>dst_addrgrp_name</i> | Address group name                                      |
| <i>dst_port_op</i>      | (Optional) Port operator                                |
| <i>dst_port_range</i>   | (Optional) Port range                                   |
| <i>dst_port0</i>        | (Optional) Port number                                  |
| <i>dst_port0_str</i>    | (Optional) TCP port                                     |
| <i>dst_port1</i>        | (Optional) Port number                                  |
| <i>dst_port1_str</i>    | (Optional) TCP port                                     |
| <i>dst_port2</i>        | (Optional) Port number                                  |
| <i>dst_port2_str</i>    | (Optional) TCP port                                     |
| <i>dst_portgroup</i>    | (Optional) dst port group                               |
| <i>dst_port_group</i>   | (Optional) Port group name                              |
| <i>dscp</i>             | (Optional) Match packets with given dscp value          |
| <i>dscp_num</i>         | (Optional) Differentiated services codepoint value      |
| <i>dscp_str</i>         | (Optional) Differentiated services codepoint label      |
| <i>tos</i>              | (Optional) Match packets with given TOS value           |
| <i>tos_num</i>          | (Optional) Type of service value                        |
| <i>tos_str</i>          | (Optional) Type of service label                        |
| <i>precedence</i>       | (Optional) Match packets with given precedence value    |
| <i>prec_num</i>         | (Optional) Precedence value                             |
| <i>prec_str</i>         | (Optional) Precedence label                             |
| <i>fragments</i>        | (Optional) Check non-initial fragments                  |
| <i>log</i>              | (Optional) Log matches against this entry               |
| <i>time-range</i>       | (Optional) Specify a time range                         |
| <i>time_range_name</i>  | (Optional) Time range name                              |
| <i>packet-length</i>    | (Optional) Match packets based on layer 3 packet length |
| <i>plen_op</i>          | (Optional) Packet-length operator                       |
| <i>plen_range</i>       | (Optional) Packet-length range                          |
| <i>plen0</i>            | (Optional) Packet length                                |
| <i>plen1</i>            | (Optional) Lower packet length                          |

|                          |   |
|--------------------------|---|
| <i>plen2</i>             | (Optional) Higher packet length                             |
| <i>ttl</i>               | (Optional) Match Packets with a given TTL value             |
| <i>ttl_num</i>           | (Optional)  |
| <i>tcp-option-length</i> | (Optional) Specify TCP Options size                         |
| <i>tcp_opt_len</i>       | (Optional) TCP option length (multiples of 4 bytes)         |
| <i>tcp-flags-mask</i>    | (Optional) Specify TCP Flags                                |
| <i>tcp_flags_mask</i>    | (Optional) TCP flags mask                                   |
| <i>http-method</i>       | (Optional) Match packets based on http-method               |
| <i>opt_num</i>           | (Optional) http_option value                                |
| <i>opt_str</i>           | (Optional) http_option_param                                |
| <i>packet-length</i>     | (Optional) Match packets based on layer 3 packet length     |
| <i>plen_op</i>           | (Optional) Packet-length operator                           |
| <i>plen_range</i>        | (Optional) Packet-length range                              |
| <i>plen0</i>             | (Optional) Packet length                                    |
| <i>plen1</i>             | (Optional) Lower packet length                              |
| <i>plen2</i>             | (Optional) Higher packet length                             |
| <i>urg</i>               | (Optional) Match on the URG bit                             |
| <i>ack</i>               | (Optional) Match on the ACK bit                             |
| <i>psh</i>               | (Optional) Match on the PSH bit                             |
| <i>rst</i>               | (Optional) Match on the RST bit                             |
| <i>syn</i>               | (Optional) Match on the SYN bit                             |
| <i>fin</i>               | (Optional) Match on the FIN bit                             |
| <i>established</i>       | (Optional) Match established connections                    |
| <i>udf</i>               | (Optional) User defined field match                         |
| <i>udf_name</i>          | (Optional) UDF name   |
| <i>udf_val</i>           | (Optional) UDF value to match                               |
| <i>udf_mask</i>          | (Optional) Mask to apply to UDF value                       |
| <i>capture</i>           | (Optional) Enable packet capture on this filter for session |
| <i>session</i>           | (Optional) Session ID <1-48> for this session               |

---

|                   |   |
|-------------------|---|
| <i>session-id</i> | (Optional) Session ID <1-48> for this session   |
| <i>action</i>     | (Optional) Action   |
| <i>actionid</i>   | (Optional) redirect: Ethernet1/1,port-channel1 set-erspan-dscp: <1-63><br>set-erspan-gre-proto: <1-65535> |

---

**Command Mode**

- /exec/configure/ipacl

## no

```

{ [ <seqno> ] | no } <permitdeny> { { ethertype <ethertypeid> } | { <proto_udp> { { { <src_any> | {
<src_addr><src_wild> } | <src_prefix> | { src_key_host <src_host> } } { src_key_addrgrp <src_addrgrp_name>
} } [ { { <src_port_op> { <src_port0> | <src_port0_str> } } | { <src_port_range> { <src_port1> |
<src_port1_str> } } { <src_port2> | <src_port2_str> } } | src_portgroup <src_port_group> } ] } { <dst_any> | {
<dst_addr><dst_wild> } | <dst_prefix> | { dst_key_host <dst_host> } } { dst_key_addrgrp <dst_addrgrp_name>
} } [ { { <dst_port_op> { <dst_port0> | <dst_port0_str> } } | { <dst_port_range> { <dst_port1> |
<dst_port1_str> } } { <dst_port2> | <dst_port2_str> } } | dst_portgroup <dst_port_group> } ] } { [ [ log ] [
time-range <time_range_name> ] | packet-length { <plen_op> <plen0> | <plen_range> <plen1> <plen2> } |
{ dscp { <dscp_num> | <dscp_str> } } | { ttl <ttl_num> } ] } + | { [ [ log ] [ time-range <time_range_name>
] | packet-length { <plen_op> <plen0> | <plen_range> <plen1> <plen2> } | { tos { <tos_num> | <tos_str> }
} | { precedence { <prec_num> | <prec_str> } } | { ttl <ttl_num> } ] } + ] { { udf { <udf_name> <udf_val>
<udf_mask> } + } ] [ nve vni <vni-id> ] } | { { <src_any> | { <src_addr> <src_wild> } | <src_prefix> | {
src_key_host <src_host> } | { src_key_addrgrp <src_addrgrp_name> } } } { <dst_any> | { <dst_addr> <dst_wild>
} | <dst_prefix> | { dst_key_host <dst_host> } | { dst_key_addrgrp <dst_addrgrp_name> } } } { [ [ fragments
] | [ log ] [ time-range <time_range_name> ] | packet-length { <plen_op> <plen0> | <plen_range> <plen1>
<plen2> } | { dscp { <dscp_num> | <dscp_str> } } | { ttl <ttl_num> } | { udf { <udf_name> <udf_val>
<udf_mask> } + } ] } + | { [ [ fragments ] | [ log ] [ time-range <time_range_name> ] | packet-length {
<plen_op> <plen0> | <plen_range> <plen1> <plen2> } | { tos { <tos_num> | <tos_str> } } | { precedence {
<prec_num> | <prec_str> } } | { ttl <ttl_num> } | { udf { <udf_name> <udf_val> <udf_mask> } + } ] } +
} } [ nve vni <vni-id> ] } } [ vlan <vlanid> | ingress_intf { <intfid> | <intfname> } | vlan_priority
<vlanpriorityid> ] + } { [ [ log ] [ time-range <time_range_name> ] | packet-length { <plen_op> <plen0> |
<plen_range> <plen1> <plen2> } | { dscp { <dscp_num> | <dscp_str> } } | { ttl <ttl_num> } ] } + | { [ [ log
] [ time-range <time_range_name> ] | packet-length { <plen_op> <plen0> | <plen_range> <plen1> <plen2>
} | { tos { <tos_num> | <tos_str> } } | { precedence { <prec_num> | <prec_str> } } | { ttl <ttl_num> } ] } +
] { { udf { <udf_name> <udf_val> <udf_mask> } + } ] # 2045 ../feature/acl_mgr/cli/aclmgr.cmd [ capture
session <session-id> ] { [ <action> <actionid> ] } + [ log ]

```

## Syntax Description

## Syntax Description

|                    |   |
|--------------------|---|
| <i>seqno</i>       | (Optional) Sequence number                            |
| no                 | Negate a command or set its defaults                  |
| <i>permitdeny</i>  | Permit/deny   |
| ethertype          | Configure match based on ethertype                    |
| vlan               | (Optional) Configure match based on vlan              |
| ingress_intf       | (Optional) Configure match based on ingress interface |
| vlan_priority      | (Optional) Configure match based on priority          |
| <i>ethertypeid</i> | Configure the ethertype value                         |
| <i>vlanid</i>      | (Optional) VLAN number                                |
| <i>intfid</i>      | (Optional) Interface index                            |
| <i>intfname</i>    | (Optional) Interface name                             |

|                         |                             |
|-------------------------|-----------------------------|
| <i>vlanpriorityid</i>   | (Optional) Vlan Priority    |
| <i>proto_udp</i>        | Protocol                    |
| <i>src_any</i>          | Any                         |
| <i>src_addr</i>         | Source network address      |
| <i>src_wild</i>         | Source wildcard bits        |
| <i>src_prefix</i>       | Source network prefix       |
| <i>src_key_host</i>     | A single source host        |
| <i>src_host</i>         | Source address              |
| <i>src_key_addrgrp</i>  | Source address group        |
| <i>src_addrgrp_name</i> | Address group name          |
| <i>src_port_op</i>      | (Optional) Port operator    |
| <i>src_port_range</i>   | (Optional) Port range       |
| <i>src_port0</i>        | (Optional) Port number      |
| <i>src_port0_str</i>    | (Optional) UDP port         |
| <i>src_port1</i>        | (Optional) Port number      |
| <i>src_port1_str</i>    | (Optional) UDP port         |
| <i>src_port2</i>        | (Optional) Port number      |
| <i>src_port2_str</i>    | (Optional) UDP port         |
| <i>src_portgroup</i>    | (Optional) src port group   |
| <i>src_port_group</i>   | (Optional) Port group name  |
| <i>dst_any</i>          | Any                         |
| <i>dst_addr</i>         | Destination network address |
| <i>dst_wild</i>         | Destination wildcard bits   |
| <i>dst_prefix</i>       | Destination network prefix  |
| <i>dst_key_host</i>     | A single destination host   |
| <i>dst_host</i>         | Destination address         |
| <i>dst_key_addrgrp</i>  | Destination address group   |
| <i>dst_addrgrp_name</i> | Address group name          |
| <i>dst_port_op</i>      | (Optional) Port operator    |

|                        |   |
|------------------------|---|
| <i>dst_port_range</i>  | (Optional) Port range                                   |
| <i>dst_port0</i>       | (Optional) Port number                                  |
| <i>dst_port0_str</i>   | (Optional) UDP port                                     |
| <i>dst_port1</i>       | (Optional) Port number                                  |
| <i>dst_port1_str</i>   | (Optional) UDP port                                     |
| <i>dst_port2</i>       | (Optional) Port number                                  |
| <i>dst_port2_str</i>   | (Optional) UDP port                                     |
| <i>dst_portgroup</i>   | (Optional) dst port group                               |
| <i>dst_port_group</i>  | (Optional) Port group name                              |
| <i>dscp</i>            | (Optional) Match packets with given dscp value          |
| <i>dscp_num</i>        | (Optional) Differentiated services codepoint value      |
| <i>dscp_str</i>        | (Optional) Differentiated services codepoint label      |
| <i>tos</i>             | (Optional) Match packets with given TOS value           |
| <i>tos_num</i>         | (Optional) Type of service value                        |
| <i>tos_str</i>         | (Optional) Type of service label                        |
| <i>precedence</i>      | (Optional) Match packets with given precedence value    |
| <i>prec_num</i>        | (Optional) Precedence value                             |
| <i>prec_str</i>        | (Optional) Precedence label                             |
| <i>fragments</i>       | (Optional) Check non-initial fragments                  |
| <i>log</i>             | (Optional) Log matches against this entry               |
| <i>time-range</i>      | (Optional) Specify a time range                         |
| <i>time_range_name</i> | (Optional) Time range name                              |
| <i>packet-length</i>   | (Optional) Match packets based on layer 3 packet length |
| <i>plen_op</i>         | (Optional) Packet-length operator                       |
| <i>plen_range</i>      | (Optional) Packet-length range                          |
| <i>plen0</i>           | (Optional) Packet length                                |
| <i>plen1</i>           | (Optional) Lower packet length                          |
| <i>plen2</i>           | (Optional) Higher packet length                         |
| <i>ttl</i>             | (Optional) Match Packets with a given TTL value         |



|                   |   |
|-------------------|---|
| <i>ttl_num</i>    | (Optional)  |
| <i>nve</i>        | (Optional) VNI ID <0-16777215>  |
| <i>vni</i>        | (Optional) VNI ID <0-16777215>  |
| <i>vni-id</i>     | (Optional) VNI ID <0-16777215>  |
| <i>udf</i>        | (Optional) User defined field match   |
| <i>udf_name</i>   | (Optional) UDF name   |
| <i>udf_val</i>    | (Optional) UDF value to match   |
| <i>udf_mask</i>   | (Optional) Mask to apply to UDF value   |
| <i>capture</i>    | (Optional) Enable packet capture on this filter for session   |
| <i>session</i>    | (Optional) Session ID <1-48> for this session   |
| <i>session-id</i> | (Optional) Session ID <1-48> for this session   |
| <i>action</i>     | (Optional) Action   |
| <i>actionid</i>   | (Optional) redirect: Ethernet1/1,port-channel1 set-erspan-dscp: <1-63><br>set-erspan-gre-proto: <1-65535> |

### Command Mode

- /exec/configure/ipacl

## no

```
{ [ <seqno> ] | no } <permitdeny> <proto_igmp> { { { <src_any> | { <src_addr> <src_wild> } | <src_prefix>
| { src_key_host <src_host> } | { src_key_addrgrp <src_addrgrp_name> } } } { <dst_any> | { <dst_addr>
<dst_wild> } | <dst_prefix> | { dst_key_host <dst_host> } | { dst_key_addrgrp <dst_addrgrp_name> } } } { [
[ log ] [ time-range <time_range_name> ] | <igmp_num> | packet-length { <plen_op> <plen0> | <plen_range>
<plen1> <plen2> } } | { dscp { <dscp_num> | <dscp_str> } } ] + | [ [ log ] [ time-range <time_range_name> ]
| <igmp_str> | packet-length { <plen_op> <plen0> | <plen_range> <plen1> <plen2> } | { dscp { <dscp_num>
| <dscp_str> } } ] + | [ [ log ] [ time-range <time_range_name> ] | <igmp_num> | packet-length { <plen_op>
<plen0> | <plen_range> <plen1> <plen2> } | { tos { <tos_num> | <tos_str> } } | { precedence { <prec_num>
| <prec_str> } } ] + | [ [ log ] [ time-range <time_range_name> ] | <igmp_str> | packet-length { <plen_op>
<plen0> | <plen_range> <plen1> <plen2> } | { tos { <tos_num> | <tos_str> } } | { precedence { <prec_num>
| <prec_str> } } ] + } } | { { <src_any> | { <src_addr> <src_wild> } | <src_prefix> | { src_key_host <src_host>
} | { src_key_addrgrp <src_addrgrp_name> } } } { <dst_any> | { <dst_addr> <dst_wild> } | <dst_prefix> | {
dst_key_host <dst_host> } | { dst_key_addrgrp <dst_addrgrp_name> } } } { { [ [ fragments ] [ log ] [ time-range
<time_range_name> ] | packet-length { <plen_op> <plen0> | <plen_range> <plen1> <plen2> } | { dscp {
<dscp_num> | <dscp_str> } } | { ttl <ttl_num> } } ] + | { [ [ fragments ] [ log ] [ time-range
<time_range_name> ] | packet-length { <plen_op> <plen0> | <plen_range> <plen1> <plen2> } | { tos {
<tos_num> | <tos_str> } } | { precedence { <prec_num> | <prec_str> } } | { ttl <ttl_num> } } ] + } } [ capture
session <session-id> ] { [ <action> <actionid> ] } + [ log ] }
```

**Syntax Description****Syntax Description**

|                         |                                      |
|-------------------------|--------------------------------------|
| <i>seqno</i>            | (Optional) Sequence number           |
| no                      | Negate a command or set its defaults |
| <i>permitdeny</i>       | Permit/deny                          |
| <i>proto_igmp</i>       | Protocol                             |
| <i>src_any</i>          | Any                                  |
| <i>src_addr</i>         | Source network address               |
| <i>src_wild</i>         | Source wildcard bits                 |
| <i>src_prefix</i>       | Source network prefix                |
| src_key_host            | A single source host                 |
| <i>src_host</i>         | Source address                       |
| src_key_addrgrp         | Source address group                 |
| <i>src_addrgrp_name</i> | Address group name                   |
| <i>dst_any</i>          | Any                                  |
| <i>dst_addr</i>         | Destination network address          |
| <i>dst_wild</i>         | Destination wildcard bits            |

|                         |   |
|-------------------------|---|
| <i>dst_prefix</i>       | Destination network prefix                                  |
| <i>dst_key_host</i>     | A single destination host                                   |
| <i>dst_host</i>         | Destination address   |
| <i>dst_key_addrgrp</i>  | Destination address group                                   |
| <i>dst_addrgrp_name</i> | Address group name  |
| <i>dscp</i>             | (Optional) Match packets with given dscp value              |
| <i>dscp_num</i>         | (Optional) Differentiated services codepoint value          |
| <i>dscp_str</i>         | (Optional) Differentiated services codepoint label          |
| <i>tos</i>              | (Optional) Match packets with given TOS value               |
| <i>tos_num</i>          | (Optional) Type of service value                            |
| <i>tos_str</i>          | (Optional) Type of service label                            |
| <i>precedence</i>       | (Optional) Match packets with given precedence value        |
| <i>prec_num</i>         | (Optional) Precedence value                                 |
| <i>prec_str</i>         | (Optional) Precedence label                                 |
| <i>fragments</i>        | (Optional) Check non-initial fragments                      |
| <i>log</i>              | (Optional) Log matches against this entry                   |
| <i>time-range</i>       | (Optional) Specify a time range                             |
| <i>time_range_name</i>  | (Optional) Time range name                                  |
| <i>packet-length</i>    | (Optional) Match packets based on layer 3 packet length     |
| <i>plen_op</i>          | (Optional) Packet-length operator                           |
| <i>plen_range</i>       | (Optional) Packet-length range                              |
| <i>plen0</i>            | (Optional) Packet length                                    |
| <i>plen1</i>            | (Optional) Lower packet length                              |
| <i>plen2</i>            | (Optional) Higher packet length                             |
| <i>ttl</i>              | (Optional) Match Packets with a given TTL value             |
| <i>ttl_num</i>          | (Optional)  |
| <i>igmp_num</i>         | (Optional) IGMP message type                                |
| <i>igmp_str</i>         | (Optional) IGMP type  |
| <i>capture</i>          | (Optional) Enable packet capture on this filter for session |

---

|                   |   |
|-------------------|---|
| <i>session</i>    | (Optional) Session ID <1-48> for this session   |
| <i>session-id</i> | (Optional) Session ID <1-48> for this session   |
| <i>action</i>     | (Optional) Action   |
| <i>actionid</i>   | (Optional) redirect: Ethernet1/1,port-channel1 set-erspan-dscp: <1-63><br>set-erspan-gre-proto: <1-65535> |

---

**Command Mode**

- /exec/configure/ipacl

## no

```
{ [ <seqno> ] | no } <permitdeny> { { { ethertype <ethertypeid> } | { <proto_icmp> { { { <src_any> | {
<src_addr><src_wild> } | <src_prefix> | { src_key_host <src_host> } | { src_key_addrgrp <src_addrgrp_name>
} } } { <dst_any> | { <dst_addr><dst_wild> } | <dst_prefix> | { dst_key_host <dst_host> } | { dst_key_addrgrp
<dst_addrgrp_name> } } } { [ [ log ] [ time-range <time_range_name> ] | { <icmp_type> [ <icmp_code> ] } |
packet-length { <plen_op> <plen0> | <plen_range> <plen1> <plen2> } } | { dscp { <dscp_num> | <dscp_str>
} } } ] + [ [ log ] [ time-range <time_range_name> ] | { <icmp_str> | packet-length { <plen_op> <plen0> |
<plen_range> <plen1> <plen2> } } | { dscp { <dscp_num> | <dscp_str> } } } ] + [ [ log ] [ time-range
<time_range_name> ] | { <icmp_type> [ <icmp_code> ] } | packet-length { <plen_op> <plen0> | <plen_range>
<plen1> <plen2> } } | { tos { <tos_num> | <tos_str> } } } | { precedence { <prec_num> | <prec_str> } } } ] + [ [
log ] [ time-range <time_range_name> ] | { <icmp_str> | packet-length { <plen_op> <plen0> | <plen_range>
<plen1> <plen2> } } | { tos { <tos_num> | <tos_str> } } } | { precedence { <prec_num> | <prec_str> } } } ] + } }
| { { <src_any> | { <src_addr><src_wild> } | <src_prefix> | { src_key_host <src_host> } | { src_key_addrgrp
<src_addrgrp_name> } } } { <dst_any> | { <dst_addr><dst_wild> } | <dst_prefix> | { dst_key_host <dst_host>
} | { dst_key_addrgrp <dst_addrgrp_name> } } } { { [ [ fragments ] | [ log ] [ time-range <time_range_name>
] | packet-length { <plen_op> <plen0> | <plen_range> <plen1> <plen2> } } | { dscp { <dscp_num> | <dscp_str>
} } } | { ttl <ttl_num> } } } } + | { [ [ fragments ] | [ log ] [ time-range <time_range_name> ] | packet-length {
<plen_op> <plen0> | <plen_range> <plen1> <plen2> } } | { tos { <tos_num> | <tos_str> } } } | { precedence {
<prec_num> | <prec_str> } } } | { ttl <ttl_num> } } } } + } } } } [ vlan <vlanid> | ingress_intf { <intfid> |
<intfname> } | vlan_priority <vlanpriorityid> ] + [ capture session <session-id> ] { [ <action> <actionid> ]
} + [ log ] }
```

**Syntax Description****Syntax Description**

|                       |   |
|-----------------------|---|
| <i>seqno</i>          | (Optional) Sequence number                            |
| no                    | Negate a command or set its defaults                  |
| <i>permitdeny</i>     | Permit/deny   |
| ethertype             | Configure match based on ethertype                    |
| vlan                  | (Optional) Configure match based on vlan              |
| ingress_intf          | (Optional) Configure match based on ingress interface |
| vlan_priority         | (Optional) Configure match based on priority          |
| <i>ethertypeid</i>    | Configure the ethertype value                         |
| <i>vlanid</i>         | (Optional) VLAN number                                |
| <i>intfid</i>         | (Optional) Interface index                            |
| <i>intfname</i>       | (Optional) Interface name                             |
| <i>vlanpriorityid</i> | (Optional) Vlan Priority                              |
| <i>proto_icmp</i>     | Protocol  |
| <i>src_any</i>        | Any   |

|                         |   |
|-------------------------|---|
| <i>src_addr</i>         | Source network address                                  |
| <i>src_wild</i>         | Source wildcard bits                                    |
| <i>src_prefix</i>       | Source network prefix                                   |
| <i>src_key_host</i>     | A single source host                                    |
| <i>src_host</i>         | Source address  |
| <i>src_key_addrgrp</i>  | Source address group                                    |
| <i>src_addrgrp_name</i> | Address group name                                      |
| <i>dst_any</i>          | Any   |
| <i>dst_addr</i>         | Destination network address                             |
| <i>dst_wild</i>         | Destination wildcard bits                               |
| <i>dst_prefix</i>       | Destination network prefix                              |
| <i>dst_key_host</i>     | A single destination host                               |
| <i>dst_host</i>         | Destination address                                     |
| <i>dst_key_addrgrp</i>  | Destination address group                               |
| <i>dst_addrgrp_name</i> | Address group name                                      |
| <i>dscp</i>             | (Optional) Match packets with given dscp value          |
| <i>dscp_num</i>         | (Optional) Differentiated services codepoint value      |
| <i>dscp_str</i>         | (Optional) Differentiated services codepoint label      |
| <i>tos</i>              | (Optional) Match packets with given TOS value           |
| <i>tos_num</i>          | (Optional) Type of service value                        |
| <i>tos_str</i>          | (Optional) Type of service label                        |
| <i>precedence</i>       | (Optional) Match packets with given precedence value    |
| <i>prec_num</i>         | (Optional) Precedence value                             |
| <i>prec_str</i>         | (Optional) Precedence label                             |
| <i>fragments</i>        | (Optional) Check non-initial fragments                  |
| <i>log</i>              | (Optional) Log matches against this entry               |
| <i>time-range</i>       | (Optional) Specify a time range                         |
| <i>time_range_name</i>  | (Optional) Time range name                              |
| <i>packet-length</i>    | (Optional) Match packets based on layer 3 packet length |

|                   |   |
|-------------------|---|
| <i>plen_op</i>    | (Optional) Packet-length operator   |
| <i>plen_range</i> | (Optional) Packet-length range  |
| <i>plen0</i>      | (Optional) Packet length  |
| <i>plen1</i>      | (Optional) Lower packet length  |
| <i>plen2</i>      | (Optional) Higher packet length   |
| <i>ttl</i>        | (Optional) Match Packets with a given TTL value   |
| <i>ttl_num</i>    | (Optional)  |
| <i>icmp_type</i>  | (Optional) ICMP message type  |
| <i>icmp_code</i>  | (Optional) ICMP message code  |
| <i>icmp_str</i>   | (Optional) ICMP label   |
| <i>capture</i>    | (Optional) Enable packet capture on this filter for session   |
| <i>session</i>    | (Optional) Session ID <1-48> for this session   |
| <i>session-id</i> | (Optional) Session ID <1-48> for this session   |
| <i>action</i>     | (Optional) Action   |
| <i>actionid</i>   | (Optional) redirect: Ethernet1/1,port-channel1 set-erspan-dscp: <1-63><br>set-erspan-gre-proto: <1-65535> |

### Command Mode

- /exec/configure/ipacl

## no

```
{ [ <seqno> ] | no } <permitdeny> <proto_tcp> { { { <src_any> | { <src_addr> <src_wild> } | <src_prefix>
| { src_key_host <src_host> } | { src_key_addrgrp <src_addrgrp_name> } } [ { { <src_port_op> { <src_port0>
| <src_port0_str> } } | { <src_port_range> { <src_port1> | <src_port1_str> } { <src_port2> | <src_port2_str>
} } | src_portgroup <src_port_group> } ] { <dst_any> | { <dst_addr> <dst_wild> } | <dst_prefix> | {
dst_key_host <dst_host> } | { dst_key_addrgrp <dst_addrgrp_name> } } [ { { <dst_port_op> { <dst_port0>
| <dst_port0_str> } } | { <dst_port_range> { <dst_port1> | <dst_port1_str> } { <dst_port2> | <dst_port2_str>
} } | dst_portgroup <dst_port_group> } ] [ { { dscp { <dscp_num> | <dscp_str> } } ] [ { flow-label
<flow_num> } ] [ log ] [ time-range <time_range_name> ] [ urg | ack | psh | rst | syn | fin | established ] [ {
tcp-flags-mask <tcp_flags_mask> } ] [ packet-length { <plen_op> <plen0> | <plen_range> <plen1> <plen2>
} ] ] + } | { { <src_any> | { <src_addr> <src_wild> } | <src_prefix> | { src_key_host <src_host> } | {
src_key_addrgrp <src_addrgrp_name> } } { <dst_any> | { <dst_addr> <dst_wild> } | <dst_prefix> | {
dst_key_host <dst_host> } | { dst_key_addrgrp <dst_addrgrp_name> } } { [ { dscp { <dscp_num> | <dscp_str>
} } ] [ { flow-label <flow_num> } ] [ fragments ] [ log ] [ time-range <time_range_name> ] [ packet-length
{ <plen_op> <plen0> | <plen_range> <plen1> <plen2> } ] [ { udf { <udf_name> <udf_val> <udf_mask>
+ } ] ] + } } [ vlan <vlanid> | ingress_intf { <intfid> | <intfname> } | vlan_priority <vlanpriorityid> ] + [
capture session <session-id> ] [ { <actionv6> <actionidv6> } ] }
```

## Syntax Description

## Syntax Description

|                       |   |
|-----------------------|---|
| <i>seqno</i>          | (Optional) Sequence number                            |
| no                    | Negate a command or set its defaults                  |
| <i>permitdeny</i>     | Permit/deny   |
| <i>proto_tcp</i>      | Protocol  |
| vlan                  | (Optional) Configure match based on vlan              |
| ingress_intf          | (Optional) Configure match based on ingress interface |
| vlan_priority         | (Optional) Configure match based on priority          |
| udf                   | (Optional) User defined field match                   |
| <i>udf_name</i>       | (Optional) UDF name                                   |
| <i>udf_val</i>        | (Optional) UDF value to match                         |
| <i>udf_mask</i>       | (Optional) Mask to apply to UDF value                 |
| <i>vlanid</i>         | (Optional) VLAN number                                |
| <i>intfid</i>         | (Optional) Interface index                            |
| <i>intfname</i>       | (Optional) Interface name                             |
| <i>vlanpriorityid</i> | (Optional) Vlan Priority                              |
| <i>src_any</i>        | Any   |



|                         |  |
|-------------------------|--|
| <i>src_key_host</i>     | A single source host                               |
| <i>src_key_addrgrp</i>  | Source address group                               |
| <i>src_addrgrp_name</i> | Address group name                                 |
| <i>src_port_op</i>      | (Optional) Port operator                           |
| <i>src_port_range</i>   | (Optional) Port range                              |
| <i>src_port0</i>        | (Optional) Port number                             |
| <i>src_port0_str</i>    | (Optional) TCP port                                |
| <i>src_port1</i>        | (Optional) Port number                             |
| <i>src_port1_str</i>    | (Optional) TCP port                                |
| <i>src_port2</i>        | (Optional) Port number                             |
| <i>src_port2_str</i>    | (Optional) TCP port                                |
| <i>src_portgroup</i>    | (Optional) src port group                          |
| <i>src_port_group</i>   | (Optional) Port group name                         |
| <i>dst_any</i>          | Any  |
| <i>dst_key_host</i>     | A single destination host                          |
| <i>dst_key_addrgrp</i>  | Destination address group                          |
| <i>dst_addrgrp_name</i> | Address group name                                 |
| <i>dst_port_op</i>      | (Optional) Port operator                           |
| <i>dst_port_range</i>   | (Optional) Port range                              |
| <i>dst_port0</i>        | (Optional) Port number                             |
| <i>dst_port0_str</i>    | (Optional) TCP port                                |
| <i>dst_port1</i>        | (Optional) Port number                             |
| <i>dst_port1_str</i>    | (Optional) TCP port                                |
| <i>dst_port2</i>        | (Optional) Port number                             |
| <i>dst_port2_str</i>    | (Optional) TCP port                                |
| <i>dst_portgroup</i>    | (Optional) dst port group                          |
| <i>dst_port_group</i>   | (Optional) Port group name                         |
| <i>dscp</i>             | (Optional) Match packets with given dscp value     |
| <i>dscp_num</i>         | (Optional) Differentiated services codepoint value |

|                        |   |
|------------------------|---|
| <i>dscp_str</i>        | (Optional) Differentiated services codepoint label  |
| <i>flow-label</i>      | (Optional) Flow label   |
| <i>flow_num</i>        | (Optional) Flow label value   |
| <i>fragments</i>       | (Optional) Check non-initial fragments  |
| <i>log</i>             | (Optional) Log matches against this entry   |
| <i>time-range</i>      | (Optional) Specify a time range   |
| <i>time_range_name</i> | (Optional) Time range name  |
| <i>packet-length</i>   | (Optional) Match packets based on layer 3 packet length   |
| <i>plen_op</i>         | (Optional) Packet-length operator   |
| <i>plen_range</i>      | (Optional) Packet-length range  |
| <i>plen0</i>           | (Optional) Packet length  |
| <i>plen1</i>           | (Optional) Lower packet length  |
| <i>plen2</i>           | (Optional) Higher packet length   |
| <i>tcp-flags-mask</i>  | Specify TCP Flags   |
| <i>tcp_flags_mask</i>  | TCP flags mask  |
| <i>urg</i>             | (Optional) Match on the URG bit   |
| <i>ack</i>             | (Optional) Match on the ACK bit   |
| <i>psh</i>             | (Optional) Match on the PSH bit   |
| <i>rst</i>             | (Optional) Match on the RST bit   |
| <i>syn</i>             | (Optional) Match on the SYN bit   |
| <i>fin</i>             | (Optional) Match on the FIN bit   |
| <i>established</i>     | (Optional) Match established connections  |
| <i>capture</i>         | (Optional) Enable packet capture on this filter for session   |
| <i>session</i>         | (Optional) Session ID <1-48> for this session   |
| <i>session-id</i>      | (Optional) Session ID <1-48> for this session   |
| <i>actionv6</i>        | (Optional) ActionV6   |
| <i>actionidv6</i>      | (Optional) redirect: Ethernet1/1,port-channel1 set-erspan-dscp: <1-63><br>set-erspan-gre-proto: <1-65535> |

### Command Mode

- /exec/configure/ipv6acl

## no

```
{ [ <seqno> ] | no } <permitdeny> <proto_udp> { { { <src_any> | { <src_addr> <src_wild> } | <src_prefix>
| { src_key_host <src_host> } | { src_key_addrgrp <src_addrgrp_name> } } [ { { <src_port_op> { <src_port0>
| <src_port0_str> } } | { <src_port_range> { <src_port1> | <src_port1_str> } { <src_port2> | <src_port2_str>
} } | src_portgroup <src_port_group> } ] { <dst_any> | { <dst_addr> <dst_wild> } | <dst_prefix> | {
dst_key_host <dst_host> } | { dst_key_addrgrp <dst_addrgrp_name> } } [ { { <dst_port_op> { <dst_port0>
| <dst_port0_str> } } | { <dst_port_range> { <dst_port1> | <dst_port1_str> } { <dst_port2> | <dst_port2_str>
} } | dst_portgroup <dst_port_group> } ] [ { { dscp { <dscp_num> | <dscp_str> } } ] [ { flow-label <flow_num>
} ] [ log ] [ time-range <time_range_name> ] [ packet-length { <plen_op> <plen0> | <plen_range> <plen1>
<plen2> } ] ] + } [ nve vni <vni-id> ] | { { <src_any> | { <src_addr> <src_wild> } | <src_prefix> | {
src_key_host <src_host> } | { src_key_addrgrp <src_addrgrp_name> } } { <dst_any> | { <dst_addr> <dst_wild>
} | <dst_prefix> | { dst_key_host <dst_host> } | { dst_key_addrgrp <dst_addrgrp_name> } } [ { { dscp {
<dscp_num> | <dscp_str> } } ] [ { flow-label <flow_num> } ] [ fragments ] [ log ] [ time-range
<time_range_name> ] [ packet-length { <plen_op> <plen0> | <plen_range> <plen1> <plen2> } ] [ { udf {
<udf_name> <udf_val> <udf_mask> } + } ] ] + } [ nve vni <vni-id> ] [ vlan <vlanid> | ingress_intf {
<intfid> | <intfname> } | vlan_priority <vlanpriorityid> ] + [ capture session <session-id> ] [ { <actionv6>
<actionidv6> } ] }
```

## Syntax Description

## Syntax Description

|                       |   |
|-----------------------|---|
| <i>seqno</i>          | (Optional) Sequence number                            |
| no                    | Negate a command or set its defaults                  |
| <i>permitdeny</i>     | Permit/deny   |
| <i>proto_udp</i>      | Protocol  |
| vlan                  | (Optional) Configure match based on vlan              |
| ingress_intf          | (Optional) Configure match based on ingress interface |
| vlan_priority         | (Optional) Configure match based on priority          |
| udf                   | (Optional) User defined field match                   |
| <i>udf_name</i>       | (Optional) UDF name                                   |
| <i>udf_val</i>        | (Optional) UDF value to match                         |
| <i>udf_mask</i>       | (Optional) Mask to apply to UDF value                 |
| <i>vlanid</i>         | (Optional) VLAN number                                |
| <i>intfid</i>         | (Optional) Interface index                            |
| <i>intfname</i>       | (Optional) Interface name                             |
| <i>vlanpriorityid</i> | (Optional) Vlan Priority                              |
| <i>src_any</i>        | Any   |

|                         |  |
|-------------------------|--|
| <i>src_key_host</i>     | A single source host                               |
| <i>src_key_addrgrp</i>  | Source address group                               |
| <i>src_addrgrp_name</i> | Address group name                                 |
| <i>src_port_op</i>      | (Optional) Port operator                           |
| <i>src_port_range</i>   | (Optional) Port range                              |
| <i>src_port0</i>        | (Optional) Port number                             |
| <i>src_port0_str</i>    | (Optional) UDP port                                |
| <i>src_port1</i>        | (Optional) Port number                             |
| <i>src_port1_str</i>    | (Optional) UDP port                                |
| <i>src_port2</i>        | (Optional) Port number                             |
| <i>src_port2_str</i>    | (Optional) UDP port                                |
| <i>src_portgroup</i>    | (Optional) src port group                          |
| <i>src_port_group</i>   | (Optional) Port group name                         |
| <i>dst_any</i>          | Any  |
| <i>dst_key_host</i>     | A single destination host                          |
| <i>dst_key_addrgrp</i>  | Destination address group                          |
| <i>dst_addrgrp_name</i> | Address group name                                 |
| <i>dst_port_op</i>      | (Optional) Port operator                           |
| <i>dst_port_range</i>   | (Optional) Port range                              |
| <i>dst_port0</i>        | (Optional) Port number                             |
| <i>dst_port0_str</i>    | (Optional) UDP port                                |
| <i>dst_port1</i>        | (Optional) Port number                             |
| <i>dst_port1_str</i>    | (Optional) UDP port                                |
| <i>dst_port2</i>        | (Optional) Port number                             |
| <i>dst_port2_str</i>    | (Optional) UDP port                                |
| <i>dst_portgroup</i>    | (Optional) dst port group                          |
| <i>dst_port_group</i>   | (Optional) Port group name                         |
| <i>dscp</i>             | (Optional) Match packets with given dscp value     |
| <i>dscp_num</i>         | (Optional) Differentiated services codepoint value |

|                        |   |
|------------------------|---|
| <i>dscp_str</i>        | (Optional) Differentiated services codepoint label  |
| <i>flow-label</i>      | (Optional) Flow label   |
| <i>flow_num</i>        | (Optional) Flow label value   |
| <i>fragments</i>       | (Optional) Check non-initial fragments  |
| <i>log</i>             | (Optional) Log matches against this entry   |
| <i>time-range</i>      | (Optional) Specify a time range   |
| <i>time_range_name</i> | (Optional) Time range name  |
| <i>packet-length</i>   | (Optional) Match packets based on layer 3 packet length   |
| <i>plen_op</i>         | (Optional) Packet-length operator   |
| <i>plen_range</i>      | (Optional) Packet-length range  |
| <i>plen0</i>           | (Optional) Packet length  |
| <i>plen1</i>           | (Optional) Lower packet length  |
| <i>plen2</i>           | (Optional) Higher packet length   |
| <i>capture</i>         | (Optional) Enable packet capture on this filter for session   |
| <i>session</i>         | (Optional) Session ID <1-48> for this session   |
| <i>session-id</i>      | (Optional) Session ID <1-48> for this session   |
| <i>nve</i>             | (Optional) VNI ID <0-16777215>  |
| <i>vni</i>             | (Optional) VNI ID <0-16777215>  |
| <i>vni-id</i>          | (Optional) VNI ID <0-16777215>  |
| <i>actionv6</i>        | (Optional) ActionV6   |
| <i>actionidv6</i>      | (Optional) redirect: Ethernet1/1,port-channel1 set-erspan-dscp: <1-63><br>set-erspan-gre-proto: <1-65535> |

### Command Mode

- /exec/configure/ipv6acl

## no

```
{ [ <seqno> ] | no } <permitdeny> <proto_sctp> { { { <src_any> | { <src_addr> <src_wild> } | <src_prefix>
| { src_key_host <src_host> } | { src_key_addrgrp <src_addrgrp_name> } } [ { { <src_port_op> { <src_port0>
| <src_port0_str> } } | { <src_port_range> { <src_port1> | <src_port1_str> } { <src_port2> | <src_port2_str>
} } | src_portgroup <src_port_group> } ] { <dst_any> | { <dst_addr> <dst_wild> } | <dst_prefix> | {
dst_key_host <dst_host> } | { dst_key_addrgrp <dst_addrgrp_name> } } [ { { <dst_port_op> { <dst_port0>
| <dst_port0_str> } } | { <dst_port_range> { <dst_port1> | <dst_port1_str> } { <dst_port2> | <dst_port2_str>
} } | dst_portgroup <dst_port_group> } ] [ { dscp { <dscp_num> | <dscp_str> } } ] [ { flow-label <flow_num>
} ] [ log ] [ time-range <time_range_name> ] [ packet-length { <plen_op> <plen0> | <plen_range> <plen1>
<plen2> } ] ] + } | { { <src_any> | { <src_addr> <src_wild> } | <src_prefix> | { src_key_host <src_host> }
| { src_key_addrgrp <src_addrgrp_name> } } { <dst_any> | { <dst_addr> <dst_wild> } | <dst_prefix> | {
dst_key_host <dst_host> } | { dst_key_addrgrp <dst_addrgrp_name> } } [ { dscp { <dscp_num> | <dscp_str>
} } ] [ { flow-label <flow_num> } ] [ fragments ] [ log ] [ time-range <time_range_name> ] [ packet-length
{ <plen_op> <plen0> | <plen_range> <plen1> <plen2> } ] [ { udf { <udf_name> <udf_val> <udf_mask> }
+ } ] ] + [ vlan <vlanid> | ingress_intf { <intfid> | <intfname> } | vlan_priority <vlanpriorityid> ] + [ capture
session <session-id> ] }
```

**Syntax Description****Syntax Description**

|                       |   |
|-----------------------|---|
| <i>seqno</i>          | (Optional) Sequence number                            |
| no                    | Negate a command or set its defaults                  |
| <i>permitdeny</i>     | Permit/deny   |
| <i>proto_sctp</i>     | Protocol  |
| vlan                  | (Optional) Configure match based on vlan              |
| ingress_intf          | (Optional) Configure match based on ingress interface |
| vlan_priority         | (Optional) Configure match based on priority          |
| udf                   | (Optional) User defined field match                   |
| <i>udf_name</i>       | (Optional) UDF name                                   |
| <i>udf_val</i>        | (Optional) UDF value to match                         |
| <i>udf_mask</i>       | (Optional) Mask to apply to UDF value                 |
| <i>vlanid</i>         | (Optional) VLAN number                                |
| <i>intfid</i>         | (Optional) Interface index                            |
| <i>intfname</i>       | (Optional) Interface name                             |
| <i>vlanpriorityid</i> | (Optional) Vlan Priority                              |
| <i>src_any</i>        | Any   |
| src_key_host          | A single source host                                  |

|                         |  |
|-------------------------|--|
| <i>src_key_addrgrp</i>  | Source address group                               |
| <i>src_addrgrp_name</i> | Address group name                                 |
| <i>src_port_op</i>      | (Optional) Port operator                           |
| <i>src_port_range</i>   | (Optional) Port range                              |
| <i>src_port0</i>        | (Optional) Port number                             |
| <i>src_port0_str</i>    | (Optional) SCTP port                               |
| <i>src_port1</i>        | (Optional) Port number                             |
| <i>src_port1_str</i>    | (Optional) SCTP port                               |
| <i>src_port2</i>        | (Optional) Port number                             |
| <i>src_port2_str</i>    | (Optional) SCTP port                               |
| <i>src_portgroup</i>    | (Optional) src port group                          |
| <i>src_port_group</i>   | (Optional) Port group name                         |
| <i>dst_any</i>          | Any  |
| <i>dst_key_host</i>     | A single destination host                          |
| <i>dst_key_addrgrp</i>  | Destination address group                          |
| <i>dst_addrgrp_name</i> | Address group name                                 |
| <i>dst_port_op</i>      | (Optional) Port operator                           |
| <i>dst_port_range</i>   | (Optional) Port range                              |
| <i>dst_port0</i>        | (Optional) Port number                             |
| <i>dst_port0_str</i>    | (Optional) SCTP port                               |
| <i>dst_port1</i>        | (Optional) Port number                             |
| <i>dst_port1_str</i>    | (Optional) SCTP port                               |
| <i>dst_port2</i>        | (Optional) Port number                             |
| <i>dst_port2_str</i>    | (Optional) SCTP port                               |
| <i>dst_portgroup</i>    | (Optional) dst port group                          |
| <i>dst_port_group</i>   | (Optional) Port group name                         |
| <i>dscp</i>             | (Optional) Match packets with given dscp value     |
| <i>dscp_num</i>         | (Optional) Differentiated services codepoint value |
| <i>dscp_str</i>         | (Optional) Differentiated services codepoint label |



|                        |   |
|------------------------|---|
| <i>flow-label</i>      | (Optional) Flow label                                       |
| <i>flow_num</i>        | (Optional) Flow label value                                 |
| <i>fragments</i>       | (Optional) Check non-initial fragments                      |
| <i>log</i>             | (Optional) Log matches against this entry                   |
| <i>time-range</i>      | (Optional) Specify a time range                             |
| <i>time_range_name</i> | (Optional) Time range name                                  |
| <i>packet-length</i>   | (Optional) Match packets based on layer 3 packet length     |
| <i>plen_op</i>         | (Optional) Packet-length operator                           |
| <i>plen_range</i>      | (Optional) Packet-length range                              |
| <i>plen0</i>           | (Optional) Packet length                                    |
| <i>plen1</i>           | (Optional) Lower packet length                              |
| <i>plen2</i>           | (Optional) Higher packet length                             |
| <i>capture</i>         | (Optional) Enable packet capture on this filter for session |
| <i>session</i>         | (Optional) Session ID <1-48> for this session               |
| <i>session-id</i>      | (Optional) Session ID <1-48> for this session               |

### Command Mode

- /exec/configure/ipv6acl

## no

```
{ [ <seqno> ] | no } <permitdeny> <proto_icmpv6> { { { { <src_any> | { <src_addr> <src_wild> } |
<src_prefix> | { src_key_host <src_host> } | { src_key_addrgrp <src_addrgrp_name> } } } { <dst_any> | {
<dst_addr> <dst_wild> } | <dst_prefix> | { dst_key_host <dst_host> } | { dst_key_addrgrp <dst_addrgrp_name>
} } } { [ { <icmpv6_type> [ <icmpv6_code> ] } | { dscp { <dscp_num> | <dscp_str> } } | { flow-label
<flow_num> } ] [ log ] [ time-range <time_range_name> ] | packet-length { <plen_op> <plen0> | <plen_range>
<plen1> <plen2> } } ] + [ [ <icmpv6_str> | { dscp { <dscp_num> | <dscp_str> } } | { flow-label <flow_num>
} ] [ log ] [ time-range <time_range_name> ] | packet-length { <plen_op> <plen0> | <plen_range> <plen1>
<plen2> } } ] + } | { { <src_any> | { <src_addr> <src_wild> } | <src_prefix> | { src_key_host <src_host>
} | { src_key_addrgrp <src_addrgrp_name> } } } { <dst_any> | { <dst_addr> <dst_wild> } | <dst_prefix> | {
dst_key_host <dst_host> } | { dst_key_addrgrp <dst_addrgrp_name> } } } { [ { dscp { <dscp_num> | <dscp_str>
} } ] [ { flow-label <flow_num> } ] [ fragments ] [ log ] [ time-range <time_range_name> ] [ packet-length
{ <plen_op> <plen0> | <plen_range> <plen1> <plen2> } ] [ { udf { <udf_name> <udf_val> <udf_mask>
+ } } ] + } } [ vlan <vlanid> | ingress_intf { <intfid> | <intfname> } | vlan_priority <vlanpriorityid> ] + [
capture session <session-id> ] { [ <actionv6> <actionidv6> ] } }
```

## Syntax Description

## Syntax Description

|                       |   |
|-----------------------|---|
| <i>seqno</i>          | (Optional) Sequence number                            |
| no                    | Negate a command or set its defaults                  |
| <i>permitdeny</i>     | Permit/deny   |
| <i>proto_icmpv6</i>   | Protocol  |
| vlan                  | (Optional) Configure match based on vlan              |
| ingress_intf          | (Optional) Configure match based on ingress interface |
| vlan_priority         | (Optional) Configure match based on priority          |
| udf                   | (Optional) User defined field match                   |
| <i>udf_name</i>       | (Optional) UDF name                                   |
| <i>udf_val</i>        | (Optional) UDF value to match                         |
| <i>udf_mask</i>       | (Optional) Mask to apply to UDF value                 |
| <i>vlanid</i>         | (Optional) VLAN number                                |
| <i>intfid</i>         | (Optional) Interface index                            |
| <i>intfname</i>       | (Optional) Interface name                             |
| <i>vlanpriorityid</i> | (Optional) Vlan Priority                              |
| <i>src_any</i>        | Any   |
| src_key_host          | A single source host                                  |

|                         |   |
|-------------------------|---|
| <i>src_key_addrgrp</i>  | Source address group  |
| <i>src_addrgrp_name</i> | Address group name  |
| <i>dst_any</i>          | Any   |
| <i>dst_key_host</i>     | A single destination host                                   |
| <i>dst_key_addrgrp</i>  | Destination address group                                   |
| <i>dst_addrgrp_name</i> | Address group name  |
| <i>dscp</i>             | (Optional) Match packets with given dscp value              |
| <i>dscp_num</i>         | (Optional) Differentiated services codepoint value          |
| <i>dscp_str</i>         | (Optional) Differentiated services codepoint label          |
| <i>flow-label</i>       | (Optional) Flow label                                       |
| <i>flow_num</i>         | (Optional) Flow label value                                 |
| <i>fragments</i>        | (Optional) Check non-initial fragments                      |
| <i>log</i>              | (Optional) Log matches against this entry                   |
| <i>time-range</i>       | (Optional) Specify a time range                             |
| <i>time_range_name</i>  | (Optional) Time range name                                  |
| <i>packet-length</i>    | (Optional) Match packets based on layer 3 packet length     |
| <i>plen_op</i>          | (Optional) Packet-length operator                           |
| <i>plen_range</i>       | (Optional) Packet-length range                              |
| <i>plen0</i>            | (Optional) Packet length                                    |
| <i>plen1</i>            | (Optional) Lower packet length                              |
| <i>plen2</i>            | (Optional) Higher packet length                             |
| <i>icmpv6_type</i>      | (Optional) ICMPv6 message type                              |
| <i>icmpv6_code</i>      | (Optional) ICMPv6 message code                              |
| <i>icmpv6_str</i>       | (Optional) ICMPv6 label                                     |
| <i>capture</i>          | (Optional) Enable packet capture on this filter for session |
| <i>session</i>          | (Optional) Session ID <1-48> for this session               |
| <i>session-id</i>       | (Optional) Session ID <1-48> for this session               |
| <i>actionv6</i>         | (Optional) ActionV6   |

---

*actionidv6* (Optional) redirect: Ethernet1/1,port-channel1 set-erspan-dscp: <1-63>  
set-erspan-gre-proto: <1-65535>

---

**Command Mode**

- /exec/configure/ipv6acl

## no

```
{ { [ <seqno> ] | no } <permitdeny> { { [ <arp_request> ] req_ip { <sender1_ip_any> | { { <sender1_host>
<sender1_ip> | { <sender1_net_ip> <sender1_ip_mask> } } } } mac { <sender1_mac_any> | { {
<sender1_mac_host> <sender1_mac> | { <sender1_net_mac> <sender1_mac_mask> } } } } | {
<arp_response> resp_ip { <sender2_ip_any> | { { <sender2_host> <sender2_ip> | { <sender2_net_ip>
<sender2_ip_mask> } } } } { <target_ip_any> | { { <target_host> <target_ip> | { <target_net_ip>
<target_ip_mask> } } } } mac { <sender2_mac_any> | { { <sender2_mac_host> <sender2_mac> | {
<sender2_net_mac> <sender2_mac_mask> } } } } [ { <target_mac_any> | { { <target_mac_host> <target_mac>
| { <target_net_mac> <target_mac_mask> } } } } ] } [ <arp_log> ] [ capture session <session-id> ] }
```

**Syntax Description****Syntax Description**

|                        |                                      |
|------------------------|--------------------------------------|
| <i>seqno</i>           | (Optional) Sequence number           |
| no                     | Negate a command or set its defaults |
| <i>permitdeny</i>      | Permit/deny                          |
| req_ip                 | Any IP protocol                      |
| resp_ip                | Any IP protocol                      |
| <i>arp_request</i>     | (Optional) ARP_Request               |
| <i>arp_response</i>    | ARP_Response                         |
| <i>sender1_ip_any</i>  | Any                                  |
| <i>sender1_host</i>    | Host                                 |
| <i>sender1_ip</i>      | IP address <a.b.c.d>                 |
| <i>sender1_net_ip</i>  | IP address <a.b.c.d>                 |
| <i>sender1_ip_mask</i> | IP mask <a.b.c.d>                    |
| <i>sender2_ip_any</i>  | Any                                  |
| <i>sender2_host</i>    | Host                                 |
| <i>sender2_ip</i>      | IP address <a.b.c.d>                 |
| <i>sender2_net_ip</i>  | IP address <a.b.c.d>                 |
| <i>sender2_ip_mask</i> | IP mask <a.b.c.d>                    |
| <i>target_ip_any</i>   | Any                                  |
| <i>target_host</i>     | Host                                 |
| <i>target_ip</i>       | IP address <a.b.c.d>                 |
| <i>target_net_ip</i>   | IP address <a.b.c.d>                 |

|                         |   |
|-------------------------|---|
| <i>target_ip_mask</i>   | IP mask <a.b.c.d>   |
| <i>mac</i>              | MAC configuration commands                                  |
| <i>sender1_mac_any</i>  | Any   |
| <i>sender1_mac_host</i> | Host  |
| <i>sender1_mac</i>      | MAC address EEEE.EEEE.EEEE                                  |
| <i>sender1_net_mac</i>  | MAC address EEEE.EEEE.EEEE                                  |
| <i>sender1_mac_mask</i> | MAC mask EEEE.EEEE.EEEE                                     |
| <i>sender2_mac_any</i>  | Any   |
| <i>sender2_mac_host</i> | Host  |
| <i>sender2_mac</i>      | MAC address EEEE.EEEE.EEEE                                  |
| <i>sender2_net_mac</i>  | MAC address EEEE.EEEE.EEEE                                  |
| <i>sender2_mac_mask</i> | MAC mask EEEE.EEEE.EEEE                                     |
| <i>target_mac_any</i>   | (Optional) Any  |
| <i>target_mac_host</i>  | (Optional) Host   |
| <i>target_mac</i>       | (Optional) MAC address EEEE.EEEE.EEEE                       |
| <i>target_net_mac</i>   | (Optional) MAC address EEEE.EEEE.EEEE                       |
| <i>target_mac_mask</i>  | (Optional) MAC mask EEEE.EEEE.EEEE                          |
| <i>arp_log</i>          | (Optional) Log  |
| <i>capture</i>          | (Optional) Enable packet capture on this filter for session |
| <i>session</i>          | (Optional) Session ID <1-48> for this session               |
| <i>session-id</i>       | (Optional) Session ID <1-48> for this session               |

### Command Mode

- /exec/configure/arpacl

# no

```
{ [ <seqno> ] | no } { <addr> <wild> | <prefix> | host <hostaddr> }
```

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| <i>seqno</i>       | (Optional) Sequence number                           |
| <i>no</i>          | Negate a command or set its defaults                 |
| <i>addr</i>        | A.B.C.D Network address of object-group member       |
| <i>wild</i>        | A.B.C.D wildcard                                     |
| <i>prefix</i>      | A.B.C.D/nn Network prefix of the object-group member |
| <i>host</i>        | Host address of the object-group member              |
| <i>hostaddr</i>    | A.B.C.D Host address                                 |

## Command Mode

- /exec/configure/ipgroup

# no

{ [ <seqno> ] | no } { <addr> <wild> | <prefix> | host <hostaddr> }

## Syntax Description

---

**Syntax Description**

*seqno* (Optional) Sequence number

---

no Negate a command or set its defaults

---

host Host address of the object-group member

---

## Command Mode

- /exec/configure/ipv6group



# no

```
{ [ <seqno> ] | no } { <_port_op> <port0_num> | <_port_range> <port1_num> <port2_num> }
```

## Syntax Description

| Syntax Description |                                      |
|--------------------|--------------------------------------|
| <i>seqno</i>       | (Optional) Sequence number           |
| no                 | Negate a command or set its defaults |
| <i>_port_op</i>    | Port operator                        |
| <i>_port_range</i> | Port range                           |
| <i>port0_num</i>   | Port number                          |
| <i>port1_num</i>   | Port number                          |
| <i>port2_num</i>   | Port number                          |

## Command Mode

- /exec/configure/portgroup

## no

```
{ [ <seqno> ] | no } <permitdeny> { <src_any> | { <src_addr> <src_wild> } } { <dst_any> | { <dst_addr>
<dst_wild> } } [ <mac_proto> | <mac_proto_str> ] [ vlan <vlan> | cos <cos> ] + [ time-range
<time_range_name> ] [ capture session <session-id> ] { [ <macaction> <macactionid> ] } +
```

**Syntax Description****Syntax Description**

|                        |   |
|------------------------|---|
| <i>seqno</i>           | (Optional) Sequence number                                  |
| no                     | Negate a command or set its defaults                        |
| <i>permitdeny</i>      | Permit/deny   |
| <i>src_any</i>         | Any   |
| <i>src_addr</i>        | Source MAC address  |
| <i>src_wild</i>        | Source wildcard bits  |
| <i>dst_any</i>         | Any   |
| <i>dst_addr</i>        | Destination MAC address                                     |
| <i>dst_wild</i>        | Destination wildcard bits                                   |
| <i>mac_proto</i>       | (Optional) MAC protocol number                              |
| <i>mac_proto_str</i>   | (Optional) MAC protocol name                                |
| vlan                   | (Optional) VLAN number                                      |
| cos                    | (Optional) CoS value  |
| vlan                   | (Optional) VLAN number                                      |
| cos                    | (Optional) CoS value  |
| time-range             | (Optional) Specify a time range                             |
| <i>time_range_name</i> | (Optional) Time range name                                  |
| capture                | (Optional) Enable packet capture on this filter for session |
| session                | (Optional) Session ID <1-48> for this session               |
| <i>session-id</i>      | (Optional) Session ID <1-48> for this session               |
| <i>macaction</i>       | (Optional) MAC ACL Action                                   |
| <i>macactionid</i>     | (Optional) redirect: Ethernet1/1,port-channel1              |

**Command Mode**

- /exec/configure/macacl

# no

[no] { userprofile | trustedCert | CRLLookup | user-switch-bind | user-certdn-match | user-pubkey-match }

## Syntax Description

| Syntax Description | no                              | Negate a command or set its defaults |
|--------------------|---------------------------------|--------------------------------------|
| userprofile        | Delete the userprofile          |                                      |
| trustedCert        | Delete the trustedCert          |                                      |
| CRLLookup          | Delete the CRLLookup            |                                      |
| user-switch-bind   | Delete the user-switch-bind     |                                      |
| user-certdn-match  | Delete the certificate matching |                                      |
| user-pubkey-match  | Delete the pubkey matching      |                                      |

## Command Mode

- /exec/configure/ldap/search

# node

[no] node [ ip <ip-addr> | IPv6 <ip-addrv6> ]

## Syntax Description

### Syntax Description

|                |  |
|----------------|--|
| no             | (Optional) Negate a command or set its defaults                  |
| node           | Catena device-group node   |
| ip             | (Optional) Catena device-group node IPv4 address                 |
| <i>ip-addr</i> | (Optional) Catena device-group node IP4 prefix in format i.i.i.i |
| IPv6           | (Optional) Catena device-group node IPv6 address                 |

## Command Mode

- /exec/configure/catena-device-grp

# node

[no] node [ ip <ip-addr> | IPv6 <ip-addrv6> ]

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults  |
| node               | ITD node   |
| ip                 | (Optional) ITD node IPv4 address                 |
| <i>ip-addr</i>     | (Optional) ITD node IP4 prefix in format i.i.i.i |
| IPv6               | (Optional) ITD node IPv6 address                 |

## Command Mode

- /exec/configure/itd-device-group

# node

[no] node [ ip <ip-addr> | IPv6 <ip-addrv6> ]

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults  |
| node               | ITD node   |
| ip                 | (Optional) ITD node IPv4 address                 |
| <i>ip-addr</i>     | (Optional) ITD node IP4 prefix in format i.i.i.i |
| IPv6               | (Optional) ITD node IPv6 address                 |

## Command Mode

- /exec/configure/itd-session-device-group

# node

[no] node [ ip <ip-addr> | IPv6 <ip-addrv6> ]

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults  |
| node               | ITD node   |
| ip                 | (Optional) ITD node IPv4 address                 |
| <i>ip-addr</i>     | (Optional) ITD node IP4 prefix in format i.i.i.i |
| IPv6               | (Optional) ITD node IPv6 address                 |

## Command Mode

- /exec/configure/itd-device-group

# node

[no] node [ ip <ip-addr> | IPv6 <ip-addrv6> ]

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults  |
| node               | PLB node   |
| ip                 | (Optional) PLB node IPv4 address                 |
| <i>ip-addr</i>     | (Optional) PLB node IP4 prefix in format i.i.i.i |
| IPv6               | (Optional) PLB node IPv6 address                 |

## Command Mode

- /exec/configure/plb-session-device-group



# node

[no] node [ ip <ip-addr> | IPv6 <ip-addrv6> ]

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults  |
| node               | PLB node   |
| ip                 | (Optional) PLB node IPv4 address                 |
| <i>ip-addr</i>     | (Optional) PLB node IP4 prefix in format i.i.i.i |
| IPv6               | (Optional) PLB node IPv6 address                 |

## Command Mode

- /exec/configure/plb-device-group

# nsf await-redist-proto-convergence

{ [ no ] nsf await-redist-proto-convergence }

## Syntax Description

| Syntax Description             |   |  |
|--------------------------------|---|--|
| no                             | (Optional) Negate a command or set its defaults   |  |
| nsf                            | Non-stop forwarding   |  |
| await-redist-proto-convergence | Specify whether EIGRP should wait for other protocols to converge before advertising routes |  |

## Command Mode

- /exec/configure/router-eigrp/router-eigrp-vrf-common /exec/configure/router-eigrp/router-eigrp-af-common

## ntp access-group

[no] ntp access-group { peer | serve-only | serve | query-only } <acl-name>

### Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its default |
| ntp                | NTP configuration                              |
| access-group       | NTP access-group                               |
| peer               | access-group peer                              |
| serve              | access-group serve                             |
| serve-only         | access-group serve-only                        |
| query-only         | access-group query-only                        |
| <i>acl-name</i>    | Name of access list                            |

### Command Mode

- /exec/configure

# ntp access-group match-all

[no] ntp access-group match-all

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its default |
| ntp                | NTP configuration                              |
| access-group       | NTP access-group                               |
| match-all          | Scan ACLs present in all ntp access groups     |

## Command Mode

- /exec/configure

# ntp allow private

```
[no] ntp allow { private | control [ rate-limit <delay> ] }
```

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its default |
| ntp                | NTP configuration                              |
| allow              | Enable/Disable the packets                     |
| private            | Enable/Disable Private mode packets            |
| control            | Enable/Disable Control mode packets            |
| rate-limit         | (Optional) Rate-limit the control packets      |
| delay              | (Optional) Rate-limit delay (Default 3)        |

## Command Mode

- /exec/configure

# ntp authenticate

[no] ntp authenticate

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its default |
| ntp                | NTP configuration                              |
| authenticate       | Enable/Disable authentication                  |

## Command Mode

- /exec/configure

# ntp authentication-key md5

[no] ntp authentication-key <number> md5 <md5> [ 0 | 7 ]

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 | (Optional) Negate a command or set its default |  |
| ntp                | NTP configuration                              |  |
| authentication-key | NTP authentication key                         |  |
| <i>number</i>      | authentication key number (range 1-65535)      |  |
| md5                | use md5 authentication scheme                  |  |
| <i>md5</i>         | MD5 string                                     |  |
| 0                  | (Optional) clear text                          |  |
| 7                  | (Optional) encrypted                           |  |

## Command Mode

- /exec/configure

# ntp clear internal buffer

ntp clear internal buffer

## Syntax Description

---

**Syntax Description**

---

ntp NTP configuration

---

clear clear

---

internal internal

---

buffer debug message  
buffer

---

## Command Mode

- /exec



# ntp drop-aged-packet

[no] ntp drop-aged-packet

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ntp                | NTP Configuration                               |
| drop-aged-packet   | Enable or disable Riviera Timestamp Check.      |

## Command Mode

- /exec/configure

# ntp enable ntpd-logfile debug-level

[no] ntp enable ntpd-logfile debug-level <level>

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its default |
| ntp                | NTP configuration                              |
| enable             | Enable logging                                 |
| ntpd-logfile       | NTP daemon logs                                |
| debug-level        | debug level of logs                            |
| <i>level</i>       | debug level of logs                            |

## Command Mode

- /exec/configure

# ntp logging

[no] ntp logging

## Syntax Description

|                           |         |  |
|---------------------------|---------|--|
| <b>Syntax Description</b> | no      | (Optional) Negate a command or set its default |
|                           | ntp     | NTP configuration                              |
|                           | logging | Enable/Disable logging of NTPD Events          |

## Command Mode

- /exec/configure

# ntp master

[no] ntp master [ <stratum-no> ]

## Syntax Description

| Syntax Description |            |                                     |
|--------------------|------------|-------------------------------------|
| no                 | (Optional) | Negate a command or set its default |
| ntp                |            | NTP configuration                   |
| master             |            | Act as NTP master clock             |
| <i>stratum-no</i>  | (Optional) | Stratum number                      |

## Command Mode

- /exec/configure

# ntp passive

[no] ntp passive

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its default |
| ntp                | NTP configuration                              |
| passive            | NTP passive command                            |

## Command Mode

- /exec/configure

# ntp peer

```
[no] ntp peer <host0> [ prefer | key <keyid> | use-vrf { <vrf-name> | <vrf-known-name> } | minpoll <minpoll> | maxpoll <maxpoll> ] +
```

## Syntax Description

| Syntax Description    |  |
|-----------------------|--|
| no                    | (Optional) Negate a command or set its defaults                |
| ntp                   | NTP Configuration  |
| peer                  | NTP Peer address   |
| <i>host0</i>          | Hostname/IP address of the NTP Peer                            |
| prefer                | (Optional) Preferred Server                                    |
| key                   | (Optional) Keyid to be used while communicating to this server |
| <i>keyid</i>          | (Optional) Value of keyid 1-65535                              |
| use-vrf               | (Optional) Display per-VRF information                         |
| <i>vrf-name</i>       | (Optional) VRF name  |
| <i>vrf-known-name</i> | (Optional) Known VRF name                                      |
| minpoll               | (Optional) Minimum interval to poll a peer                     |
| <i>minpoll</i>        | (Optional) Poll interval in secs to a power of 2 [default 4]   |
| maxpoll               | (Optional) Maximum interval to poll a peer                     |
| <i>maxpoll</i>        | (Optional) Poll interval in secs to a power of 2 [default 6]   |

## Command Mode

- /exec/configure

# ntp rts-update

[no] ntp rts-update

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ntp                | NTP Configuration                               |
| rts-update         | Enable or disable RTS update to linecards.      |

## Command Mode

- /exec/configure

## ntp server

```
[no] ntp server <host0> [ prefer | key <keyid> | use-vrf { <vrf-name> | <vrf-known-name> } | minpoll <minpoll> | maxpoll <maxpoll> ] +
```

### Syntax Description

| Syntax Description    |            |   |
|-----------------------|------------|---|
| no                    | (Optional) | Negate a command or set its defaults                |
| ntp                   |            | NTP Configuration                                   |
| server                |            | NTP server address                                  |
| <i>host0</i>          |            | Hostname/IP address of the NTP Server               |
| prefer                | (Optional) | Preferred Server                                    |
| key                   | (Optional) | Keyid to be used while communicating to this server |
| <i>keyid</i>          | (Optional) | Value of keyid 1-65535                              |
| use-vrf               | (Optional) | Display per-VRF information                         |
| <i>vrf-name</i>       | (Optional) | VRF name  |
| <i>vrf-known-name</i> | (Optional) | Known VRF name                                      |
| minpoll               | (Optional) | Minimum interval to poll a server                   |
| <i>minpoll</i>        | (Optional) | Poll interval in secs to a power of 2 [default 4]   |
| maxpoll               | (Optional) | Maximum interval to poll a server                   |
| <i>maxpoll</i>        | (Optional) | Poll interval in secs to a power of 2 [default 6]   |

### Command Mode

- /exec/configure



# ntp source-interface

[no] ntp source-interface <interface>

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its default |
| ntp                | NTP configuration                              |
| source-interface   | Source interface sending NTP packets           |
| <i>interface</i>   | Source interface                               |

## Command Mode

- /exec/configure

# ntp source

[no] ntp source <ip-addr>

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its default |
| ntp                | NTP Configuration                              |
| source             | Source of NTP packets                          |
| <i>ip-addr</i>     | IPv4/IPv6 address                              |

## Command Mode

- /exec/configure

# ntp sync-retry

ntp sync-retry

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| ntp                | NTP configuration                             |
| sync-retry         | Retry synchronization with configured servers |

## Command Mode

- /exec

# ntp trusted-key

[no] ntp trusted-key <number>

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its default |
| ntp                | NTP configuration                              |
| trusted-key        | NTP trusted-key                                |
| <i>number</i>      | trusted-key number                             |

## Command Mode

- /exec/configure

# nv overlay evpn

[no] nv overlay evpn

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| nv                 | Command to enable/disable features              |
| overlay            | Command to enable/disable features              |
| evpn               | Enable/Disable Ethernet VPN (EVPN)              |

## Command Mode

- /exec/configure

# nve interface remap-replication-servers

nve interface <nve-if> remap-replication-servers

## Syntax Description

### Syntax Description

|                           |                                   |
|---------------------------|-----------------------------------|
| nve                       | Configure NVE information         |
| interface                 | Interface                         |
| <i>nve-if</i>             | NVE interface                     |
| remap-replication-servers | Remap Replication servers to VNIs |

## Command Mode

- /exec

## nve interface replication-server up

```
nve interface <nve-if> replication-server <rep-addr> { up | down }
```

### Syntax Description

| Syntax Description |                    |                                |
|--------------------|--------------------|--------------------------------|
|                    | nve                | Configure NVE information      |
|                    | interface          | Interface                      |
|                    | <i>nve-if</i>      | NVE interface                  |
|                    | replication-server | Configure a replication server |
|                    | <i>rep-addr</i>    | Replication Server IP Address  |
|                    | up                 | mark replication-server up     |
|                    | down               | mark replication-server down   |

### Command Mode

- /exec

# nve oam mode draft-pang

[no] nve oam mode draft-pang

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| nve                | VxLAN functionality                             |
| oam                | VxLAN OAM functionality                         |
| mode               | Choose operation mode for OAM                   |
| draft-pang         | OAM implementation as per Draft Pang            |

## Command Mode

- /exec/configure



# nxapi certificate

```
{ nxapi certificate { { httpskey { keyfile <uri0> | <line> } } | { httpsCRT { certfile <uri1> | <line1> } } | { enable
} } }
```

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| nxapi              | Configure nxapi                                |
| certificate        | Https certificate configuration                |
| httpskey           | Https private key                              |
| httpsCRT           | Https certificate                              |
| keyfile            | Https key file                                 |
| certfile           | Https certificate file                         |
| enable             | Enable the current certificate                 |
| <i>uri0</i>        | File containing https private key for the user |
| <i>line</i>        | nxapi https private key                        |
| <i>uri1</i>        | File containing https certificate              |
| <i>line1</i>       | nxapi https certificate                        |

## Command Mode

- /exec/configure

# nxapi flow

```
{ [ no ] nxapi flow }
```

## Syntax Description

---

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | no (Optional) Negate a command or set its defaults |
|---------------------------|--|

---

|  |                       |
|--|-----------------------|
|  | nxapi Configure nxapi |
|--|-----------------------|

---

|  |  |
|--|--|
|  | flow allow frontend to access /sys/flow/ |
|--|--|

---

## Command Mode

- /exec/configure

# nxapi http port

{ nxapi { http | https } port <s0> } | { no nxapi { http | https } } | { no nxapi { http | https } port <s0> }

## Syntax Description

---

**Syntax Description**

**no** Negate a command or set its defaults

---

**nxapi** Configure nxapi

---

**s0** Port number. Please do not use well-known protocol ports

---

**http** Http configuration

---

**https** Hhttps configuration

---

**port** Port number

---

## Command Mode

- /exec/configure

## nxapi use-vrf management default

```
{ nxapi use-vrf { management | default | <vrf_name> } } | { no nxapi use-vrf { management | default | <vrf_name> } }
```

### Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults   |
| nxapi              |  | Configure nxapi                        |
| use-vrf            |  | vrf to be used for nxapi communication |
| management         |  | management vrf                         |
| default            |  | default vrf                            |
| <i>vrf_name</i>    |  | name of the vrf                        |

### Command Mode

- /exec/configure

# nxsdk enable app

[no] nxsdk enable app <app-index>

## Syntax Description

|                           |                  |   |
|---------------------------|------------------|---|
| <b>Syntax Description</b> | no               | (Optional) Negate a command or set its defaults |
|                           | nxsdk            | NXOS SDK  |
|                           | enable           | Command to enable/disable nxsdk application     |
|                           | app              | Enable/disable application                      |
|                           | <i>app-index</i> | Application index                               |

## Command Mode

- /exec

## nxsdk service-name

```
{ [ no ] nxsdk service-name <service-name> }
```

### Syntax Description

---

**Syntax Description**

---

nxsdk      NXOS SDK

---

service-name    Complete path and name of file to execute

---

*service-name*    Service name

---

### Command Mode

- /exec/configure



## 0 Commands

---

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- [overload rip](#), on page 3045
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# oam-channel

{ oam-channel <val> } | { no oam-channel }

## Syntax Description

| Syntax Description | oam-channel | oam-channel used |
|--------------------|-------------|------------------|
| <i>val</i>         | 2 - nvo3    | tissa            |

## Command Mode

- /exec/configure/configngoamprofile

# obfl logging uuid msg

obfl logging uuid <uuid> <log-file> msg <log\_str>

## Syntax Description

|                           |                 |                                  |
|---------------------------|-----------------|----------------------------------|
| <b>Syntax Description</b> | obfl            | Perform the OBFL operation       |
|                           | logging         | Perform the logging              |
|                           | uuid            | UUID of the process              |
|                           | <i>uuid</i>     | UUID of the process              |
|                           | <i>log-file</i> | Log File of your process         |
|                           | msg             | Message to be Logged in the file |
|                           | <i>log_str</i>  | Type the message to be logged    |

## Command Mode

- /exec

# object-group ip address

[no] object-group ip address <name>

## Syntax Description

|                           |              |   |
|---------------------------|--------------|---|
| <b>Syntax Description</b> | no           | (Optional) Negate a command or set its defaults |
|                           | object-group | Configure ACL object groups                     |
|                           | ip           | IP Object groups                                |
|                           | address      | Address object group                            |
|                           | <i>name</i>  | object-group name                               |

## Command Mode

- /exec/configure

# object-group ip port

[no] object-group ip port <name>

## Syntax Description

---

### Syntax Description

---

|              |  |
|--------------|--|
| no           | (Optional) Negate a command or set its defaults                  |
| object-group | Configure ACL object groups                                      |
| ip           | IP Object groups   |
| port         | IP port object group (can be used in IPv4 and IPv6 access-lists) |
| <i>name</i>  | object-group name  |

---

## Command Mode

- /exec/configure

# object-group ipv6 address

[no] object-group ipv6 address <name>

## Syntax Description

|                           |              |   |
|---------------------------|--------------|---|
| <b>Syntax Description</b> | no           | (Optional) Negate a command or set its defaults |
|                           | object-group | Configure ACL object groups                     |
|                           | ipv6         | IPv6 Object groups                              |
|                           | address      | Address object group                            |
|                           | <i>name</i>  | object-group name                               |

## Command Mode

- /exec/configure

# of-port interface

[no] of-port interface <ifname>

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <b>no</b> (Optional) Negate a command or set its defaults |
|                           | <b>of-port</b> Add interfaces to openflow switch          |
|                           | <b>interface</b> Interface                                |
|                           | <i>ifname</i> interface name                              |

## Command Mode

- /exec/configure/openflow/switch

## offset-list route in

[no] offset-list { { route-map <map> } | { prefix-list <list> } } { in | out } <offset> <interface>

### Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| offset-list        | Add or subtract offset from EIGRP metrics       |
| route-map          | Use a route-map for offset-list selection       |
| <i>map</i>         | Route-map name                                  |
| prefix-list        | Use a prefix-list for offset-list selection     |
| <i>list</i>        | Reference to prefix-list name                   |
| in                 | Perform offset on incoming updates              |
| out                | Perform offset on outgoing updates              |
| <i>offset</i>      | Offset  |
| <i>interface</i>   | Interface name                                  |

### Command Mode

- /exec/configure/router-eigrp/router-eigrp-vrf-common /exec/configure/router-eigrp/router-eigrp-af-common

# onep

[no] onep

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | no (Optional) Negate a command or set its defaults |
|                           | onep Enable/Disable One Platform                   |

## Command Mode

- /exec/configure



# onep applications

[no] onep applications <config-domain>

## Syntax Description

| Syntax Description   |  |
|----------------------|--|
| no                   | (Optional) Negate a command or set its defaults  |
| onep                 | One Platform   |
| applications         | One platform applications  |
| <i>config-domain</i> | Virtual service name or tag used by remote onep applications to retrieve its configuration |

## Command Mode

- /exec/configure

# onep install

onep install <xsd-location> <config-domain>

## Syntax Description

---

### Syntax Description

---

onep            One Platform

---

install        install a CLI definition

---

*xsd-location*   the xsd file containing the onep application CLI definition

---

*config-domain* virtual service name or tag used by remote onep applications to retrieve its configuration

---

## Command Mode

- /exec

# onep stop

```
onep stop { session { all | <onep-session-id> } }
```

## Syntax Description

| Syntax Description     |  |                        |
|------------------------|--|------------------------|
| onep                   |  | One Platform           |
| stop                   |  | Stop specific activity |
| session                |  | One Platform session   |
| all                    |  | All sessions           |
| <i>onep-session-id</i> |  | Specific session name  |

## Command Mode

- /exec

# onep uninstall

onep uninstall <app-name> <app-version> <config-domain> [ force ]

## Syntax Description

### Syntax Description

|                      |  |
|----------------------|--|
| onep                 | One Platform   |
| uninstall            | uninstall a CLI definition   |
| <i>app-name</i>      | application name   |
| <i>app-version</i>   | application version  |
| <i>config-domain</i> | virtual service name or tag used by remote onep applications to retrieve its configuration |
| force                | (Optional) force uninstallation  |

## Command Mode

- /exec

# open-fsm

[no] open-fsm

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults       |
| open-fsm           | Enable session open FSM for establishing BGP sessions |

## Command Mode

- /exec/configure/router-bgp

# openflow

[no] openflow

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| openflow           | OpenFlow configuration                          |

## Command Mode

- /exec/configure

# operation-packet-priority normal

{ { no | default } operation-packet-priority | operation-packet-priority { normal | high } }

## Syntax Description

### Syntax Description

|                           |                                 |
|---------------------------|---------------------------------|
| no                        |                                 |
| default                   | Set a command to its defaults   |
| operation-packet-priority | Set operation packet properties |
| high                      | Priority high                   |
| normal                    | Priority normal                 |

## Command Mode

- /exec/configure/ip-sla/jitter

# option exporter-stats timeout

{ [ no ] option exporter-stats timeout <time> | no option exporter-stats timeout }

## Syntax Description

| Syntax Description | option         | Version 9 Option Templates and Data |
|--------------------|----------------|-------------------------------------|
|                    | exporter-stats | Exporter Statistics Option          |
|                    | timeout        | Option resend time                  |
|                    | <i>time</i>    | Time in seconds                     |

## Command Mode

- /exec/configure/nfm-exporter-v9



# option interface-table timeout

{ [ no ] option interface-table timeout <time> | no option interface-table timeout }

## Syntax Description

|                           |                 |                                     |
|---------------------------|-----------------|-------------------------------------|
| <b>Syntax Description</b> | option          | Version 9 Option Templates and Data |
|                           | interface-table | Interface Table Option              |
|                           | timeout         | Option resend time                  |
|                           | <i>time</i>     | Time in seconds                     |

## Command Mode

- /exec/configure/nfm-exporter-v9

# option sampler-table timeout

{ [ no ] option sampler-table timeout <time> | no option sampler-table timeout }

## Syntax Description

| Syntax Description |  |                                     |
|--------------------|--|-------------------------------------|
| option             |  | Version 9 Option Templates and Data |
| sampler-table      |  | Export Sampler Information          |
| timeout            |  | Option resend time                  |
| <i>time</i>        |  | Time in seconds                     |

## Command Mode

- /exec/configure/nfm-exporter-v9

# orib event-history

```
[no] orib event-history { cli | ipc | uroute | mroute | mroute_only | uhw | mhw | ha | internal } { size {
<size_in_text> | <size_in_kbytes> } }
```

## Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| orib                  | Display ORIB information                        |  |
| event-history         | ORIB event logs                                 |  |
| cli                   | ORIB cli logs                                   |  |
| ipc                   | ORIB ipc logs                                   |  |
| uroute                | ORIB unicast route logs                         |  |
| mroute                | ORIB multicast route logs                       |  |
| mroute_only           | ORIB multicast route logs without mhw           |  |
| uhw                   | ORIB unicast platform logs                      |  |
| mhw                   | ORIB multicast platform logs                    |  |
| ha                    | ORIB ha logs                                    |  |
| internal              | ORIB internal logs                              |  |
| size                  | Configure size                                  |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_kbytes</i> | Size in kbytes                                  |  |

## Command Mode

- /exec/configure

## orib orib\_api\_init

```
{ orib orib_api_init <client-name> } | { orib orib_api_close } | { orib orib_add_route <client-name> <mac>
[ <nh> | <nh6> ] <if-name> } | { orib orib_delete_route <client-name> <mac> [ <nh> | <nh6> ] <if-name> }
```

### Syntax Description

| Syntax Description |   |
|--------------------|---|
| orib               | Use ORIB API routines from OTV process                  |
| orib_api_init      | Call orib_api_init() from the OTV process               |
| orib_api_close     | Call orib_api_close() from the OTV process              |
| orib_add_route     | Call orib_add_route() from OTV process                  |
| orib_delete_route  | Call orib_delete_route() from OTV process               |
| <i>client-name</i> | Client name registered to ORIB process                  |
| <i>mac</i>         | VLAN-ID/MAC Address tuple in vvvv-aaaa.bbbb.cccc format |
| <i>nh</i>          | (Optional) Next-hop IPv4 address                        |
| <i>if-name</i>     | Next-hop interface (iod)                                |

### Command Mode

- /exec

## ospfv3 authentication

```
ospfv3 authentication { disable | ipsec spi <spi_id> { md5 <akey> | sha1 <akey> } } | no ospfv3 authentication
{ disable | ipsec spi <spi_id> }
```

### Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| ospfv3             |  | OSPFv3 configuration commands        |
| authentication     |  | Enable Authentication                |
| disable            |  | Disable Authentication               |
| ipsec              |  | IPSec                                |
| spi                |  | Security Parameter Index             |
| <i>spi_id</i>      |  | SPI Value                            |
| md5                |  | Use the MD5 algorithm                |
| <i>akey</i>        |  | Authentication Key                   |
| sha1               |  | Use the SHA1 algorithm               |
| <i>akey</i>        |  | Authentication Key                   |

### Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mpls-tunnel /exec/configure/if-mgmt-config

# ospfv3 bfd

[no] ospfv3 bfd [ disable ]

## Syntax Description

|                           |         |   |
|---------------------------|---------|---|
| <b>Syntax Description</b> | no      | (Optional) Negate a command or set its defaults |
|                           | ospfv3  | OSPFv3 configuration commands                   |
|                           | bfd     | Enable BFD on this interface                    |
|                           | disable | (Optional) Disable BFD on this interface        |

## Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mgmt-config

# ospfv3 cost

```
{ ospfv3 cost <cost> } | { no ospfv3 cost [ <cost> ] }
```

## Syntax Description

|                           |               |                                      |
|---------------------------|---------------|--------------------------------------|
| <b>Syntax Description</b> | <b>no</b>     | Negate a command or set its defaults |
|                           | <b>ospfv3</b> | OSPFv3 configuration commands        |
|                           | <b>cost</b>   | Cost associated with interface       |
|                           | <b>cost</b>   | Cost value                           |

## Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mpls-tunnel /exec/configure/if-mgmt-config

## ospfv3 dead-interval

```
{ ospfv3 dead-interval <interval> } | { no ospfv3 dead-interval [ <interval> ] }
```

### Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| ospfv3             |  | OSPFv3 configuration commands        |
| dead-interval      |  | Dead interval                        |
| <i>interval</i>    |  | (seconds)                            |

### Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mpls-tunnel /exec/configure/if-mgmt-config



# ospfv3 event-history detail

[no] ospfv3 event-history detail

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| ospfv3             |  | Debugging functions                  |
| event-history      | log debug events into event history buffer |                                      |
| detail             |  | Detailed event history buffer        |

## Command Mode

- /exec/configure/router-ospf3

# ospfv3 flood-bw-percentage

[no] ospfv3 flood-bw-percentage <percentage>

## Syntax Description

| Syntax Description  |            |   |
|---------------------|------------|---|
| no                  | (Optional) | Negate a command or set its defaults      |
| ospfv3              |            | OSPFv3 configuration commands             |
| flood-bw-percentage |            | Percentage of bandwidth used for flooding |
| <i>percentage</i>   |            | Negate a command or set its defaults      |

## Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mpls-tunnel /exec/configure/if-mgmt-config

# ospfv3 hello-interval

{ ospfv3 hello-interval <interval> } | { no ospfv3 hello-interval [ <interval> ] }

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| ospfv3             |  | OSPFv3 configuration commands        |
| hello-interval     |  | Hello interval                       |
| <i>interval</i>    |  | (seconds)                            |

## Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mpls-tunnel /exec/configure/if-mgmt-config

## ospfv3 instance

```
{ ospfv3 instance <instance-id> } | { no ospfv3 instance [ <instance-id> ] }
```

### Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| ospfv3             |  | OSPFv3 configuration commands        |
| instance           |  | Instance identifier                  |
| <i>instance-id</i> |  | Instance identifier value            |

### Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mpls-tunnel /exec/configure/if-mgmt-config

# ospfv3 mtu-ignore

[no] ospfv3 mtu-ignore

## Syntax Description

|                           |            |   |
|---------------------------|------------|---|
| <b>Syntax Description</b> | no         | (Optional) Negate a command or set its defaults |
|                           | ospfv3     | OSPFv3 configuration commands                   |
|                           | mtu-ignore | Disable OSPF MTU mismatch detection             |

## Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mpls-tunnel /exec/configure/if-mgmt-config

# ospfv3 network broadcast

```
{ ospfv3 network { broadcast | point-to-point } } | { no ospfv3 network [ { broadcast | point-to-point } ] }
```

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults        |
| ospfv3             |  | OSPFv3 configuration commands               |
| network            |  | Network type                                |
| broadcast          |  | Specify OSPF broadcast multi-access network |
| point-to-point     |  | Specify OSPF point-to-point network         |

## Command Mode

- /exec/configure/if-broadcast /exec/configure/if-p2p /exec/configure/if-mgmt-config

# ospfv3 network point-to-point

{ ospfv3 network point-to-point } | { no ospfv3 network [ point-to-point ] }

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| ospfv3             |  | OSPFv3 configuration commands        |
| network            |  | Network type                         |
| point-to-point     |  | Specify OSPF point-to-point network  |

## Command Mode

- /exec/configure/if-loopback

# ospfv3 passive-interface

[ default | no ] ospfv3 passive-interface

## Syntax Description

| Syntax Description |            |   |
|--------------------|------------|---|
| default            | (Optional) | Undo a command                            |
| no                 | (Optional) | Negate a command or set its defaults      |
| ospfv3             |            | OSPFv3 configuration commands             |
| passive-interface  |            | Suppress routing updates on the interface |

## Command Mode

- /exec/configure/if-broadcast /exec/configure/if-p2p /exec/configure/if-mgmt-config



# ospfv3 priority

```
{ ospfv3 priority <prio> } | { no ospfv3 priority [ <prio> ] }
```

## Syntax Description

|                           |                 |                                      |
|---------------------------|-----------------|--------------------------------------|
| <b>Syntax Description</b> | <i>no</i>       | Negate a command or set its defaults |
|                           | <i>ospfv3</i>   | OSPFv3 configuration commands        |
|                           | <i>priority</i> | Router priority                      |
|                           | <i>prio</i>     | Router priority                      |

## Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mpls-tunnel /exec/configure/if-mgmt-config

# ospfv3 retransmit-interval

{ ospfv3 retransmit-interval <interval> } | { no ospfv3 retransmit-interval [ <interval> ] }

## Syntax Description

| Syntax Description  |  |                                      |
|---------------------|--|--------------------------------------|
| no                  |  | Negate a command or set its defaults |
| ospfv3              |  | OSPFv3 configuration commands        |
| retransmit-interval |  | Packet retransmission interval       |
| <i>interval</i>     |  | (seconds)                            |

## Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mpls-tunnel /exec/configure/if-mgmt-config

# ospfv3 shutdown

[no] ospfv3 shutdown

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ospfv3             | OSPFv3 configuration commands                   |
| shutdown           | Shutdown ospf on this interface                 |

## Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mgmt-config

## ospfv3 transmit-delay

```
{ ospfv3 transmit-delay <delay> } | { no ospfv3 transmit-delay [ <delay> ] }
```

### Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| ospfv3             |  | OSPFv3 configuration commands        |
| transmit-delay     |  | Packet transmission delay            |
| <i>delay</i>       |  | (seconds)                            |

### Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mpls-tunnel /exec/configure/if-mgmt-config

# overbudgetshut

```
overbudgetshut [ module <module> ]
```

## Syntax Description

---

**Syntax Description**

---

overbudgetshut Shut down the specified LCs due to power over budget

---

module (Optional) Module Force Shut down

---

*module* (Optional) please enter the module number

---

## Command Mode

- /exec

# overbudgetsyslog

overbudgetsyslog

## Syntax Description

---

### Syntax Description

---

overbudgetsyslog Print Syslog to indicate power over budget

---

## Command Mode

- /exec

# overlay-encapsulation

[no] overlay-encapsulation <encap-type> [ tunnel-control-frames [ <layer2-prot> ] ]

## Syntax Description

| Syntax Description    |            |                                      |
|-----------------------|------------|--------------------------------------|
| no                    | (Optional) | Negate a command or set its defaults |
| overlay-encapsulation | NVE        | Overlay Encapsulation                |
| <i>encap-type</i>     |            | Configure encapsulation type         |
| tunnel-control-frames | (Optional) | tunnel protocol                      |
| <i>layer2-prot</i>    | (Optional) | configure specific protocol          |

## Command Mode

- /exec/configure/if-nve

# overlay-encapsulation

[no] overlay-encapsulation <encap-type> [ tunnel-control-frames ]

## Syntax Description

| Syntax Description    |            |                                      |
|-----------------------|------------|--------------------------------------|
| no                    | (Optional) | Negate a command or set its defaults |
| overlay-encapsulation | NVE        | Overlay Encapsulation                |
| <i>encap-type</i>     |            | Configure encapsulation type         |
| tunnel-control-frames | (Optional) | tunnel protocol                      |

## Command Mode

- /exec/configure/if-nve



# overload rip

overload rip

## Syntax Description

---

### Syntax Description

---

overload

---

rip      Forced RIP  
          overload

---

## Command Mode

- /exec

# owner

```
{ { no | default } owner | owner <text> }
```

## Syntax Description

### Syntax Description

---

no

---

default Set a command to its defaults

---

owner Owner of Entry

---

*text* Owner String

---

## Command Mode

- /exec/configure/ip-sla/udp /exec/configure/ip-sla/jitter /exec/configure/ip-sla/tcp  
/exec/configure/ip-sla/icmpEcho /exec/configure/ip-sla/dns /exec/configure/ip-sla/fabricPathEcho  
/exec/configure/ip-sla/http



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# packet

{ packet <hex-string> } | { no packet }

## Syntax Description

---

### Syntax Description

no           Negate a command or set its defaults

packet       Provide flow details starting with ethernet header in hex-string format: 0A1B  
              ..

*hex-string* Specify flow and payload in hex string format: 0A1B..

---

## Command Mode

- /exec/configure/configngoamprofileflow

# param-list param-list

[no] param-list <plistname> [ cross-check ] | param-list <plistname>

## Syntax Description

---

**Syntax Description**

---

no (Optional) Negate a command or set its defaults

---

param-list Configure a parameter list

---

*plistname* Enter the name of the parameter list

---

cross-check (Optional) Explicitly search for referencing config profile

---

## Command Mode

- /exec/configure

# parity

[no] parity { even | none | odd }

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | no (Optional) Negate a command or set its defaults |
|                           | parity Set terminal parity                         |
|                           | even Even parity                                   |
|                           | none No parity                                     |
|                           | odd Odd parity                                     |

## Command Mode

- /exec/configure/com1

# parity

[no] parity { even | none | odd }

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | no (Optional) Negate a command or set its defaults |
|                           | parity Set terminal parity                         |
|                           | even Even parity                                   |
|                           | none No parity                                     |
|                           | odd Odd parity                                     |

## Command Mode

- /exec/configure/console

# passive-interface default

[no] passive-interface default

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| passive-interface  | Suppress routing updates on the interface       |
| default            | interfaces passive by default                   |

## Command Mode

- /exec/configure/router-ospf /exec/configure/router-ospf/vrf

# passive-interface default

[no] passive-interface default <level>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| passive-interface  | Suppress IS-IS PDU                              |
| default            | Undo a command                                  |
| <i>level</i>       | IS-IS level                                     |

## Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

# passive-interface default

[no] passive-interface default

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| passive-interface  | Suppress routing updates on the interface       |
| default            | interfaces passive by default                   |

## Command Mode

- /exec/configure/router-ospf3 /exec/configure/router-ospf3/vrf

# passive-interface default

[no] passive-interface default

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| passive-interface  | Suppress routing updates on the interface       |
| default            | interfaces passive by default                   |

## Command Mode

- /exec/configure/router-eigrp/router-eigrp-vrf-common /exec/configure/router-eigrp/router-eigrp-af-common



# password

password <password-string> | { no | default } password [ <password-string> ]

## Syntax Description

| Syntax Description     |  |                                      |
|------------------------|--|--------------------------------------|
| no                     |  | Negate a command or set its defaults |
| default                |  | Inherit values from a peer template  |
| password               |  | Configure a password for neighbor    |
| <i>password-string</i> |  | Neighbor password                    |

## Command Mode

- /exec/configure/router-bgp/router-bgp-template-neighbor
- /exec/configure/router-bgp/router-bgp-neighbor-stmp /exec/configure/router-bgp/router-bgp-neighbor
- /exec/configure/router-bgp/router-bgp-vrf-neighbor /exec/configure/router-bgp/router-bgp-prefixneighbor
- /exec/configure/router-bgp/router-bgp-vrf-prefixneighbor

# password

```
password [ vrf { <vrf-name> | <vrf-known-name> } ] { required [ req-for <req-pfx-list> ] | { fallback | option
<seq-num> opt-for <opt-pfx-list> } { key-chain <name> } } | no password [ vrf { <vrf-name> |
<vrf-known-name> } ] { required | fallback | option <seq-num> }
```

## Syntax Description

### Syntax Description

|                       |  |
|-----------------------|--|
| no                    | Negate a command or set its defaults                   |
| password              | Configure LDP password                                 |
| vrf                   | (Optional) VRF Routing/Forwarding instance information |
| <i>vrf-name</i>       | (Optional) VPN Routing/Forwarding instance name        |
| <i>vrf-known-name</i> | (Optional) Known VRF name                              |
| required              | Password is required for the peer                      |
| req-for               | (Optional) Prefix list specifying control on LDP peers |
| <i>req-pfx-list</i>   | (Optional) Prefix list for LDP peers                   |
| fallback              | Specifies a fallback password will follow              |
| option                | LDP password option                                    |
| <i>seq-num</i>        | Sequence number of the LDP password option             |
| opt-for               | Prefix list specifying control on LDP peers            |
| <i>opt-pfx-list</i>   | Prefix list for LDP peers                              |
| key-chain             | Specifies a key-chain name will follow                 |
| <i>name</i>           | Key-chain name   |

## Command Mode

- /exec/configure/ldp

# password

{ [ no ] password <passwd> }

## Syntax Description

---

**Syntax Description**

---

password password

---

*passwd* password

---

## Command Mode

- /exec/configure/dot1x-cred

# password prompt username

[no] password prompt username

## Syntax Description

---

**Syntax Description**

---

no (Optional) Negate a command or set its defaults

---

password Password for the user

---

prompt Enable prompt for password

---

username Enable prompt for password on username command

---

## Command Mode

- /exec/configure

# password secure-mode

[no] password secure-mode

## Syntax Description

|                           |             |   |
|---------------------------|-------------|---|
| <b>Syntax Description</b> | no          | (Optional) Negate a command or set its defaults |
|                           | password    | Password for the user                           |
|                           | secure-mode | Enable secure mode for changing password        |

## Command Mode

- /exec/configure

# password strength-check

[no] password strength-check

## Syntax Description

|                           |                |   |
|---------------------------|----------------|---|
| <b>Syntax Description</b> | no             | (Optional) Negate a command or set its defaults |
|                           | password       | Password for the user                           |
|                           | strength-check | Strength check of password                      |

## Command Mode

- /exec/configure

# path-option dynamic explicit identifier

```
[no] path-option [ protect ] <pref> | path-option <pref> dynamic [ attributes <attr-name> | { bandwidth <kbps> | lockdown } + ] | path-option [ protect ] <pref> explicit { identifier <id-num> | name <name> } [ { attributes <attr-name> [ verbatim ] | { bandwidth <kbps> | lockdown | verbatim } + } ]
```

## Syntax Description

### Syntax Description

|                          |  |
|--------------------------|--|
| <code>no</code>          | Negate a command or set its defaults                       |
| <code>path-option</code> | a primary or fallback path setup option                    |
| <code>protect</code>     | (Optional) a path protection setup option                  |
| <code>pref</code>        | preference for this path option                            |
| <code>dynamic</code>     | setup based on dynamically calculated path                 |
| <code>explicit</code>    | setup based on preconfigured path                          |
| <code>identifier</code>  | Specify an IP explicit path by number                      |
| <code>id-num</code>      | Number of ip explicit path                                 |
| <code>name</code>        | Specify an IP explicit path by name                        |
| <code>name</code>        | Name of ip explicit path                                   |
| <code>attributes</code>  | (Optional) Specify an LSP attribute list                   |
| <code>attr-name</code>   | (Optional) Name of LSP attribute list                      |
| <code>verbatim</code>    | (Optional) send out path as is, with no checking           |
| <code>bandwidth</code>   | (Optional) override the bandwidth configured on the tunnel |
| <code>kbps</code>        | (Optional) bandwidth requirement in kbps                   |
| <code>lockdown</code>    | (Optional) not a candidate for reoptimization              |
| <code>kbps</code>        | (Optional) bandwidth requirement in kbps                   |
| <code>lockdown</code>    | (Optional) not a candidate for reoptimization              |

## Command Mode

- /exec/configure/if-te /exec/configure/tunnel-te/cbts-member

# path-selection metric igp

path-selection metric { igp | te } | no path-selection metric

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| path-selection     |  | Path Selection Configuration         |
| metric             |  | Metric Type Configuration            |
| igp                |  | Use IGP metric                       |
| te                 |  | Use TE metric (*Default)             |

## Command Mode

- /exec/configure/te



# path-selection metric igp

[no] path-selection metric | path-selection metric { igp | te }

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| path-selection     |  | Path Selection Configuration         |
| metric             |  | Metric type for path calculation     |
| igp                |  | Use IGP Metric                       |
| te                 |  | Use TE Metric                        |

## Command Mode

- /exec/configure/if-te /exec/configure/tunnel-te/cbts-member

# path-selection overload allow

[no] path-selection overload allow | path-selection overload allow { head [ middle ] [ tail ] | middle [ tail ] | tail }

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults               |
| path-selection     |  | Path Selection Configuration                       |
| overload           |  | Overload Node Configuration                        |
| allow              |  | Allow overloaded nodes in CSPFs                    |
| head               |  | Allow overloaded head node in TE CSPF              |
| middle             |  | (Optional) Allow overloaded middle node in TE CSPF |
| tail               |  | (Optional) Allow overloaded tail node in TE CSPF   |

## Command Mode

- /exec/configure/te

# path

path <dn> [ depth { 0 | 1 | unbounded } ] [ filter-condition <filter> ] | no path <dn>

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 |            | Negate a command or set its defaults |
| path               |            | Create a sensor path                 |
| depth              | (Optional) | Specify a retrieval depth            |
| filter-condition   | (Optional) | Specify a filter condition           |
| <i>dn</i>          |            | Distinguished Name                   |
| 0                  | (Optional) | Retrieval depth (0)                  |
| 1                  | (Optional) | Retrieval depth (1)                  |
| unbounded          | (Optional) | Retrieve entire tree                 |
| <i>filter</i>      | (Optional) | Filter Condition                     |

## Command Mode

- /exec/configure/telemetry/sensor-group

# path next-hop out-label-stack

```
{ no path <path-num> | path <path-num> next-hop <next-hop> out-label-stack { <static-outlabel> + |
implicit-null } }
```

## Syntax Description

| Syntax Description     |  |  |
|------------------------|--|--|
| no                     |  | Negate a command or set its defaults   |
| path                   |  | Configure an outgoing path for the LSP |
| <i>path-num</i>        |  | Path identifier                        |
| next-hop               |  | Nexthop                                |
| <i>next-hop</i>        |  | Destination IPv4 next hop              |
| out-label-stack        |  | Series of output labels                |
| <i>static-outlabel</i> |  | Label Value                            |
| implicit-null          |  | IETF MPLS implicit null label (3)      |

## Command Mode

- /exec/configure/mpls\_static/ipv4/lsp/inlabel/forw

## pathtrace nve

```
pathtrace nve { { { ip { <numeric10> | unknown } } [ vrf { <vrf-name> | <vrf-known-name> } ] { <dot1qid1>
} } } | mac <dmac> <dot1qid> <intfid> } [ profile <pid> ] [ payload { [ mac-addr <dstmac> <smac> ] [ dot1q
<dot1q-id> ] [ ip <dstip> <srcip> | ipv6 <dstip6> <srcip6> ] [ port <sport> <dport> ] [ proto <proto-id> ]
[ src-intf <src_if> ] } payload-end ] [ copy-to <copy-to-ip> [ ext-id <ext_id> ] ] [
```

### Syntax Description

#### Syntax Description

|                  |  |
|------------------|--|
| pathtrace        | Test   |
| nve              | network virtualization edge  |
| <i>numeric10</i> | Peer vtep ip address   |
| unknown          | Peer vtep ip is unknown, will be derived from payload                          |
| <i>intfid</i>    | Name of the interface for ngoam pathtrace on which dot1q is configured         |
| payload          | (Optional) Enter customer payload  |
| mac-addr         | (Optional) Mac   |
| <i>dstmac</i>    | (Optional) Destination mac address   |
| <i>smac</i>      | (Optional) Source mac address  |
| dot1q            | (Optional) Encapsulation dot1q/bd  |
| <i>dot1q-id</i>  | (Optional) Encapsulation dot1q/bd on which the mac is learnt                   |
| ip               | ip address   |
| <i>dstip</i>     | (Optional) Destination ipv4 address  |
| <i>srcip</i>     | (Optional) source ipv4 address   |
| ipv6             | (Optional) ipv6 address  |
| port             | (Optional) L4 port info  |
| <i>sport</i>     | (Optional) Source port   |
| <i>dport</i>     | (Optional) Destination port  |
| proto            | (Optional) Protocol  |
| <i>proto-id</i>  | (Optional) IANA Protocol id  |
| src-intf         | (Optional) Interface on which the host with src ip of the payload is connected |
| <i>src_if</i>    | (Optional) Interface   |
| payload-end      | (Optional) End payload info input  |

|                       |  |
|-----------------------|--|
| <i>profile</i>        | (Optional) NGOAM profile to use                              |
| <i>pid</i>            | (Optional) NGOAM profile id                                  |
| <i>mac</i>            | Mac  |
| <i>dmac</i>           | Destination mac address                                      |
| <i>dot1qid</i>        | Encapsulation dot1q/bd on which the mac is learnt            |
| <i>dot1qid1</i>       | (Optional) Encapsulation dot1q/bd on which the mac is learnt |
| <i>vrf</i>            | (Optional) Display per-VRF information                       |
| <i>vrf-name</i>       | (Optional) VRF name  |
| <i>vrf-known-name</i> | (Optional) Known VRF name                                    |
| <i>copy-to</i>        | (Optional) Send responses to this IP over mgmt vrf instead   |
| <i>copy-to-ip</i>     | (Optional) IPv4 addr to send responses to                    |
| <i>ext-id</i>         | (Optional) Identifier passed from caller                     |
| <i>ext_id</i>         | (Optional) 32-bit identifier                                 |

### Command Mode

- /exec

# pause

[no] pause { buffer-size <size-in-bytes> pause-threshold <xoff-bytes> resume-threshold <xon-bytes> }

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| pause              | PAUSE characteristics (CBFC)                    |
| buffer-size        | Ingress buffer size in bytes                    |
| pause-threshold    | Buffer limit for pausing in bytes               |
| resume-threshold   | Buffer limit at which to resume in bytes        |

## Command Mode

- /exec/configure/policy-map/type/queuing/class

# pause

```
[no] pause { no-drop | { delayed-drop <timeout> } | { [ buffer-size <size-in-bytes> pause-threshold <xoff-bytes>
resume-threshold <xon-bytes> ] pfc-cos <pfc-cos-list> } }
```

## Syntax Description

| Syntax Description  |            |  |
|---------------------|------------|--|
| no                  | (Optional) | Negate a command or set its defaults     |
| pause               |            | PAUSE charecteristics (CBFC)             |
| no-drop             |            | NO-DROP                                  |
| delayed-drop        |            | Enable delayed-drop for the CoS          |
| <i>timeout</i>      |            | Timer value for delayed drop             |
| buffer-size         | (Optional) | Ingress buffer size in bytes             |
| pause-threshold     | (Optional) | Buffer limit for pausing in bytes        |
| resume-threshold    | (Optional) | Buffer limit at which to resume in bytes |
| pfc-cos             |            | CoS values to assert PFC on              |
| <i>pfc-cos-list</i> |            | List of class-of-service values          |

## Command Mode

- /exec/configure/policy-map/type/uf/class



## pause buffer-size2 pause-threshold2 resume-threshold2

[no] pause buffer-size2 <size-in-bytes> pause-threshold2 <xoff-bytes> resume-threshold2 <xon-bytes>

### Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| pause              | PAUSE characteristics (CBFC)                    |
| buffer-size2       | Ingress buffer size in bytes                    |
| pause-threshold2   | Buffer limit for pausing in bytes               |
| resume-threshold2  | Buffer limit at which to resume in bytes        |

### Command Mode

- /exec/configure/policy-map/type/queuing/class

# pause priority

[no] pause { priority-group <priority-group-number> }

## Syntax Description

| Syntax Description           |            |  |
|------------------------------|------------|--|
| no                           | (Optional) | Negate a command or set its defaults   |
| pause                        |            | PAUSE characteristics (CBFC)   |
| priority-group               |            | ingress priority-group to which the traffic is mapped and pause limits are applied |
| <i>priority-group-number</i> |            | Priority group value   |

## Command Mode

- /exec/configure/policy-map/type/queuing/class

# payload test pattern-type pad

{ payload { test pattern-type <test-id> | pad <pad-val> } } | { no payload { test pattern-type | pad } }

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults     |
| payload            |  | Configure ngoam payload                  |
| test               |  | Configure ngoam payload test             |
| pattern-type       |  | Configure ngoam payload test pattern     |
| <i>test-id</i>     |  | Configure ngoam payload test pattern id  |
| pad                |  | Configure ngoam payload test pattern pad |
| <i>pad-val</i>     |  | Configure ngoam payload test pad value   |

## Command Mode

- /exec/configure/configngoamprofile

## peer-gateway

peer-gateway [ exclude-vlan <vlan-list> ] | no peer-gateway

### Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | Negate a command or set its defaults                                    |
| peer-gateway       | Enable L3 forwarding for packets destined to peer's gateway mac-address |
| exclude-vlan       | (Optional) Specify VLANs to be excluded from peer-gateway functionality |
| <i>vlan-list</i>   | (Optional) Specify the list of vlans                                    |

### Command Mode

- /exec/configure/vpc-domain

# peer-ip

[no] peer-ip <addr>

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <i>no</i> (Optional) Negate a command or set its defaults |
|                           | <i>peer-ip</i> Static IP Address Configuration            |
|                           | <i>addr</i> Remote Peer IP Address                        |

## Command Mode

- /exec/configure/if-nve/vni/ingr-rep

## peer-keepalive destination

```
peer-keepalive destination <dst-ip> [ [ source <src-ip> | udp-port <udp-port-num> | vrf { <vrf-name> |
<vrf-known-name> } | { interval <interval-ms> timeout <time-out> } | tos-byte <tos-byte-value> | hold-timeout
<hold-time-out> ] + | [ source <src-ip> | udp-port <udp-port-num> | vrf { <vrf-name> | <vrf-known-name>
} | { interval <interval-ms> timeout <time-out> } | tos { <tos-value> | min-delay | max-throughput |
max-reliability | min-monetary-cost | normal } | hold-timeout <hold-time-out> ] + | [ source <src-ip> | udp-port
<udp-port-num> | vrf { <vrf-name> | <vrf-known-name> } | { interval <interval-ms> timeout <time-out> } |
precedence { <prec-vlaue> | network | internet | critical | flash-override | flash | immediate | priority | routine
} | hold-timeout <hold-time-out> ] + ]
```

### Syntax Description

#### Syntax Description

|                       |   |
|-----------------------|---|
| peer-keepalive        | Keepalive/Hello with peer switch                |
| destination           | specify destination ip address of peer switch   |
| <i>dst-ip</i>         | IPv4 address (A.B.C.D) of destination           |
| source                | (Optional) source interface for hello           |
| <i>src-ip</i>         | (Optional) IPv4 address (A.B.C.D) of source     |
| udp-port              | (Optional) enter UDP port number used for hello |
| <i>udp-port-num</i>   | (Optional) udp port number for hellos           |
| vrf                   | (Optional) vrf to be used for hello messages    |
| <i>vrf-name</i>       | (Optional) vrf to be used for hellos            |
| <i>vrf-known-name</i> | (Optional) Known VRF name                       |
| interval              | (Optional) enter interval in milleseconds       |
| <i>interval-ms</i>    | (Optional) Enter interval in milleseconds       |
| timeout               | (Optional) enter timeout in seconds             |
| <i>time-out</i>       | (Optional) enter timeout in seconds             |
| precedence            | (Optional) Precedence                           |
| <i>prec-vlaue</i>     | (Optional) Precedence value                     |
| network               | (Optional) network (7)                          |
| internet              | (Optional) internet (6)                         |
| critical              | (Optional) critical (5)                         |
| flash-override        | (Optional) flash-override (4)                   |
| flash                 | (Optional) flash (3)                            |

|                       |   |
|-----------------------|---|
| immediate             | (Optional) immediate (2)                                    |
| priority              | (Optional) priority (1)                                     |
| routine               | (Optional) routine (0)                                      |
| tos                   | (Optional) Type of Service                                  |
| <i>tos-value</i>      | (Optional) Enter 4-bit TOS value                            |
| min-delay             | (Optional) min-delay (8)                                    |
| max-throughput        | (Optional) max-throughput (4)                               |
| max-reliability       | (Optional) max-reliability (2)                              |
| min-monetary-cost     | (Optional) min-monetary-cost (1)                            |
| normal                | (Optional) normal (0)                                       |
| tos-byte              | (Optional) Type of Service Byte                             |
| <i>tos-byte-value</i> | (Optional) Enter 8-bit TOS value                            |
| hold-timeout          | (Optional) hold timeout to ignore stale peer alive messages |
| <i>hold-time-out</i>  | (Optional) Enter hold-timeout in seconds                    |

#### Command Mode

- /exec/configure/vpc-domain

# peer-switch

[no] peer-switch

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| peer-switch        | Enable peer switch on vPC pair switches         |

## Command Mode

- /exec/configure/vpc-domain



# peer-type fabric

peer-type { fabric-external | fabric-border-leaf } | { no | default } peer-type

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| default            |  | Inherit values from a peer template  |
| peer-type          |  | Neighbor facing                      |
| fabric-external    |  | Fabric external                      |
| fabric-border-leaf |  | Fabric Border Leaf                   |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor-sess

# peer-vtep

[no] peer-vtep <addr>

## Syntax Description

|                           |                  |   |
|---------------------------|------------------|---|
| <b>Syntax Description</b> | <i>no</i>        | (Optional) Negate a command or set its defaults |
|                           | <i>peer-vtep</i> | Configure tunnel End Point                      |
|                           | <i>addr</i>      | Remote VTEP IP Address                          |

## Command Mode

- /exec/configure/if-nve/vni

# peer ip

[no] peer ip <ip-addr>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| peer               | ITD peer  |
| ip                 | ITD peer ip                                     |
| <i>ip-addr</i>     | NICE node IP prefix in format i.i.i.i           |

## Command Mode

- /exec/configure/itd-inout

# peer ip

[no] peer ip <ip-addr>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| peer               | ITD peer  |
| ip                 | ITD peer ip                                     |
| <i>ip-addr</i>     | NICE node IP prefix in format i.i.i.i           |

## Command Mode

- /exec/configure/itd-inout

# peer ip

[no] peer ip <ip-addr>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| peer               | PLB peer  |
| ip                 | PLB peer ip                                     |
| <i>ip-addr</i>     | NICE node IP prefix in format i.i.i.i           |

## Command Mode

- /exec/configure/plb-inout

# peer local service

[no] peer local service <service-name>

## Syntax Description

| Syntax Description  |            |   |
|---------------------|------------|---|
| no                  | (Optional) | Negate a command or set its defaults            |
| peer                |            | Peer cli for sandwich mode failure notification |
| local               |            | Peer involved in sandwich mode                  |
| service             |            | Peer service involved in sandwich mode          |
| <i>service-name</i> |            | Peer service name string                        |

## Command Mode

- /exec/configure/itd

# peer local service

[no] peer local service <service-name>

## Syntax Description

| Syntax Description |                     |   |
|--------------------|---------------------|---|
|                    | no                  | (Optional) Negate a command or set its defaults |
|                    | peer                | Peer cli for sandwich mode failure notification |
|                    | local               | Peer involved in sandwich mode                  |
|                    | service             | Peer service involved in sandwich mode          |
|                    | <i>service-name</i> | Peer service name string                        |

## Command Mode

- /exec/configure/plb

## peer vdc service

[no] peer vdc <vdc-id> service <service-name>

### Syntax Description

| Syntax Description  |            |   |
|---------------------|------------|---|
| no                  | (Optional) | Negate a command or set its defaults            |
| peer                |            | Peer cli for sandwich mode failure notification |
| vdc                 |            | Peer VDC involved in sandwich mode              |
| service             |            | Peer service involved in sandwich mode          |
| <i>vdc-id</i>       |            | VDC name of peer VDC                            |
| <i>service-name</i> |            | Peer service name string                        |

### Command Mode

- /exec/configure/itd



## peer vdc service

[no] peer vdc <vdc-id> service <service-name>

### Syntax Description

| Syntax Description  |            |   |
|---------------------|------------|---|
| no                  | (Optional) | Negate a command or set its defaults            |
| peer                |            | Peer cli for sandwich mode failure notification |
| vdc                 |            | Peer VDC involved in sandwich mode              |
| service             |            | Peer service involved in sandwich mode          |
| <i>vdc-id</i>       |            | VDC name of peer VDC                            |
| <i>service-name</i> |            | Peer service name string                        |

### Command Mode

- /exec/configure/itd

## peer vpc

[no] peer <svc-name> vpc <num>

### Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| peer               | smart channel peer                              |  |
| vpc                | vpc   |  |
| <i>svc-name</i>    | peer smart channel name                         |  |
| <i>num</i>         | VPC number to assign to smart-channel           |  |

### Command Mode

- /exec/configure/smartc

# perf

```
perf [ { record { context-switch | profile } { system | process <i0> } [ <s1> ] } | { stop { all | <s0> } } | { list
} | { create-archive <s2> } | { remove { all | <s3> } } ]
```

## Syntax Description

### Syntax Description

|                |  |
|----------------|--|
| perf           | Run perf tool to collect or process event data                     |
| record         | (Optional) Record events to a file for later analysis              |
| stop           | (Optional) Stop a perf record.                                     |
| list           | (Optional) List recorded datasets                                  |
| create-archive | (Optional) Create an archive of dataset for download               |
| remove         | (Optional) Remove recorded dataset(s)                              |
| all            | (Optional) Act on all recorded datasets                            |
| context-switch | (Optional) Record context-switch events                            |
| profile        | (Optional) Record periodic runtime samples                         |
| system         | (Optional) Record events for all processes on all CPUS             |
| process        | (Optional) Record events for a specific process with the given pid |
| <i>i0</i>      | (Optional) pid of process to record events                         |
| <i>s0</i>      | (Optional) id of perf record session to stop                       |
| <i>s1</i>      | (Optional) id to use for perf record session                       |
| <i>s2</i>      | (Optional) id of perf dataset to create an archive                 |
| <i>s3</i>      | (Optional) id of perf dataset to remove                            |

## Command Mode

- /exec

# periodic-inventory notification

[no] periodic-inventory notification

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

periodic-inventory Configure periodic software inventory message dispatch

---

notification Enable periodic software inventory message dispatch

---

## Command Mode

- /exec/configure/callhome

# periodic-inventory notification interval

```
periodic-inventory notification { interval <i0> | timeofday <s0> }
```

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| periodic-inventory | Configure periodic software inventory message dispatch         |
| notification       | Enable periodic software inventory message dispatch            |
| interval           | Configure the time period for periodic inventory               |
| <i>i0</i>          | Time period in days (default is 7 days)                        |
| timeofday          | Configure the timeofday for periodic inventory in HH:MM format |
| <i>s0</i>          | Time period in HH:MM format                                    |

## Command Mode

- /exec/configure/callhome

# periodic to

```
{ [ <seqno> ] | no } periodic { { Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday } +
| daily | weekdays | weekend } <stime> to <etime>
```

## Syntax Description

| Syntax Description |                                      |  |
|--------------------|--------------------------------------|--|
| <i>seqno</i>       | (Optional) Sequence number           |  |
| no                 | Negate a command or set its defaults |  |
| periodic           | Periodic time and date               |  |
| Monday             | Monday                               |  |
| Tuesday            | Tuesday                              |  |
| Wednesday          | Wednesday                            |  |
| Thursday           | Thursday                             |  |
| Friday             | Friday                               |  |
| Saturday           | Saturday                             |  |
| Sunday             | Sunday                               |  |
| daily              | Every day of the week                |  |
| weekdays           | Monday thru Friday                   |  |
| weekend            | Saturday and Sunday                  |  |
| <i>stime</i>       | Starting time                        |  |
| to                 | Ending day and time                  |  |
| <i>etime</i>       | Ending time                          |  |

## Command Mode

- /exec/configure/timerange

# periodic to

```
{ [ <seqno> ] | no } periodic { Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday }
<stime> to { <eday> } <etime>
```

## Syntax Description

| Syntax Description |                                      |  |
|--------------------|--------------------------------------|--|
| <i>seqno</i>       | (Optional) Sequence number           |  |
| no                 | Negate a command or set its defaults |  |
| periodic           | Periodic time and date               |  |
| Monday             | Monday                               |  |
| Tuesday            | Tuesday                              |  |
| Wednesday          | Wednesday                            |  |
| Thursday           | Thursday                             |  |
| Friday             | Friday                               |  |
| Saturday           | Saturday                             |  |
| Sunday             | Sunday                               |  |
| <i>eday</i>        | Day of the week                      |  |
| <i>stime</i>       | Starting time                        |  |
| to                 | Ending day and time                  |  |
| <i>etime</i>       | Ending time                          |  |

## Command Mode

- /exec/configure/timerange

# permit interface

[no] permit interface <if0>

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

permit Permit access to interfaces (applicable if interface policy is 'deny')

---

interface Enter the range of interfaces accessible the role

---

*if0* Enter the interface range

---

## Command Mode

- /exec/configure/role/interface



# permit vlan

[no] permit vlan <vlan-mrange>

## Syntax Description

---

**Syntax Description**

|                    |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults              |
| permit             | Permit access to vlans (applicable if vlan policy is 'deny') |
| vlan               | Enter the range of vlans accessible the role                 |
| <i>vlan-mrange</i> | Enter the vlan range   |

---

## Command Mode

- /exec/configure/role/vlan

# permit vrf

[no] permit vrf <vrf-name>

## Syntax Description

---

**Syntax Description**

---

|                 |   |
|-----------------|---|
| no              | (Optional) Negate a command or set its defaults           |
| permit          | Permit access to vrf (applicable if vrf policy is 'deny') |
| vrf             | Enter the range of vrf accessible the role                |
| <i>vrf-name</i> | Enter the vrf name  |

---

## Command Mode

- /exec/configure/role/vrf

# permit vsan

[no] permit vsan <vsan-mrange>

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults              |
| permit             | Permit access to vsans (applicable if vsan policy is 'deny') |
| vsan               | Enter the range of vsans accessible the role                 |
| <i>vsan-mrange</i> | Enter the vsan range   |

## Command Mode

- /exec/configure/role/vsan

# personality

[no] personality

## Syntax Description

| Syntax Description |                          |
|--------------------|--------------------------|
| no                 | (Optional) Negate a mode |
| personality        | Config Personality       |

## Command Mode

- /exec/configure

# personality backup

```
personality backup { <uri_local> | <uri_remote> [ password <password> ] [ vrf <vrf-known-name> ] }
```

## Syntax Description

### Syntax Description

|                       |   |
|-----------------------|---|
| <i>personality</i>    | personality                                     |
| <i>backup</i>         | backup personality                              |
| <i>password</i>       | (Optional) The password for personality backups |
| <i>vrf</i>            | (Optional) The VRF for personality backups      |
| <i>uri_local</i>      | Personality backup local destination            |
| <i>uri_remote</i>     | Personality backup remote destination           |
| <i>password</i>       | (Optional) Password for SCP username            |
| <i>vrf-known-name</i> | (Optional) VRF name                             |

## Command Mode

- /exec

# personality restore

```
personality restore <uri> [ user-name <user> ] [ password <password> ] [ hostname <hostname> ] [ vrf
<vrf_name> ]
```

## Syntax Description

### Syntax Description

|                    |                                       |
|--------------------|---------------------------------------|
| <i>personality</i> | Personality                           |
| <i>restore</i>     | Restore the personality file          |
| <i>uri</i>         | Personality file                      |
| <i>user-name</i>   | (Optional) The username for downloads |
| <i>user</i>        | (Optional) The username               |
| <i>password</i>    | (Optional) The password for downloads |
| <i>password</i>    | (Optional) The password               |
| <i>hostname</i>    | (Optional) The hostname for downloads |
| <i>hostname</i>    | (Optional) The hostname               |
| <i>vrf</i>         | (Optional) The VRF for downloads      |
| <i>vrf_name</i>    | (Optional) The VRF name               |

## Command Mode

- /exec

# phone-contact

{ phone-contact <s0> | no phone-contact }

## Syntax Description

---

**Syntax Description**

no Negate a command or set its defaults

---

phone-contact Contact person's phone number

---

s0 Phone number in international format(such as +1-800-123-4567)

---

## Command Mode

- /exec/configure/callhome

# ping

```
ping [ { { <alpha> | <numeric> [ loopback interface <interface> ] } | { multicast <group> interface <interface>
[ loopback ] } } [ [ source-interface <src-intf> | vrf { <vrf-name> | <vrf-known-name> } ] [ count { <count>
| unlimited } | packet-size <packetsize> | vrf { <vrf-name> | <vrf-known-name> } | interval <interval> | source
{ <alpha> | <numeric1> } | df-bit | timeout <timeout> } + [ [ count { <count> | unlimited } | packet-size
<packetsize> | source-interface <src-intf> | interval <interval> | df-bit | timeout <timeout> } + ] ]
```

## Syntax Description

### Syntax Description

|                   |  |
|-------------------|--|
| ping              | Test                                   |
| count             | (Optional) Number                      |
| unlimited         | (Optional) Unlimited                   |
| <i>count</i>      | (Optional) Number                      |
| packet-size       | (Optional) Packet                      |
| <i>packetsize</i> | (Optional) Size                        |
| source-interface  | (Optional) Select source interface     |
| <i>src-intf</i>   | (Optional) Specify interface           |
| interval          | (Optional) Wait                        |
| <i>interval</i>   | (Optional) Interval                    |
| <i>numeric</i>    | (Optional) IP address of remote system |
| <i>numeric1</i>   | (Optional) IP                          |
| <i>alpha</i>      | (Optional) Enter                       |
| multicast         | (Optional) Multicast                   |
| <i>group</i>      | (Optional) Multicast                   |
| interface         | (Optional) Interface                   |
| <i>interface</i>  | (Optional) Interface                   |
| loopback          | (Optional) Receive                     |
| source            | (Optional) Source                      |
| df-bit            | (Optional) Enable                      |
| timeout           | (Optional) Specify                     |
| <i>timeout</i>    | (Optional) Timeout                     |



---

|                             |  |
|-----------------------------|--|
| <code>vrf</code>            | (Optional) Display per-VRF information |
| <code>vrf-name</code>       | (Optional) VRF name                    |
| <code>vrf-known-name</code> | (Optional) Known VRF name              |

---

**Command Mode**

- /exec

# ping6

```
ping6 { { <host> | <hostname> } | { multicast <group> } } [ [ { count { <count> | unlimited } } | { packet-size
<packetsize> } | [ source { <host1> | <hostname> } ] | vrf { <vrf-name> | <vrf-known-name> } | timeout
<timeout> | { interval <interval> } ] + [ [ { count { <count> | unlimited } } | { packet-size <packetsize> } | {
source-interface <src-intf> } | timeout <timeout> | { interval <interval> } ] + ]
```

## Syntax Description

### Syntax Description

|                       |  |
|-----------------------|--|
| ping6                 | Test                                   |
| count                 | (Optional) Number                      |
| <i>count</i>          | (Optional) Number                      |
| unlimited             | (Optional) unlimited                   |
| packet-size           | (Optional) Packet                      |
| <i>packetsize</i>     | (Optional) Size                        |
| source-interface      | (Optional) Select source interface     |
| <i>src-intf</i>       | (Optional) Specify interface           |
| interval              | (Optional) Wait                        |
| <i>interval</i>       | (Optional) Interval                    |
| <i>hostname</i>       | Enter                                  |
| multicast             | Multicast                              |
| vrf                   | (Optional) Display per-VRF information |
| <i>vrf-name</i>       | (Optional) VRF name                    |
| <i>vrf-known-name</i> | (Optional) Known VRF name              |
| source                | (Optional) Source                      |
| timeout               | (Optional) Specify                     |
| <i>timeout</i>        | (Optional) Timeout                     |

## Command Mode

- /exec

## ping mpls

```
ping mpls { nil-fec labels <comma-separated-labels> } { output { ointerface <tx-interface> } nexthop
<nexthop-ip-addr> } [ { repeat <count> } | { size <size> } | { sweep <min-size> <max-size> <increment>
} } | { timeout <seconds> } | { interval <milliseconds> } | { destination <addr-start> [ <addr-end> [
<addr-incr-mask> | <addr-incr> ] ] } | { source <addr> } | { exp <exp-value> } | { pad <pattern> } | { ttl <ttl>
} | { verbose } | { reply { { mode { <reply-mode-ipv4> | router-alert | control-channel | no-reply } } | { dscp
{ <dscp-bits> | af11 | af12 | af13 | af21 | af22 | af23 | af31 | af32 | af33 | af41 | af42 | af43 | cs1 | cs2 | cs3 | cs4
| cs5 | cs6 | cs7 | default | ef } } | { pad-tlv } } } + | { force-explicit-null } | { dsmap [ hashkey { none |
hash-ipv4 { bitmap <bitmap-size> } } } ] | { flags { fec } } ] +
```

### Syntax Description

#### Syntax Description

|                               |                        |
|-------------------------------|------------------------|
| ping                          | need                   |
| mpls                          | Test                   |
| nil-fec                       | Target                 |
| labels                        | A                      |
| <i>comma-separated-labels</i> | A                      |
| repeat                        | (Optional) Repeat      |
| <i>count</i>                  | (Optional) Repeat      |
| size                          | (Optional) Packet      |
| <i>size</i>                   | (Optional) Datagram    |
| sweep                         | (Optional) Sweep       |
| <i>min-size</i>               | (Optional)             |
| <i>max-size</i>               | (Optional)             |
| <i>increment</i>              | (Optional) Sweep       |
| timeout                       | (Optional) Timeout     |
| <i>seconds</i>                | (Optional) Timeout     |
| interval                      | (Optional) Send        |
| <i>milliseconds</i>           | (Optional) Send        |
| destination                   | (Optional) Destination |
| <i>addr-start</i>             | (Optional) Destination |
| <i>addr-end</i>               | (Optional) Destination |
| <i>addr-incr-mask</i>         | (Optional) Destination |

|                  |                              |
|------------------|------------------------------|
| <i>addr-incr</i> | (Optional) Destination       |
| source           | (Optional) Source            |
| <i>addr</i>      | (Optional) Source            |
| exp              | (Optional) EXP               |
| <i>exp-value</i> | (Optional) EXP               |
| pad              | (Optional) Pad               |
| <i>pattern</i>   | (Optional) Pad               |
| ttl              | (Optional) Time              |
| <i>ttl</i>       | (Optional) TTL               |
| verbose          | (Optional) verbose           |
| reply            | (Optional) Reply             |
| mode             | (Optional) Reply             |
| reply-mode-ipv4  | (Optional) Send              |
| router-alert     | (Optional) Send              |
| control-channel  | (Optional) Send              |
| no-reply         | (Optional) Send              |
| dscp             | (Optional) DSCP              |
| <i>dscp-bits</i> | (Optional)<br>Differentiated |
| af11             | (Optional) Match             |
| af12             | (Optional) Match             |
| af13             | (Optional) Match             |
| af21             | (Optional) Match             |
| af22             | (Optional) Match             |
| af23             | (Optional) Match             |
| af31             | (Optional) Match             |
| af32             | (Optional) Match             |
| af33             | (Optional) Match             |
| af41             | (Optional) Match             |

|                        |                       |
|------------------------|-----------------------|
| af42                   | (Optional) Match      |
| af43                   | (Optional) Match      |
| cs1                    | (Optional) Match      |
| cs2                    | (Optional) Match      |
| cs3                    | (Optional) Match      |
| cs4                    | (Optional) Match      |
| cs5                    | (Optional) Match      |
| cs6                    | (Optional) Match      |
| cs7                    | (Optional) Match      |
| default                | (Optional) Match      |
| ef                     | (Optional) Match      |
| pad-tlv                | (Optional) Reply      |
| force-explicit-null    | (Optional) Force      |
| output                 | Output                |
| ointerface             | Echo                  |
| <i>tx-interface</i>    | Echo                  |
| nexthop                | Next                  |
| <i>nexthop-ip-addr</i> | Next                  |
| dsmap                  | (Optional) Request    |
| hashkey                | (Optional) Downstream |
| none                   | (Optional) Hash       |
| hash-ipv4              | (Optional) IPv4       |
| bitmap                 | (Optional) Hash       |
| <i>bitmap-size</i>     | (Optional) Multipath  |
| flags                  | (Optional) Flag       |
| fec                    | (Optional) Request    |

#### Command Mode

- /exec

## ping nve

```
ping nve { { { { ip { <numeric10> | <numeric11> | unknown } } [ vrf { <vrf-name> | <vrf-known-name>
} | { <dot1qid1> } ] } | mac <dmac> <dot1qid> <intfid> } [ profile <pid> ] } [ payload { [ mac-addr <dstmac>
<smac> ] [ dot1q <dot1q-id> ] [ ip <dstip> <srcip> | ipv6 <dstipv6> <srcipv6> ] [ port <sport> <dport> ] [
proto <proto-id> ] [ src-intf <src_if> ] } payload-end ] [ source { <numeric1> | <numeric2> } |
```

### Syntax Description

| Syntax Description |  |
|--------------------|--|
| {                  | <count>  |
| ping               | Test   |
| nve                | network virtualization edge  |
| <i>numeric10</i>   | Ipv4 address of remote host / VTEP   |
| unknown            | Peer vtep ip is unknown, Applicable only for channel Nv03                      |
| <i>dot1qid</i>     | Encapsulation dot1q/bd on which the mac is learnt                              |
| <i>intfid</i>      | Name of the interface for ngoam ping on which dot1q is configured              |
| payload            | (Optional) Enter customer payload  |
| port               | (Optional) L4 port info  |
| <i>sport</i>       | (Optional) Source port   |
| <i>dport</i>       | (Optional) Destination port  |
| proto              | (Optional) Protocol  |
| <i>proto-id</i>    | (Optional) IANA Protocol id  |
| src-intf           | (Optional) Interface on which the host with src ip of the payload is connected |
| <i>src_if</i>      | (Optional) Interface   |
| payload-end        | (Optional) End of payload info   |
| profile            | (Optional) NGOAM profile to use  |
| <i>pid</i>         | (Optional) NGOAM profile id  |
| mac                | Mac  |
| mac-addr           | (Optional) Mac   |
| ip                 | ip address   |
| <i>dstip</i>       | (Optional) Destination ipv4 address  |
| <i>srcip</i>       | (Optional) source ipv4 address   |

|                       |  |
|-----------------------|--|
| <i>ipv6</i>           | (Optional) ipv6 address                                      |
| <i>dmac</i>           | Destination mac address                                      |
| <i>dstmac</i>         | (Optional) Destination mac address                           |
| <i>smac</i>           | (Optional) Source mac address                                |
| <i>dot1q</i>          | (Optional) Encapsulation dot1q/bd                            |
| <i>dot1q-id</i>       | (Optional) Encapsulation dot1q/bd on which the mac is learnt |
| <i>dot1qid1</i>       | (Optional) Encapsulation dot1q/bd on which the mac is learnt |
| <i>vrf</i>            | (Optional) Display per-VRF information                       |
| <i>vrf-name</i>       | (Optional) VRF name  |
| <i>vrf-known-name</i> | (Optional) Known VRF name                                    |
| <i>source</i>         | (Optional) Source  |
| <i>numeric1</i>       | (Optional) IP  |

**Command Mode**

- /exec

# pktmgr cache disable

{ [ no ] pktmgr cache disable }

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | no (Optional) Negate a command or set its defaults |
|                           | pktmgr packet manager                              |
|                           | cache Disable cache                                |
|                           | disable Disable cache                              |

## Command Mode

- /exec/configure



# pktmgr discard

```
{ [ no ] pktmgr discard [ type <type> ] [ direction <direction> ] [ detail ] }
```

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| pktmgr             | packet manager                                  |
| discard            | discard CPI-bound output packets                |
| detail             | (Optional) detailed discard info                |
| direction          | (Optional) pm debug-filter direction            |
| <i>direction</i>   | (Optional) pm direction                         |
| type               | (Optional) Driver type                          |
| <i>type</i>        | (Optional) Driver type                          |

## Command Mode

- /exec

## pktmgr internal event-history size

```
[no] pktmgr internal event-history { errors | control | log | ha | pkt-errors | pkt-buffer } size { <size_in_text>
| <size_in_Kbytes> }
```

### Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| internal              | Commands for internal use                       |  |
| pktmgr                | Display Packet Manager information              |  |
| event-history         | various event logs of Pktmgr                    |  |
| errors                | error logs of Pktmgr                            |  |
| control               | control message of Pktmgr                       |  |
| log                   | syslog message of Pktmgr                        |  |
| ha                    | ha debug message of Pktmgr                      |  |
| pkt-errors            | pkt error message of Pktmgr                     |  |
| pkt-buffer            | pkt buffers message of Pktmgr                   |  |
| size                  | Configure the size of the event-hist buffer     |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_Kbytes</i> | Size of the file in kbytes                      |  |

### Command Mode

- /exec

# pktmgr internal mts-queue

{ pktmgr internal mts-queue <size> } | { no pktmgr internal mts-queue }

## Syntax Description

|                           |           |                                      |
|---------------------------|-----------|--------------------------------------|
| <b>Syntax Description</b> | no        | Negate a command or set its defaults |
|                           | pktmgr    | Display Packet Manager information   |
|                           | internal  | Commands for internal use            |
|                           | mts-queue | mts-queue                            |
|                           | size      | Size for pktmgr data sap qlimit      |

## Command Mode

- /exec/configure

# pktmgr internal span-drop enable

[no] pktmgr internal span-drop { enable | disable }

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| pktmgr             | Display Packet Manager information              |
| internal           | Commands for internal use                       |
| span-drop          | Enable/Disable span to sup packet drops         |
| enable             | Enable span to sup packet drops                 |
| disable            | Dsiable span to sup packet drops                |

## Command Mode

- /exec

# pktmgr internal span-drop enable

[no] pktmgr internal span-drop { enable | disable }

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| pktmgr             | Display Packet Manager information              |
| internal           | Commands for internal use                       |
| span-drop          | Enable/Disable span to sup packet drops         |
| enable             | Enable span to sup packet drops                 |
| disable            | Dsiable span to sup packet drops                |

## Command Mode

- /exec

# platform access-list capture

[no] { platform | hardware } access-list capture

## Syntax Description

|                           |             |   |
|---------------------------|-------------|---|
| <b>Syntax Description</b> | no          | (Optional) Negate a command or set its defaults |
|                           | platform    | Platform configuration commands                 |
|                           | hardware    | Hardware Internal Information                   |
|                           | access-list | Access Control List                             |
|                           | capture     | Configure ACL capture                           |

## Command Mode

- /exec/configure

# platform access-list fp\_dnl

[no] { platform | hardware } access-list fp\_dnl

## Syntax Description

|                           |             |   |
|---------------------------|-------------|---|
| <b>Syntax Description</b> | no          | (Optional) Negate a command or set its defaults |
|                           | platform    | Platform configuration commands                 |
|                           | hardware    | Hardware Internal Information                   |
|                           | access-list | Access control list                             |
|                           | fp_dnl      | Fabric path - do not learn mac from broadcast   |

## Command Mode

- /exec/configure

# platform access-list update

[no] { platform | hardware } access-list update { { atomic [ strict ] } | { default-result permit } }

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults                 |
| platform           | Platform configuration commands                                 |
| hardware           | Hardware Internal Information                                   |
| access-list        | Access Control List   |
| update             | Configure atomic/non-atomic update and default-result           |
| atomic             | Enable atomic update of access-list in hardware                 |
| strict             | (Optional) Strict check on TCAM size for using mutiple features |
| default-result     | Default access-list result during non-atomic hardware update    |
| permit             | Permit all packets during non-atomic update                     |

## Command Mode

- /exec/configure



# platform fabricpath mac-learning module

[no] { platform | hardware } fabricpath mac-learning module <module> [ port-group { 1-4 | 5-8 | 9-12 | 13-16 | 17-20 | 21-24 | 25-28 | 29-32 | 33-36 | 37-40 | 41-44 | 45-48 } + ]

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| platform           | Platform configuration commands                 |
| hardware           | Hardware Internal Information                   |
| fabricpath         | Fabric Path                                     |
| mac-learning       | MAC Learning                                    |
| module             | Specify a module number                         |
| <i>module</i>      | Specify a module number                         |
| port-group         | (Optional) Port Group                           |

## Command Mode

- /exec/configure

## platform forwarding interface statistics mode mpls

```
[no] { platform | hardware } forwarding interface statistics mode { mpls | default } [ module <module-num> ]
```

### Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| platform           |            | Platform configuration commands      |
| hardware           |            | Hardware Internal Information        |
| forwarding         |            | Hardware forwarding                  |
| interface          |            | Interface                            |
| statistics         |            | Statistics                           |
| mode               |            | Statistics mode                      |
| mpls               |            | Mpls mode                            |
| default            |            | Default mode                         |
| module             | (Optional) | Specify a module number              |
| <i>module-num</i>  | (Optional) | Specify a module number              |

### Command Mode

- /exec/configure

# platform forwarding layer-2 f1 exclude supervisor

[no] { platform | hardware } forwarding layer-2 f1 exclude supervisor

## Syntax Description

|                           |            |   |
|---------------------------|------------|---|
| <b>Syntax Description</b> | no         | (Optional) Negate a command or set its defaults                     |
|                           | platform   | Platform configuration commands                                     |
|                           | hardware   | Hardware Internal Information                                       |
|                           | forwarding | Forwarding information  |
|                           | layer-2    | L2 only mode  |
|                           | f1         | N7K-F132XP-15 module  |
|                           | exclude    | Exclude supervisor from getting copies of ARP and multicast packets |
|                           | supervisor | Supervisor module   |

## Command Mode

- /exec/configure

## platform ip verify

[no] { platform | hardware } ip verify { address { source { broadcast | multicast } | class-e | destination { zero } | identical | reserved } | checksum | protocol | fragment | length { minimum | consistent | maximum { max-frag | udp | max-tcp } } | tcp { tiny-frag } | version | syslog }

### Syntax Description

#### Syntax Description

|             |   |
|-------------|---|
| no          | (Optional) Negate a command or set its defaults                             |
| platform    | Platform configuration commands   |
| hardware    | Hardware Internal Information   |
| ip          | IP  |
| verify      | Enable IPv4 and some IPv6 packet validation checks in hardware              |
| address     | IPv4 Source and destination address validation                              |
| source      | Check source address  |
| broadcast   | Source address is 255.255.255.255   |
| multicast   | Source address is 224.x.x.x   |
| destination | Check destination address   |
| zero        | Destination address is 0.0.0.0  |
| class-e     | Class E IDS check   |
| identical   | Same IP SA and DA   |
| reserved    | Source address is 127.x.x.x   |
| checksum    | Verify IPv4 and IPv6 packet checksum  |
| protocol    | Verify IP protocol  |
| fragment    | Check IPv4 and IPv6 fragment with non-zero offset and DF bit active         |
| length      | Validate IPv4 packet header and payload length                              |
| minimum     | Minimum IPv4 header length  |
| consistent  | Actual frame size is equal to or more than IPv4 length plus ethernet header |
| maximum     | Check max fragment offset and payload length                                |
| max-frag    | Fragment offset field value   |
| udp         | Maximum UDP length has to be less than IPv4 payload length                  |
| max-tcp     | Maximum TCP length has to be less than IPv4 payload length                  |

---

|           |   |
|-----------|---|
| tcp       | Validate TCP packet header                                |
| tiny-frag | Check TCP tiny fragment                                   |
| version   | Must be 4 for an ethertype of IPv4 (0x0800)               |
| syslog    | Syslog Messages logging configuration for IDS check drops |

---

**Command Mode**

- /exec/configure

## platform ipv6 verify

```
[no] { platform | hardware } ipv6 verify { length { consistent | maximum { max-frag | udp | max-tcp } } | tcp
{ tiny-frag } | version }
```

### Syntax Description

#### Syntax Description

|            |   |
|------------|---|
| no         | (Optional) Negate a command or set its defaults                             |
| platform   | Platform configuration commands   |
| hardware   | Hardware Internal Information   |
| ipv6       | IPv6  |
| verify     | Enable IPv6 packet validation checks in hardware                            |
| length     | Validate IPv6 packet header and payload length                              |
| consistent | Actual frame size is equal to or more than IPv6 length plus ethernet header |
| maximum    | Check max fragment offset and payload length                                |
| max-frag   | Fragment offset field value   |
| udp        | Maximum UDP length has to be less than IPv6 payload length                  |
| max-tcp    | Maximum TCP length has to be less than IPv6 payload length                  |
| tcp        | Validate TCP packet header  |
| tiny-frag  | Check TCP tiny fragment   |
| version    | Must be 6 for an ethertype of IPv6 (0x86DD)                                 |

### Command Mode

- /exec/configure

# platform qos

[no] { platform | hardware } qos { afd profile <prof-opts> [ module <module> ] }

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| platform           | Platform configuration commands                 |
| hardware           | Hardware Internal Information                   |
| qos                | Configure qos related configuration             |
| afd                | Approximate Fair Dropping                       |
| profile            | AFD profiles                                    |
| <i>prof-opts</i>   |   |
| module             | (Optional) Specify a module number              |
| <i>module</i>      | (Optional) Specify a module number              |

## Command Mode

- /exec/configure

# platform qos

[no] { platform | hardware } qos { min-buffer qos-group <buff-prof-opts> [ module <module> ] }

## Syntax Description

| Syntax Description    |            |                                      |
|-----------------------|------------|--------------------------------------|
| no                    | (Optional) | Negate a command or set its defaults |
| platform              |            | Platform configuration commands      |
| hardware              |            | Hardware Internal Information        |
| qos                   |            | Configure qos related configuration  |
| min-buffer            |            | minimum/reserved buffer selection    |
| qos-group             |            | Qos Group                            |
| <i>buff-prof-opts</i> |            |                                      |
| module                | (Optional) | Specify a module number              |
| <i>module</i>         | (Optional) | Specify a module number              |

## Command Mode

- /exec/configure



# platform qos

```
[no] { platform | hardware } qos { ns-mcq3-alias qos-group <qos-grp-val> [ module <module> ] }
```

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults                   |
| platform           | Platform configuration commands                                   |
| hardware           | Hardware Internal Information                                     |
| qos                | Configure QoS related configuration                               |
| ns-mcq3-alias      | Select qos-group to which to divert qos-group-3 Multicast traffic |
| qos-group          | Qos Group   |
| <i>qos-grp-val</i> | QoS group value   |
| module             | (Optional) Specify a module number                                |
| <i>module</i>      | (Optional) Specify a module number                                |

## Command Mode

- /exec/configure

# platform qos

```
[no] { platform | hardware } qos { ing-pg-hdrm-reserve percent <percent-val> [ module <module> ] }
```

## Syntax Description

| Syntax Description |                     |   |
|--------------------|---------------------|---|
|                    | no                  | (Optional) Negate a command or set its defaults |
|                    | platform            | Platform configuration commands                 |
|                    | hardware            | Hardware Internal Information                   |
|                    | qos                 | Configure qos related configuration             |
|                    | ing-pg-hdrm-reserve | Set Ingress PG Headroom reservation             |
|                    | percent             | PG Headroom reservation percent                 |
|                    | <i>percent-val</i>  | percent of PG Headroom to reserve               |
|                    | module              | (Optional) Specify a module number              |
|                    | <i>module</i>       | (Optional) Specify a module number              |

## Command Mode

- /exec/configure

# platform qos

[no] { platform | hardware } qos { burst-detect max-records <val> }

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| platform           | Platform configuration commands                 |
| hardware           | Hardware Internal Information                   |
| qos                | Configure qos related configuration             |
| burst-detect       | Set OOBST burst monitor configs                 |
| max-records        | Set OOBST burst monitor max records             |
| val                | maximum number of records to monitor            |

## Command Mode

- /exec/configure

# platform qos

```
[no] { platform | hardware } qos { oq-drops type <sel> [ module <module> ] }
```

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| platform           | Platform configuration commands                 |
| hardware           | Hardware Internal Information                   |
| qos                | Configure qos related configuration             |
| oq-drops           | per output queue drops                          |
| type               | type of drops - occ/wred/both                   |
| <i>sel</i>         |   |
| module             | (Optional) Specify a module number              |
| <i>module</i>      | (Optional) Specify a module number              |

## Command Mode

- /exec/configure

# platform qos

```
[no] { platform | hardware } qos { dynamic-packet-prioritization age-period <period> usec [ module <module> ] }
```

## Syntax Description

| Syntax Description            |            |                                      |
|-------------------------------|------------|--------------------------------------|
| no                            | (Optional) | Negate a command or set its defaults |
| platform                      |            | Platform configuration commands      |
| hardware                      |            | Hardware Internal Information        |
| qos                           |            | Configure qos related configuration  |
| dynamic-packet-prioritization |            | Dynamic Packet Prioritization        |
| age-period                    |            | Aging Period                         |
| <i>period</i>                 |            | Aging Period                         |
| usec                          |            | micro seconds                        |
| module                        | (Optional) | Specify a module number              |
| <i>module</i>                 | (Optional) | Specify a module number              |

## Command Mode

- /exec/configure

# platform qos

```
[no] { platform | hardware } qos { dynamic-packet-prioritization max-num-pkts <pkts> [ module <module> ] }
```

## Syntax Description

| Syntax Description |                               |   |
|--------------------|-------------------------------|---|
|                    | no                            | (Optional) Negate a command or set its defaults |
|                    | platform                      | Platform configuration commands                 |
|                    | hardware                      | Hardware Internal Information                   |
|                    | qos                           | Configure qos related configuration             |
|                    | dynamic-packet-prioritization | Dynamic Packet Prioritization                   |
|                    | max-num-pkts                  | Maximum number of packets prioritized           |
|                    | <i>pkts</i>                   | Number of packets                               |
|                    | module                        | (Optional) Specify a module number              |
|                    | <i>module</i>                 | (Optional) Specify a module number              |

## Command Mode

- /exec/configure

# platform qos

```
[no] { platform | hardware } qos { etrap age-period <period> usec [ module <module> ] }
```

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| platform           | Platform configuration commands                 |
| hardware           | Hardware Internal Information                   |
| qos                | Configure qos related configuration             |
| etrap              | Elephant Trap                                   |
| age-period         | Aging Period                                    |
| <i>period</i>      | Aging Period                                    |
| usec               | micro seconds                                   |
| module             | (Optional) Specify a module number              |
| <i>module</i>      | (Optional) Specify a module number              |

## Command Mode

- /exec/configure

# platform qos

```
[no] { platform | hardware } qos { etrap byte-count <count> [ module <module> ] }
```

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| platform           | Platform configuration commands                 |
| hardware           | Hardware Internal Information                   |
| qos                | Configure qos related configuration             |
| etrap              | Elephant Trap                                   |
| byte-count         | Number of bytes to become elephant flow         |
| <i>count</i>       | Number of bytes                                 |
| module             | (Optional) Specify a module number              |
| <i>module</i>      | (Optional) Specify a module number              |

## Command Mode

- /exec/configure



# platform qos

[no] { platform | hardware } qos { etrap bandwidth-threshold <bw> bytes [ module <module> ] }

## Syntax Description

| Syntax Description  |            |                                       |
|---------------------|------------|---------------------------------------|
| no                  | (Optional) | Negate a command or set its defaults  |
| platform            |            | Platform configuration commands       |
| hardware            |            | Hardware Internal Information         |
| qos                 |            | Configure qos related configuration   |
| etrap               |            | Elephant Trap                         |
| bandwidth-threshold |            | Bandwidth threshold for elephant flow |
| <i>bw</i>           |            | Number of bytes                       |
| bytes               |            | Bytes                                 |
| module              | (Optional) | Specify a module number               |
| <i>module</i>       | (Optional) | Specify a module number               |

## Command Mode

- /exec/configure

# platform qos

```
[no] { platform | hardware } qos { buffer input peak <sel> [ module <module> ] }
```

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| platform           | Platform configuration commands                 |
| hardware           | Hardware Internal Information                   |
| qos                | Configure qos related configuration             |
| buffer             | buffer config                                   |
| input              | input buffer                                    |
| peak               | peak counter type                               |
| <i>sel</i>         |   |
| module             | (Optional) Specify a module number              |
| <i>module</i>      | (Optional) Specify a module number              |

## Command Mode

- /exec/configure

# platform qos buffer peak monitor counter0 class

[no] { platform | hardware } qos buffer peak monitor counter0 class <classes>

## Syntax Description

### Syntax Description

|          |   |
|----------|---|
| no       | (Optional) Negate a command or set its defaults |
| platform | Platform configuration commands                 |
| hardware | Hardware Internal Information                   |
| qos      | Configure qos related configuration             |
| buffer   | buffer config                                   |
| peak     | Configure peak control                          |
| monitor  | monitor peak                                    |
| counter0 | selecting counter 0 for assigning classes       |
| class    | class(es) to monitor                            |
| classes  | qos-group                                       |

### Command Mode

- /exec/configure

# platform qos buffer peak monitor counter1 class

[no] { platform | hardware } qos buffer peak monitor counter1 class { <classes> | none }

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| platform           | Platform configuration commands                 |
| hardware           | Hardware Internal Information                   |
| qos                | Configure qos related configuration             |
| buffer             | buffer config                                   |
| peak               | Configure peak control                          |
| monitor            | monitor peak                                    |
| counter1           | selecting counter 1 for assigning classes       |
| class              | class(es) to monitor                            |
| <i>classes</i>     | qos-group                                       |
| none               | none  |

## Command Mode

- /exec/configure

# platform qos classify ns-only

[no] { platform | hardware } qos classify ns-only

## Syntax Description

|                           |          |  |
|---------------------------|----------|--|
| <b>Syntax Description</b> | no       | (Optional) Negate a command or set its defaults  |
|                           | platform | Platform configuration commands                  |
|                           | hardware | Hardware Internal Information                    |
|                           | qos      | Quality Of Service                               |
|                           | classify | Configure qos classification                     |
|                           | ns-only  | Enable qos classification on NS only in hardware |

## Command Mode

- /exec/configure

# platform qos eoq

```
[no] { platform | hardware } qos eoq { stats-class qos-group { all | <qos-grp-val> } [ module <module> ] }
```

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults             |
| platform           |            | Platform configuration commands                  |
| hardware           |            | Hardware Internal Information                    |
| qos                |            | Configure QoS related configuration              |
| eoq                |            | Extended Output Queue(EOQ) related configuration |
| stats-class        |            | Select class for which to report the statistics  |
| qos-group          |            | Qos Group  |
| <i>qos-grp-val</i> |            | QoS group value                                  |
| all                |            | all Qos Groups                                   |
| module             | (Optional) | Specify a module number                          |
| <i>module</i>      | (Optional) | Specify a module number                          |

## Command Mode

- /exec/configure

# platform qos include ipg

[no] { platform | hardware } qos include { ipg [ module <module> ] }

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults   |
| platform           | Platform configuration commands                   |
| hardware           | Hardware Internal Information                     |
| qos                | Configure qos related configuration               |
| include            | include specific configuration param              |
| ipg                | Select whether to include IPG in Shaping/Policing |
| module             | (Optional) Specify a module number                |
| <i>module</i>      | (Optional) Specify a module number                |

## Command Mode

- /exec/configure

# platform qos ing

```
[no] { platform | hardware } qos { ing-pg-share [ module <module> ] }
```

## Syntax Description

| Syntax Description |            |                                       |
|--------------------|------------|---------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults  |
| platform           |            | Platform configuration commands       |
| hardware           |            | Hardware Internal Information         |
| qos                |            | Configure qos related configuration   |
| ing-pg-share       |            | Select Ingress PG Shared Buffer Usage |
| module             | (Optional) | Specify a module number               |
| <i>module</i>      | (Optional) | Specify a module number               |

## Command Mode

- /exec/configure



# platform qos ing

[no] { platform | hardware } qos { ing-pg-no-min [ pgmin <pgmin> ] [ module <module> ] }

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| platform           |            | Platform configuration commands      |
| hardware           |            | Hardware Internal Information        |
| qos                |            | Configure qos related configuration  |
| ing-pg-no-min      |            | Enable PG Min                        |
| pgmin              | (Optional) | Set PG Min Value                     |
| <i>pgmin</i>       | (Optional) | PG Min Value                         |
| module             | (Optional) | Specify a module number              |
| <i>module</i>      | (Optional) | Specify a module number              |

## Command Mode

- /exec/configure

# platform qos mac ipg

{ platform | hardware } qos mac ipg <val> | no { platform | hardware } qos mac ipg [ <val> ]

## Syntax Description

| Syntax Description |                                      |  |
|--------------------|--------------------------------------|--|
| no                 | Negate a command or set its defaults |  |
| platform           | Platform configuration commands      |  |
| hardware           | Hardware Internal Information        |  |
| qos                | Configure qos related configuration  |  |
| mac                | MAC                                  |  |
| ipg                | Mac IPG Value                        |  |
| <i>val</i>         | new Mac IPG value in byte            |  |

## Command Mode

- /exec/configure

# platform qos ns

[no] { platform | hardware } qos { ns-buffer-profile <buff-prof-opts> [ module <module> ] }

## Syntax Description

| Syntax Description    |            |                                      |
|-----------------------|------------|--------------------------------------|
| no                    | (Optional) | Negate a command or set its defaults |
| platform              |            | Platform configuration commands      |
| hardware              |            | Hardware Internal Information        |
| qos                   |            | Configure qos related configuration  |
| ns-buffer-profile     |            | NorthStar buffer absorption profiles |
| <i>buff-prof-opts</i> |            |                                      |
| module                | (Optional) | Specify a module number              |
| <i>module</i>         | (Optional) | Specify a module number              |

## Command Mode

- /exec/configure

# platform qos q-noise percent

[no] { platform | hardware } qos q-noise percent <noise>

## Syntax Description

### Syntax Description

|          |   |
|----------|---|
| no       | (Optional) Negate a command or set its defaults           |
| platform | Platform configuration commands                           |
| hardware | Hardware Internal Information                             |
| qos      | Configure qos related configuration                       |
| q-noise  | Configure noise thresholds                                |
| percent  | Noise threshold in percentage of dynamic/static queue_max |
| noise    | Noise percent   |

## Command Mode

- /exec/configure

## platform rate-limiter

```
{ platform | hardware } rate-limiter { layer-3 { <l3-opts> | multicast <mcast-opts> } | layer-2 { <l2-opts> } | <opts> | fl <fl-opts> } { <pps> [ burst <burst> ] | disable } [ module <module> [ port <start> <end> ] ] | no { platform | hardware } rate-limiter { layer-3 { <l3-opts> | multicast <mcast-opts> } | layer-2 { <l2-opts> } | <opts> | fl <fl-opts> } [ disable ] [ <pps> ] [ burst <burst> ] [ module <module> [ port <start> <end> ] ]
```

### Syntax Description

#### Syntax Description

|                   |   |
|-------------------|---|
| no                | Negate a command or set its defaults          |
| platform          | Platform configuration commands               |
| hardware          | Hardware Internal Information                 |
| rate-limiter      | Configure Rate-Limiter for packets forwarded  |
| layer-3           | Layer-3 control and Routed packets            |
| <i>l3-opts</i>    |   |
| multicast         | Multicast data packets                        |
| <i>mcast-opts</i> |   |
| layer-2           | Layer-2 control and Bridged packets           |
| <i>l2-opts</i>    |   |
| <i>opts</i>       |   |
| <i>pps</i>        | value in packets per sec                      |
| fl                | Control packets from F1 modules to supervisor |
| <i>fl-opts</i>    |   |
| disable           | Disable the rate-limiter                      |
| module            | (Optional) Specify a module number            |
| <i>module</i>     | (Optional) Specify a module number            |
| port              | (Optional) Port range                         |
| <i>start</i>      | (Optional) Port start index                   |
| <i>end</i>        | (Optional) Port end index                     |
| burst             | (Optional) Modify burst parameter             |
| <i>burst</i>      | (Optional) value of burst size                |

### Command Mode

- /exec/configure

# platform rate-limiter

```
{ platform | hardware } rate-limiter { layer-3 { <l3-opts> | multicast <mcast-opts> } | layer-2 { <l2-opts> } | <opts> | fl <fl-opts> } { <pps> [ burst <burst> ] | disable } [ module <module> [ port <start> <end> ] ] | no { platform | hardware } rate-limiter { layer-3 { <l3-opts> | multicast <mcast-opts> } | layer-2 { <l2-opts> } | <opts> | fl <fl-opts> } [ disable ] [ <pps> ] [ burst <burst> ] [ module <module> [ port <start> <end> ] ]
```

## Syntax Description

### Syntax Description

|                   |   |
|-------------------|---|
| no                | Negate a command or set its defaults          |
| platform          | Platform configuration commands               |
| hardware          | Hardware Internal Information                 |
| rate-limiter      | Configure Rate-Limiter for packets forwarded  |
| layer-3           | Layer-3 control and Routed packets            |
| <i>l3-opts</i>    |   |
| multicast         | Multicast data packets                        |
| <i>mcast-opts</i> |   |
| layer-2           | Layer-2 control and Bridged packets           |
| <i>l2-opts</i>    |   |
| <i>opts</i>       |   |
| <i>pps</i>        | value in kbits per sec                        |
| fl                | Control packets from F1 modules to supervisor |
| <i>fl-opts</i>    |   |
| disable           | Disable the rate-limiter                      |
| module            | (Optional) Specify a module number            |
| <i>module</i>     | (Optional) Specify a module number            |
| port              | (Optional) Port range                         |
| <i>start</i>      | (Optional) Port start index                   |
| <i>end</i>        | (Optional) Port end index                     |
| burst             | (Optional) Modify burst parameter             |
| <i>burst</i>      | (Optional) value of burst size                |

## Command Mode

- /exec/configure



## platform rate-limiter access-list-log

```
{ platform | hardware } rate-limiter access-list-log { <pps> [ burst <burst> ] | disable } [ module <module> [ port <start> <end> ] ] | no { platform | hardware } rate-limiter access-list-log [ disable ] [ <pps> ] [ burst <burst> ] [ module <module> [ port <start> <end> ] ]
```

### Syntax Description

#### Syntax Description

|                 |  |
|-----------------|--|
| no              | Negate a command or set its defaults                 |
| platform        | Platform configuration commands                      |
| hardware        | Hardware Internal Information                        |
| rate-limiter    | Configure Rate-Limiter for packets forwarded         |
| access-list-log | Packets copied to supervisor for access-list logging |
| <i>pps</i>      | value in packets per sec                             |
| disable         | Disable the rate-limiter                             |
| module          | (Optional) Specify a module number                   |
| <i>module</i>   | (Optional) Specify a module number                   |
| port            | (Optional) Port range                                |
| <i>start</i>    | (Optional) Port start index                          |
| <i>end</i>      | (Optional) Port end index                            |
| burst           | (Optional) Modify burst parameter                    |
| <i>burst</i>    | (Optional) value of burst size                       |

### Command Mode

- /exec/configure

## platform rate-limiter span-egress

```
{ platform | hardware } rate-limiter span-egress <rate> [ module <module> ] | no { platform | hardware }
rate-limiter span-egress [ <rate> ] [ module <module> ]
```

### Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults         |
| platform           |  | Platform configuration commands              |
| hardware           |  | Hardware Internal Information                |
| rate-limiter       |  | Configure Rate-Limiter for packets forwarded |
| span-egress        |  | SPAN/ERSPAN egress packets                   |
| <i>rate</i>        |  | value in kbit per sec                        |
| module             |  | (Optional) Specify a module number           |
| <i>module</i>      |  | (Optional) Specify a module number           |

### Command Mode

- /exec/configure

# plb

{ plb <service-name> } | { no plb <service-name> }

## Syntax Description

| Syntax Description  |  |                                      |
|---------------------|--|--------------------------------------|
| no                  |  | Negate a command or set its defaults |
| plb                 |  | PLB service                          |
| <i>service-name</i> |  | PLB service-name                     |

## Command Mode

- /exec/configure

# plb l3-device-group

```
{ plb l3-device-group <svc-name> } | { no plb l3-device-group <svc-name> }
```

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| plb                |  | PLB service                          |
| l3-device-group    |  | PLB L3 device group                  |
| <i>svc-name</i>    |  | service-name                         |

## Command Mode

- /exec/configure

# plb session l3-device-group

```
{ plb session l3-device-group <svc-name> } | { no plb session l3-device-group <svc-name> }
```

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| plb                |  | PLB service                          |
| session            |  | PLB session                          |
| l3-device-group    |  | PLB L3 device group                  |
| <i>svc-name</i>    |  | service-name                         |

## Command Mode

- /exec/configure

# plb statistics

```
{ plb statistics <service-name> } | { no plb statistics <service-name> }
```

## Syntax Description

| Syntax Description  |  |                                      |
|---------------------|--|--------------------------------------|
| no                  |  | Negate a command or set its defaults |
| plb                 |  | PLB service                          |
| statistics          |  | PLB statistics                       |
| <i>service-name</i> |  | PLB service-name                     |

## Command Mode

- /exec/configure

# plugin-test load

plugin-test load <uri0> [ [ <uri1> ] [ <uri2> ] ]

## Syntax Description

| Syntax Description |                             |
|--------------------|-----------------------------|
| plugin-test        | PLUGIN test                 |
| load               | PLUGIN test load            |
| <i>uri0</i>        | Enter image name            |
| <i>uri1</i>        | (Optional) Enter image name |
| <i>uri2</i>        | (Optional) Enter image name |

## Command Mode

- /exec

# plugin-test unload

```
plugin-test unload <s0> [ [ <s1> ] [ <s2> ] ]
```

## Syntax Description

### Syntax Description

---

```
plugin-test PLUGIN test
```

---

```
unload plugin test unload
```

---

```
s0 Enter swid
```

---

```
s1 (Optional) Enter swid
```

---

```
s2 (Optional) Enter swid
```

---

## Command Mode

- /exec



# police

```
[no] police [ { [ cir ] { <cir-val> [ <opt_kbps_mbps_gbps_pps_cir> ] | percent <cir-perc> } } { [ [ bc ]
<bc-val> [ <opt_kbytes_mbytes_gbytes_bc> ] } ] } { [ { pir { <pir> [ <opt_kbps_mbps_gbps_pps_pir> ] |
percent1 <pir-perc> } } [ [ be ] <be-val> [ <opt_kbytes_mbytes_gbytes_be> ] ] } ] } { [ { conform {
<opt_drop_transmit_conform> | { set-cos-transmit <set-cos-val> } | { set-dscp-transmit { <set-dscp-val> |
<opt_set_dscp> } } | { set-prec-transmit { <set-prec-val> | <opt_set_prec> } } } ] [ { exceed {
<opt_drop_transmit_exceed> | { set dscp1 dscp2 table cir-markdown-map } } ] [ { violate {
<opt_drop_transmit_violate> | { set1 dscp3 dscp4 table1 pir-markdown-map } } } ] ] ] }
```

## Syntax Description

### Syntax Description

|                                    |  |
|------------------------------------|--|
| no                                 | Negate a command or set its defaults                         |
| police                             | Police   |
| cir                                | (Optional) Specify committed information rate                |
| <i>opt_kbps_mbps_gbps_pps_cir</i>  | (Optional) Units   |
| percent                            | (Optional) Specify rate as percentage of interface data-rate |
| pir                                | (Optional) Specify peak information rate                     |
| <i>opt_kbps_mbps_gbps_pps_pir</i>  | (Optional) Units   |
| percent1                           | (Optional) Specify rate as percentage of interface data-rate |
| be                                 | (Optional) Specify extended burst                            |
| <i>opt_kbytes_mbytes_gbytes_be</i> | (Optional) Units   |
| bc                                 | (Optional) Specify committed burst                           |
| <i>opt_kbytes_mbytes_gbytes_bc</i> | (Optional) Units   |
| conform                            | (Optional) Specify a conform action                          |
| <i>opt_drop_transmit_conform</i>   | (Optional) Set the action                                    |
| set-cos-transmit                   | (Optional) Set conform action cos val                        |
| <i>set-cos-val</i>                 | (Optional) 802.1Q Class of Service value                     |
| set-dscp-transmit                  | (Optional) Set conform action dscp val                       |
| <i>set-dscp-val</i>                | (Optional) DSCP value  |
| <i>opt_set_dscp</i>                | (Optional)   |
| set-prec-transmit                  | (Optional) Set conform action precedence val                 |
| <i>set-prec-val</i>                | (Optional) IP Precedence value                               |

|                                  |   |
|----------------------------------|---|
| <i>opt_set_prec</i>              | (Optional)  |
| exceed                           | (Optional) Specify a exceed action                |
| <i>opt_drop_transmit_exceed</i>  | (Optional) Set the action                         |
| set                              | (Optional) Set exceed action to cir-markdown-map  |
| dscp1                            | (Optional) Exceed from field                      |
| dscp2                            | (Optional) Exceed to field                        |
| table                            | (Optional) To specify table name                  |
| cir-markdown-map                 | (Optional) Well known markdown map                |
| violate                          | (Optional) Specify a violate action               |
| <i>opt_drop_transmit_violate</i> | (Optional) Set the action                         |
| set1                             | (Optional) Set violate action to pir-markdown-map |
| dscp3                            | (Optional) Violate from field                     |
| dscp4                            | (Optional) Violate to field                       |
| table1                           | (Optional) To specify table name                  |
| pir-markdown-map                 | (Optional) Well known markdown map                |

#### Command Mode

- /exec/configure/pmap/class

# police

```
[no] police [ { [ cir ] { <cir-val> [ <opt_kbps_mbps_gbps_pps_cir> ] | percent <cir-perc> } } { [ [ bc ]
<bc-val> [ <opt_kbytes_mbytes_gbytes_bc> ] } ] } { [ { pir { <pir> [ <opt_kbps_mbps_gbps_pps_pir> ] |
percent1 <pir-perc> } } [ [ be ] <be-val> [ <opt_kbytes_mbytes_gbytes_be> ] ] } ] } { [ { conform {
<opt_drop_transmit_conform> | { set-cos-transmit <set-cos-val> } | { set-dscp-transmit { <set-dscp-val> |
<opt_set_dscp> } } | { set-prec-transmit { <set-prec-val> | <opt_set_prec> } } } ] [ { exceed {
<opt_drop_transmit_exceed> | { set dscp1 dscp2 table cir-markdown-map } } ] [ { violate {
<opt_drop_transmit_violate> | { set1 dscp3 dscp4 table1 pir-markdown-map } } } ] ] ] }
```

## Syntax Description

### Syntax Description

|                                    |  |
|------------------------------------|--|
| no                                 | Negate a command or set its defaults                         |
| police                             | Police   |
| cir                                | (Optional) Specify committed information rate                |
| <i>opt_kbps_mbps_gbps_pps_cir</i>  | (Optional) Units   |
| percent                            | (Optional) Specify rate as percentage of interface data-rate |
| pir                                | (Optional) Specify peak information rate                     |
| <i>opt_kbps_mbps_gbps_pps_pir</i>  | (Optional) Units   |
| percent1                           | (Optional) Specify rate as percentage of interface data-rate |
| be                                 | (Optional) Specify extended burst                            |
| <i>opt_kbytes_mbytes_gbytes_be</i> | (Optional) Units   |
| bc                                 | (Optional) Specify committed burst                           |
| <i>opt_kbytes_mbytes_gbytes_bc</i> | (Optional) Units   |
| conform                            | (Optional) Specify a conform action                          |
| <i>opt_drop_transmit_conform</i>   | (Optional) Set the action                                    |
| set-cos-transmit                   | (Optional) Set conform action cos val                        |
| <i>set-cos-val</i>                 | (Optional) 802.1Q Class of Service value                     |
| set-dscp-transmit                  | (Optional) Set conform action dscp val                       |
| <i>set-dscp-val</i>                | (Optional) DSCP value  |
| <i>opt_set_dscp</i>                | (Optional)   |
| set-prec-transmit                  | (Optional) Set conform action precedence val                 |
| <i>set-prec-val</i>                | (Optional) IP Precedence value                               |

|                                  |   |
|----------------------------------|---|
| <i>opt_set_prec</i>              | (Optional)  |
| exceed                           | (Optional) Specify a exceed action                |
| <i>opt_drop_transmit_exceed</i>  | (Optional) Set the action                         |
| set                              | (Optional) Set exceed action to cir-markdown-map  |
| dscp1                            | (Optional) Exceed from field                      |
| dscp2                            | (Optional) Exceed to field                        |
| table                            | (Optional) To specify table name                  |
| cir-markdown-map                 | (Optional) Well known markdown map                |
| violate                          | (Optional) Specify a violate action               |
| <i>opt_drop_transmit_violate</i> | (Optional) Set the action                         |
| set1                             | (Optional) Set violate action to pir-markdown-map |
| dscp3                            | (Optional) Violate from field                     |
| dscp4                            | (Optional) Violate to field                       |
| table1                           | (Optional) To specify table name                  |
| pir-markdown-map                 | (Optional) Well known markdown map                |

#### Command Mode

- /exec/configure/pmap/class

# police

```
[no] police { { [ cir ] { <cir-val> [ bps | kbps | mbps | gbps | pps ] | percent <cir-perc> } [ [ bc ] {
<committed-burst> [ bytes | kbytes | mbytes | ms | us | packets ] } ] [ pir { <pir-val> [ bps2 | kbps2 | mbps2 |
gbps2 | pps2 ] | percent <pir-perc> } [ [ be ] { <extended-burst> [ bytes2 | kbytes2 | mbytes2 | ms2 | us2 |
packets2 ] } ] ] [ conform { transmit | set-prec-transmit { <prec-val> | <prec-enum> } | set-dscp-transmit {
<dscp-val> | <dscp-enum> } | set-cos-transmit <cos-val> | set-discard-class-transmit <disc-class-val> |
set-qos-transmit <qos-grp-val> | set-mpls-exp-imposition-transmit <exp-value-imp> |
set-mpls-exp-topmost-transmit <exp-value-top> } [ exceed { transmit1 | drop1 | set <exc-frm-field>
<exc-to-field> table cir-markdown-map | set-prec-transmit1 { <prec-val1> | <prec-enum1> } | set-dscp-transmit1
{ <dscp-val1> | <dscp-enum1> } | set-cos-transmit1 <cos-val1> | set-discard-class-transmit1 <disc-class-val1>
| set-qos-transmit1 <qos-grp-val1> | set-mpls-exp-imposition-transmit1 <exp-value-imp1> |
set-mpls-exp-topmost-transmit1 <exp-value-top1> } ] [ violate { drop2 | set <vio-frm-field> <vio-to-field>
table2 pir-markdown-map | set-prec-transmit2 { <prec-val2> | <prec-enum2> } | set-dscp-transmit2 {
<dscp-val2> | <dscp-enum2> } | set-cos-transmit2 <cos-val2> | set-discard-class-transmit2 <disc-class-val2>
| set-qos-transmit2 <qos-grp-val2> | set-mpls-exp-imposition-transmit2 <exp-value-imp2> |
set-mpls-exp-topmost-transmit2 <exp-value-top2> } ] ] } | aggregate <policer-name> }
```

## Syntax Description

### Syntax Description

|                 |  |
|-----------------|--|
| no              | (Optional) Negate a command or set its defaults    |
| police          | police   |
| cir             | (Optional) Specify committed information rate      |
| bc              | (Optional) Specify committed burst                 |
| percent         | Specify rate as percentage of interface data-rate  |
| <i>cir-perc</i> | Percentage   |
| <i>pir-perc</i> | (Optional) Percentage                              |
| pir             | (Optional) Specify peak information rate           |
| be              | (Optional) Specify extended burst (for 1R3C meter) |
| bps             | (Optional) Bits per second                         |
| kbps            | (Optional) Kilo bits per second                    |
| mbps            | (Optional) Mega bits per second                    |
| gbps            | (Optional) Giga bits per second                    |
| pps             | (Optional) Packets per second                      |
| bps2            | (Optional) Bits per second                         |
| kbps2           | (Optional) Kilo Bits per second                    |
| mbps2           | (Optional) Mega Bits per second                    |

|                    |                                       |
|--------------------|---------------------------------------|
| gbps2              | (Optional) Giga Bits per second       |
| pps2               | (Optional) Packets per second         |
| bytes              | (Optional) Bytes                      |
| kbytes             | (Optional) Kilo bytes                 |
| mbytes             | (Optional) Mega bytes                 |
| us                 | (Optional) Micro second(s)            |
| ms                 | (Optional) Milli second(s)            |
| packets            | (Optional) Packets                    |
| bytes2             | (Optional) Bytes                      |
| kbytes2            | (Optional) Kilo Bytes                 |
| mbytes2            | (Optional) Mega Bytes                 |
| ms2                | (Optional) Milli seconds              |
| us2                | (Optional) Micro seconds              |
| packets2           | (Optional) Packets                    |
| conform            | (Optional) Specify a conform action   |
| exceed             | (Optional) Specify a exceed action    |
| violate            | (Optional) Specify a violate action   |
| transmit           | (Optional) Transmit packet            |
| transmit1          | (Optional) Transmit packet            |
| drop1              | (Optional) Drop packet                |
| drop2              | (Optional) Drop packet                |
| set-prec-transmit  | (Optional) Set precedence and send it |
| set-prec-transmit1 | (Optional) Set precedence and send it |
| set-prec-transmit2 | (Optional) Set precedence and send it |
| <i>prec-val</i>    | (Optional) Precedence value           |
| <i>prec-val1</i>   | (Optional) Precedence value           |
| <i>prec-val2</i>   | (Optional) Precedence value           |
| <i>prec-enum</i>   | (Optional)                            |
| <i>prec-enum1</i>  | (Optional)                            |

|                                  |   |
|----------------------------------|---|
| <i>prec-enum2</i>                | (Optional)                                  |
| set-dscp-transmit                | (Optional) Set dscp and send it             |
| set-dscp-transmit1               | (Optional) Set dscp and send it             |
| set-dscp-transmit2               | (Optional) Set dscp and send it             |
| <i>dscp-val</i>                  | (Optional) DSCP value                       |
| <i>dscp-val1</i>                 | (Optional) DSCP value                       |
| <i>dscp-val2</i>                 | (Optional) DSCP value                       |
| <i>dscp-enum</i>                 | (Optional)                                  |
| <i>dscp-enum1</i>                | (Optional)                                  |
| <i>dscp-enum2</i>                | (Optional)                                  |
| set-cos-transmit                 | (Optional) Set cos and send it              |
| set-cos-transmit1                | (Optional) Set cos and send it              |
| set-cos-transmit2                | (Optional) Set cos and send it              |
| <i>cos-val</i>                   | (Optional) new cos value                    |
| <i>cos-val1</i>                  | (Optional) new cos value                    |
| <i>cos-val2</i>                  | (Optional) new cos value                    |
| set-discard-class-transmit       | (Optional) Set discard class and send it    |
| set-discard-class-transmit1      | (Optional) Set discard class and send it    |
| set-discard-class-transmit2      | (Optional) Set discard class and send it    |
| <i>disc-class-val</i>            | (Optional) new discard-class value          |
| <i>disc-class-val1</i>           | (Optional) new discard-class value          |
| <i>disc-class-val2</i>           | (Optional) new discard-class value          |
| set-qos-transmit                 | (Optional) Set qos-group and send it        |
| set-qos-transmit1                | (Optional) Set qos-group and send it        |
| set-qos-transmit2                | (Optional) Set qos-group and send it        |
| <i>qos-grp-val</i>               | (Optional) QoS group value                  |
| <i>qos-grp-val1</i>              | (Optional) QoS group value                  |
| <i>qos-grp-val2</i>              | (Optional) QoS group value                  |
| set-mpls-exp-imposition-transmit | (Optional) set-mpls-exp-imposition-transmit |

|  |   |
|--|---|
| <i>set-mpls-exp-imposition-transmit1</i> | (Optional) set-mpls-exp-imposition-transmit                   |
| <i>set-mpls-exp-imposition-transmit2</i> | (Optional) set-mpls-exp-imposition-transmit                   |
| <i>exp-value-imp</i>                     | (Optional) MPLS imposition value                              |
| <i>exp-value-imp1</i>                    | (Optional) MPLS imposition value                              |
| <i>exp-value-imp2</i>                    | (Optional) MPLS imposition value                              |
| <i>set-mpls-exp-topmost-transmit</i>     | (Optional) Set MPLS topmost label                             |
| <i>set-mpls-exp-topmost-transmit1</i>    | (Optional) Set MPLS topmost label                             |
| <i>set-mpls-exp-topmost-transmit2</i>    | (Optional) Set MPLS topmost label                             |
| <i>exp-value-top</i>                     | (Optional) MPLS topmost value                                 |
| <i>exp-value-top1</i>                    | (Optional) MPLS topmost value                                 |
| <i>exp-value-top2</i>                    | (Optional) MPLS topmost value                                 |
| <i>set</i>                               | (Optional) Set a particular value using table or markdown map |
| <i>exc-frm-field</i>                     | (Optional)  |
| <i>exc-to-field</i>                      | (Optional)  |
| <i>vio-frm-field</i>                     | (Optional)  |
| <i>vio-to-field</i>                      | (Optional)  |
| <i>table</i>                             | (Optional) Set using the table-map                            |
| <i>table2</i>                            | (Optional) Set using the table-map                            |
| <i>cir-markdown-map</i>                  | (Optional) Markdown map table name for exceed action          |
| <i>pir-markdown-map</i>                  | (Optional) Markdown map table name for violate action         |
| <i>aggregate</i>                         | Choose aggregate policer for current class                    |
| <i>policer-name</i>                      | Enter aggregate-policer name                                  |

### Command Mode

- /exec/configure/policy-map/class



# police

```
[no] police { { [ cir ] { <cir-val> [ bps | kbps | mbps | gbps ] | percent <cir-perc> } [ [ bc ] { <committed-burst>
[ bytes | kbytes | mbytes | ms | us ] } ] [ pir { <pir-val> [ bps2 | kbps2 | mbps2 | gbps2 | pps2 ] | percent <pir-perc>
} [ [ be ] { <extended-burst> [ bytes2 | kbytes2 | mbytes2 | ms2 | us2 | packets2 ] } ] ] [ conform { transmit |
set-prec-transmit { <prec-val> | <prec-enum> } | set-dscp-transmit { <dscp-val> | <dscp-enum> } |
set-cos-transmit <cos-val> | set-discard-class-transmit <disc-class-val> | set-qos-transmit <qos-grp-val> |
set-mpls-exp-imposition-transmit <exp-value-imp> | set-mpls-exp-topmost-transmit <exp-value-top> } [
exceed { drop1 | set <exc-frm-field> <exc-to-field> table cir-markdown-map | set-prec-transmit1 { <prec-val1>
| <prec-enum1> } | set-dscp-transmit1 { <dscp-val1> | <dscp-enum1> } | set-cos-transmit1 <cos-val1> |
set-discard-class-transmit1 <disc-class-val1> | set-qos-transmit1 <qos-grp-val1> |
set-mpls-exp-imposition-transmit1 <exp-value-imp1> | set-mpls-exp-topmost-transmit1 <exp-value-top1> }
] [ violate { drop2 | set <vio-frm-field> <vio-to-field> table2 pir-markdown-map | set-prec-transmit2 {
<prec-val2> | <prec-enum2> } | set-dscp-transmit2 { <dscp-val2> | <dscp-enum2> } | set-cos-transmit2
<cos-val2> | set-discard-class-transmit2 <disc-class-val2> | set-qos-transmit2 <qos-grp-val2> |
set-mpls-exp-imposition-transmit2 <exp-value-imp2> | set-mpls-exp-topmost-transmit2 <exp-value-top2> }
] ] } | aggregate <policer-name> }
```

## Syntax Description

### Syntax Description

|                 |  |
|-----------------|--|
| no              | (Optional) Negate a command or set its defaults    |
| police          | police   |
| cir             | (Optional) Specify committed information rate      |
| bc              | (Optional) Specify committed burst                 |
| percent         | Specify rate as percentage of interface data-rate  |
| <i>cir-perc</i> | Percentage   |
| <i>pir-perc</i> | (Optional) Percentage                              |
| pir             | (Optional) Specify peak information rate           |
| be              | (Optional) Specify extended burst (for 1R3C meter) |
| bps             | (Optional) Bits per second                         |
| kbps            | (Optional) Kilo bits per second                    |
| mbps            | (Optional) Mega bits per second                    |
| gbps            | (Optional) Giga bits per second                    |
| bps2            | (Optional) Bits per second                         |
| kbps2           | (Optional) Kilo Bits per second                    |
| mbps2           | (Optional) Mega Bits per second                    |
| gbps2           | (Optional) Giga Bits per second                    |

|                    |                                       |
|--------------------|---------------------------------------|
| pps2               | (Optional) Packets per second         |
| bytes              | (Optional) Bytes                      |
| kbytes             | (Optional) Kilo bytes                 |
| mbytes             | (Optional) Mega bytes                 |
| us                 | (Optional) Micro second(s)            |
| ms                 | (Optional) Milli second(s)            |
| bytes2             | (Optional) Bytes                      |
| kbytes2            | (Optional) Kilo Bytes                 |
| mbytes2            | (Optional) Mega Bytes                 |
| ms2                | (Optional) Milli seconds              |
| us2                | (Optional) Micro seconds              |
| packets2           | (Optional) Packets                    |
| conform            | (Optional) Specify a conform action   |
| exceed             | (Optional) Specify a exceed action    |
| violate            | (Optional) Specify a violate action   |
| transmit           | (Optional) Transmit packet            |
| drop1              | (Optional) Drop packet                |
| drop2              | (Optional) Drop packet                |
| set-prec-transmit  | (Optional) Set precedence and send it |
| set-prec-transmit1 | (Optional) Set precedence and send it |
| set-prec-transmit2 | (Optional) Set precedence and send it |
| <i>prec-val</i>    | (Optional) Precedence value           |
| <i>prec-val1</i>   | (Optional) Precedence value           |
| <i>prec-val2</i>   | (Optional) Precedence value           |
| <i>prec-enum</i>   | (Optional)                            |
| <i>prec-enum1</i>  | (Optional)                            |
| <i>prec-enum2</i>  | (Optional)                            |
| set-dscp-transmit  | (Optional) Set dscp and send it       |
| set-dscp-transmit1 | (Optional) Set dscp and send it       |

|  |   |
|--|---|
| <code>set-dscp-transmit2</code>                | (Optional) Set dscp and send it             |
| <code>dscp-val</code>                          | (Optional) DSCP value                       |
| <code>dscp-val1</code>                         | (Optional) DSCP value                       |
| <code>dscp-val2</code>                         | (Optional) DSCP value                       |
| <code>dscp-enum</code>                         | (Optional)                                  |
| <code>dscp-enum1</code>                        | (Optional)                                  |
| <code>dscp-enum2</code>                        | (Optional)                                  |
| <code>set-cos-transmit</code>                  | (Optional) Set cos and send it              |
| <code>set-cos-transmit1</code>                 | (Optional) Set cos and send it              |
| <code>set-cos-transmit2</code>                 | (Optional) Set cos and send it              |
| <code>cos-val</code>                           | (Optional) new cos value                    |
| <code>cos-val1</code>                          | (Optional) new cos value                    |
| <code>cos-val2</code>                          | (Optional) new cos value                    |
| <code>set-discard-class-transmit</code>        | (Optional) Set discard class and send it    |
| <code>set-discard-class-transmit1</code>       | (Optional) Set discard class and send it    |
| <code>set-discard-class-transmit2</code>       | (Optional) Set discard class and send it    |
| <code>disc-class-val</code>                    | (Optional) new discard-class value          |
| <code>disc-class-val1</code>                   | (Optional) new discard-class value          |
| <code>disc-class-val2</code>                   | (Optional) new discard-class value          |
| <code>set-qos-transmit</code>                  | (Optional) Set qos-group and send it        |
| <code>set-qos-transmit1</code>                 | (Optional) Set qos-group and send it        |
| <code>set-qos-transmit2</code>                 | (Optional) Set qos-group and send it        |
| <code>qos-grp-val</code>                       | (Optional) QoS group value                  |
| <code>qos-grp-val1</code>                      | (Optional) QoS group value                  |
| <code>qos-grp-val2</code>                      | (Optional) QoS group value                  |
| <code>set-mpls-exp-imposition-transmit</code>  | (Optional) set-mpls-exp-imposition-transmit |
| <code>set-mpls-exp-imposition-transmit1</code> | (Optional) set-mpls-exp-imposition-transmit |
| <code>set-mpls-exp-imposition-transmit2</code> | (Optional) set-mpls-exp-imposition-transmit |
| <code>exp-value-imp</code>                     | (Optional) MPLS imposition value            |

|                                |   |
|--------------------------------|---|
| <i>exp-value-imp1</i>          | (Optional) MPLS imposition value                              |
| <i>exp-value-imp2</i>          | (Optional) MPLS imposition value                              |
| set-mpls-exp-topmost-transmit  | (Optional) Set MPLS topmost label                             |
| set-mpls-exp-topmost-transmit1 | (Optional) Set MPLS topmost label                             |
| set-mpls-exp-topmost-transmit2 | (Optional) Set MPLS topmost label                             |
| <i>exp-value-top</i>           | (Optional) MPLS topmost value                                 |
| <i>exp-value-top1</i>          | (Optional) MPLS topmost value                                 |
| <i>exp-value-top2</i>          | (Optional) MPLS topmost value                                 |
| set                            | (Optional) Set a particular value using table or markdown map |
| <i>exc-frm-field</i>           | (Optional)  |
| <i>exc-to-field</i>            | (Optional)  |
| <i>vio-frm-field</i>           | (Optional)  |
| <i>vio-to-field</i>            | (Optional)  |
| table                          | (Optional) Set using the table-map                            |
| table2                         | (Optional) Set using the table-map                            |
| cir-markdown-map               | (Optional) Markdown map table name for exceed action          |
| pir-markdown-map               | (Optional) Markdown map table name for violate action         |
| aggregate                      | Choose aggregate policer for current class                    |
| <i>policer-name</i>            | Enter aggregate-policer name                                  |

### Command Mode

- /exec/configure/policy-map/class

## police police pps

```

police { [ cir ] { <cir-val> [ <opt_kbps_mbps_gbps_pps_cir> ] | percent <cir-perc> } } [ { [ bc ] <bc-val>
[ <opt_kbytes_mbytes_gbytes_bc> ] } ] } [ { [ pir ] { <pir> [ <opt_kbps_mbps_gbps_pps_pir> ] | percent1
<pir-perc> } } [ [ be ] <be-val> [ <opt_kbytes_mbytes_gbytes_be> ] } ] } [ { conform {
<opt_drop_transmit_conform> | { set-cos-transmit <set-cos-val> } | { set-dscp-transmit { <set-dscp-val> |
<opt_set_dscp> } } | { set-prec-transmit { <set-prec-val> | <opt_set_prec> } } } ] [ { exceed {
<opt_drop_transmit_exceed> | { set dscp1 dscp2 table cir-markdown-map } } } ] [ { violate {
<opt_drop_transmit_violate> | { set1 dscp3 dscp4 table1 pir-markdown-map } } } ] } | police { pps {
<pps-val> } }

```

### Syntax Description

#### Syntax Description

|                                    |  |
|------------------------------------|--|
| police                             | Police   |
| cir                                | (Optional) Specify committed information rate                |
| <i>opt_kbps_mbps_gbps_pps_cir</i>  | (Optional) Units   |
| percent                            | Specify rate as percentage of interface data-rate            |
| pir                                | (Optional) Specify peak information rate                     |
| <i>opt_kbps_mbps_gbps_pps_pir</i>  | (Optional) Units   |
| percent1                           | (Optional) Specify rate as percentage of interface data-rate |
| be                                 | (Optional) Specify extended burst                            |
| <i>opt_kbytes_mbytes_gbytes_be</i> | (Optional) Units   |
| bc                                 | (Optional) Specify committed burst                           |
| <i>opt_kbytes_mbytes_gbytes_bc</i> | (Optional) Units   |
| conform                            | (Optional) Specify a conform action                          |
| <i>opt_drop_transmit_conform</i>   | (Optional) Set the action                                    |
| set-cos-transmit                   | (Optional) Set conform action cos val                        |
| <i>set-cos-val</i>                 | (Optional) 802.1Q Class of Service value                     |
| set-dscp-transmit                  | (Optional) Set conform action dscp val                       |
| <i>set-dscp-val</i>                | (Optional) DSCP value  |
| <i>opt_set_dscp</i>                | (Optional)   |
| set-prec-transmit                  | (Optional) Set conform action precedence val                 |
| <i>set-prec-val</i>                | (Optional) IP Precedence value                               |
| <i>opt_set_prec</i>                | (Optional)   |

|                                  |   |
|----------------------------------|---|
| exceed                           | (Optional) Specify a exceed action                |
| <i>opt_drop_transmit_exceed</i>  | (Optional) Set the action                         |
| set                              | (Optional) Set exceed action to cir-markdown-map  |
| dscp1                            | (Optional) Exceed from field                      |
| dscp2                            | (Optional) Exceed to field                        |
| table                            | (Optional) To specify table name                  |
| cir-markdown-map                 | (Optional) Well known markdown map                |
| violate                          | (Optional) Specify a violate action               |
| <i>opt_drop_transmit_violate</i> | (Optional) Set the action                         |
| set1                             | (Optional) Set violate action to pir-markdown-map |
| dscp3                            | (Optional) Violate from field                     |
| dscp4                            | (Optional) Violate to field                       |
| table1                           | (Optional) To specify table name                  |
| pir-markdown-map                 | (Optional) Well known markdown map                |
| pps                              | Specify PPS rate limit                            |

### Command Mode

- /exec/configure/pmap/class

## police police pps

```

police { [ cir ] { <cir-val> [ <opt_kbps_mbps_gbps_pps_cir> ] | percent <cir-perc> } } [ { [ bc ] <bc-val>
[ <opt_kbytes_mbytes_gbytes_bc> ] } ] } [ { { pir { <pir> [ <opt_kbps_mbps_gbps_pps_pir> ] | percent1
<pir-perc> } } [ [ be ] <be-val> [ <opt_kbytes_mbytes_gbytes_be> ] ] } ] } [ { conform {
<opt_drop_transmit_conform> | { set-cos-transmit <set-cos-val> } | { set-dscp-transmit { <set-dscp-val> |
<opt_set_dscp> } } | { set-prec-transmit { <set-prec-val> | <opt_set_prec> } } } ] [ { exceed {
<opt_drop_transmit_exceed> | { set dscp1 dscp2 table cir-markdown-map } } } ] [ { violate {
<opt_drop_transmit_violate> | { set1 dscp3 dscp4 table1 pir-markdown-map } } } ] ] | police { pps {
<pps-val> } }

```

### Syntax Description

#### Syntax Description

|                                    |  |
|------------------------------------|--|
| police                             | Police   |
| cir                                | (Optional) Specify committed information rate                |
| <i>opt_kbps_mbps_gbps_pps_cir</i>  | (Optional) Units   |
| percent                            | Specify rate as percentage of interface data-rate            |
| pir                                | (Optional) Specify peak information rate                     |
| <i>opt_kbps_mbps_gbps_pps_pir</i>  | (Optional) Units   |
| percent1                           | (Optional) Specify rate as percentage of interface data-rate |
| be                                 | (Optional) Specify extended burst                            |
| <i>opt_kbytes_mbytes_gbytes_be</i> | (Optional) Units   |
| bc                                 | (Optional) Specify committed burst                           |
| <i>opt_kbytes_mbytes_gbytes_bc</i> | (Optional) Units   |
| conform                            | (Optional) Specify a conform action                          |
| <i>opt_drop_transmit_conform</i>   | (Optional) Set the action                                    |
| set-cos-transmit                   | (Optional) Set conform action cos val                        |
| <i>set-cos-val</i>                 | (Optional) 802.1Q Class of Service value                     |
| set-dscp-transmit                  | (Optional) Set conform action dscp val                       |
| <i>set-dscp-val</i>                | (Optional) DSCP value  |
| <i>opt_set_dscp</i>                | (Optional)   |
| set-prec-transmit                  | (Optional) Set conform action precedence val                 |
| <i>set-prec-val</i>                | (Optional) IP Precedence value                               |
| <i>opt_set_prec</i>                | (Optional)   |

|                                  |   |
|----------------------------------|---|
| exceed                           | (Optional) Specify a exceed action                |
| <i>opt_drop_transmit_exceed</i>  | (Optional) Set the action                         |
| set                              | (Optional) Set exceed action to cir-markdown-map  |
| dscp1                            | (Optional) Exceed from field                      |
| dscp2                            | (Optional) Exceed to field                        |
| table                            | (Optional) To specify table name                  |
| cir-markdown-map                 | (Optional) Well known markdown map                |
| violate                          | (Optional) Specify a violate action               |
| <i>opt_drop_transmit_violate</i> | (Optional) Set the action                         |
| set1                             | (Optional) Set violate action to pir-markdown-map |
| dscp3                            | (Optional) Violate from field                     |
| dscp4                            | (Optional) Violate to field                       |
| table1                           | (Optional) To specify table name                  |
| pir-markdown-map                 | (Optional) Well known markdown map                |
| pps                              | Specify PPS rate limit                            |

### Command Mode

- /exec/configure/pmap/class



# policy-map

[no] policy-map [ type qos ] [ match-first ] <pmap-name-qos>

## Syntax Description

| Syntax Description   |            |  |
|----------------------|------------|--|
| no                   | (Optional) | Negate a command or set its defaults             |
| policy-map           |            | Configure a policy map                           |
| type                 | (Optional) | Specify the type of this policy-map              |
| qos                  | (Optional) | Qos policy                                       |
| match-first          | (Optional) | Take the action for the first class that matches |
| <i>pmap-name-qos</i> |            | Policy-map name (alphanumeric)                   |

## Command Mode

- /exec/configure

# policy-map type control-plane

[no] policy-map type control-plane <pmap-name>

## Syntax Description

|                           |                  |   |
|---------------------------|------------------|---|
| <b>Syntax Description</b> | no               | (Optional) Negate a command or set its defaults |
|                           | policy-map       | Configure a policy map                          |
|                           | type             | Specify the type of this policy-map             |
|                           | control-plane    | Control-Plane                                   |
|                           | <i>pmap-name</i> | Policy-map name (alphanumeric)                  |

## Command Mode

- /exec/configure

# policy-map type network-qos

[no] policy-map type network-qos <pmap-name-nq>

## Syntax Description

| Syntax Description  |            |                                      |
|---------------------|------------|--------------------------------------|
| no                  | (Optional) | Negate a command or set its defaults |
| policy-map          |            | Configure a policy map               |
| type                |            | Specify the type of this policy-map  |
| network-qos         |            | Network QoS policy                   |
| <i>pmap-name-nq</i> |            | Policy-map name                      |

## Command Mode

- /exec/configure

## policy-map type psp

```
[no] policy-map type psp { <pmap-name-plc> | { handle <ppf_id> } } [ table <table_type> ] [ client <clienttype> <clientID> ]
```

### Syntax Description

| Syntax Description   |            |                                      |
|----------------------|------------|--------------------------------------|
| no                   | (Optional) | Negate a command or set its defaults |
| policy-map           |            | Configure a policy map               |
| type                 |            | Specify the type of this policy-map  |
| psp                  |            | PSP policy                           |
| <i>pmap-name-plc</i> |            | Policy-map name (alphanumeric)       |
| handle               |            | Handle                               |
| <i>ppf_id</i>        |            | PPF ID                               |
| table                | (Optional) | table                                |
| <i>table_type</i>    | (Optional) | Table Type                           |
| client               | (Optional) | set client type                      |
| <i>clienttype</i>    | (Optional) | cli/onep                             |
| <i>clientID</i>      | (Optional) | client appID                         |

### Command Mode

- /exec/configure

# policy-map type queuing

[no] policy-map type queuing [ match-first ] <pmap-name-que>

## Syntax Description

| Syntax Description   |            |  |
|----------------------|------------|--|
| no                   | (Optional) | Negate a command or set its defaults             |
| policy-map           |            | Configure a policy map                           |
| type                 |            | Specify the type of this policy-map              |
| queuing              |            | Queuing policy                                   |
| match-first          | (Optional) | Take the action for the first class that matches |
| <i>pmap-name-que</i> |            | Policy-map name (alphanumeric)                   |

## Command Mode

- /exec/configure

# policy

policy { { dynamic identity <device-id> } | { static sgt <sgt> [ trusted ] } } | no policy static | no policy dynamic

## Syntax Description

### Syntax Description

|                  |  |
|------------------|--|
| policy           | Enable and define policy to be applied             |
| dynamic          | apply to authorization server for policy           |
| identity         | specify identity of peer for authorization request |
| <i>device-id</i> | peer's device-id                                   |
| static           | configure static policy                            |
| sgt              | SGT tag for pkts from this device                  |
| <i>sgt</i>       | sgt value  |
| trusted          | (Optional) specify trust state of the link         |

## Command Mode

- /exec/configure/cts-manual

# policy

[no] policy <name>

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

policy NBM Flow policy

---

*name* Policy name

---

## Command Mode

- /exec/configure/nbm-flow

# pop

pop [ <name> ]

## Syntax Description

---

**Syntax Description**

---

pop    pop mode from stack or restore from name

---

*name*    (Optional) name

---

## Command Mode

- /global



# port-channel limit

port-channel limit | no port-channel limit

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | Negate a command or set its defaults           |
| port-channel       | Configure the maximum number of supported vPCs |
| limit              | limit to 244 vPCs                              |

## Command Mode

- /exec/configure/vpc-domain

## port-channel load-balance

```
port-channel load-balance <bndl_hash> <bndl_sel> [ rotate <po-lb-rotate-range> ] [ concatenation ] [ module
<module> | fex all ] [ symmetric ] | no port-channel load-balance [ <bndl_hash> <bndl_sel> [ rotate
<po-lb-rotate-range> ] [ concatenation ] [ module <module> | fex all ] [ symmetric ] ]
```

### Syntax Description

#### Syntax Description

|                           |  |
|---------------------------|--|
| no                        | Negate a command or set its defaults                   |
| port-channel              | Configure port channel parameters                      |
| load-balance              | Configure port-channel load balance                    |
| <i>bndl_hash</i>          | bundle hash  |
| <i>bndl_sel</i>           | bundle select  |
| rotate                    | (Optional) offset the hash-input                       |
| <i>po-lb-rotate-range</i> | (Optional) offset the hash-input                       |
| concatenation             | (Optional) enable/disable concatenation                |
| module                    | (Optional) Specify a module number                     |
| <i>module</i>             | (Optional) Specify a module number                     |
| fex                       | (Optional) FEX devices                                 |
| all                       | (Optional) Permit all FEX to configure port-channel LB |
| symmetric                 | (Optional) symmetric load balancing                    |

### Command Mode

- /exec/configure

# port-channel load-balance1 ethernet

port-channel load-balance1 ethernet <algorithm> [ symmetric ] | no port-channel load-balance1 ethernet [ <algorithm> [ symmetric ] ]

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| port-channel       |  | Configure port channel parameters    |
| load-balance1      |  | Configure port-channel load balance  |
| ethernet           |  | Ethernet port-channel                |
| <i>algorithm</i>   |  | Configure port-channel load balance  |
| symmetric          |  | (Optional) symmetric load balancing  |

## Command Mode

- /exec/configure

# port-channel load-balance2 resilient

port-channel load-balance2 resilient | no port-channel load-balance2 resilient

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults               |
| port-channel       |  | Configure port channel parameters                  |
| load-balance2      |  | Configure port-channel load balance                |
| resilient          |  | Configure port-channel load balance resilient mode |

## Command Mode

- /exec/configure

# port-channel load-balance ethernet

port-channel load-balance ethernet <algorithm> [ module <module> ] | no port-channel load-balance ethernet [ <algorithm> [ module <module> ] ]

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| port-channel       |  | Configure port channel parameters    |
| load-balance       |  | Configure port-channel load balance  |
| ethernet           |  | Ethernet port-channel                |
| module             |  | (Optional) Specify a module number   |
| <i>module</i>      |  | (Optional) Specify a module number   |
| <i>algorithm</i>   |  | Configure port-channel load balance  |

## Command Mode

- /exec/configure

## port-channel load-balance hash-modulo-f2

[no] port-channel load-balance hash-modulo-f2

### Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| port-channel       | Configure port channel parameters               |
| load-balance       | Configure port-channel load balance             |
| hash-modulo-f2     | Enable/disable modulo hash for N7K-F248XP cards |

### Command Mode

- /exec/configure

# port-channel load-balance hash enable

[no] port-channel load-balance hash enable

## Syntax Description

|                           |              |   |
|---------------------------|--------------|---|
| <b>Syntax Description</b> | no           | (Optional) Negate a command or set its defaults |
|                           | port-channel | Configure port channel parameters               |
|                           | load-balance | Configure port-channel load balance             |
|                           | hash         | hash enhancement                                |
|                           | enable       | enable  |

## Command Mode

- /exec/configure

# port-channel load-balance internal

port-channel load-balance internal <algorithm> | no port-channel load-balance internal <algorithm>

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults                  |
| port-channel       |  | Configure port channel parameters                     |
| load-balance       |  | Configure port-channel load balance                   |
| internal           |  | Configure port-channel load balance internal commands |
| <i>algorithm</i>   |  | Configure port-channel load balance internal mode     |

## Command Mode

- /exec/configure



# port-channel load-balance internal dynamic-pin

port-channel load-balance internal dynamic-pin | no port-channel load-balance internal dynamic-pin

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | Negate a command or set its defaults                  |
| port-channel       | Configure port channel parameters                     |
| load-balance       | Configure port-channel load balance                   |
| internal           | Configure port-channel load balance internal commands |
| dynamic-pin        | Configure port-channel load balance internal commands |

## Command Mode

- /exec/configure

## port-channel load-balance internal rtag7

port-channel load-balance internal rtag7 <algorithm> | no port-channel load-balance internal rtag7 <algorithm>

### Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults                  |
| port-channel       |  | Configure port channel parameters                     |
| load-balance       |  | Configure port-channel load balance                   |
| internal           |  | Configure port-channel load balance internal commands |
| rtag7              |  | Configure port-channel load balance internal commands |
| <i>algorithm</i>   |  | Configure port-channel load balance internal mode     |

### Command Mode

- /exec/configure

# port-group

{ port-group <name> } | { no port-group <name> }

## Syntax Description

|                           |             |                                      |
|---------------------------|-------------|--------------------------------------|
| <b>Syntax Description</b> | no          | Negate a command or set its defaults |
|                           | port-group  | catena port group                    |
|                           | <i>name</i> | catena port group name               |

## Command Mode

- /exec/configure/catena

# port-group

{ port-group <name> } | { no port-group <name> }

## Syntax Description

|                           |             |                                      |
|---------------------------|-------------|--------------------------------------|
| <b>Syntax Description</b> | no          | Negate a command or set its defaults |
|                           | port-group  | smart channel port group             |
|                           | <i>name</i> | smart channel port group name        |

## Command Mode

- /exec/configure/smartc

# port-profile

```
[no] port-profile [ type <typeval> ] { <profilename> | <s0> }
```

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| port-profile       | Configure a port-profile                        |
| <i>profilename</i> | Enter the name of the profile                   |
| <i>s0</i>          | Enter the name of the profile                   |
| type               | (Optional) configure type of the profile        |
| <i>typeval</i>     | (Optional)                                      |

## Command Mode

- /exec/configure

# port-profile dump

[no] port-profile dump

## Syntax Description

---

### Syntax Description

---

|    |   |
|----|---|
| no | (Optional) Negate a command or set its defaults |
|----|---|

---

|              |                   |
|--------------|-------------------|
| port-profile | Dump port-profile |
|--------------|-------------------|

---

|      |   |
|------|---|
| dump | Dump all additional information from database |
|------|---|

---

## Command Mode

- /exec

# port-profile no-redirect

[no] port-profile no-redirect

## Syntax Description

|                           |              |   |
|---------------------------|--------------|---|
| <b>Syntax Description</b> | no           | (Optional) Negate a command or set its defaults |
|                           | port-profile | Show port-profile information                   |
|                           | no-redirect  | Disable port-profile redirection                |

## Command Mode

- /exec

# port

```
{ port <tportnum> } | { no port [ <tportnum-ignore> ] }
```

## Syntax Description

| Syntax Description     |            |                                      |
|------------------------|------------|--------------------------------------|
| no                     |            | Negate a command or set its defaults |
| port                   |            | Port number                          |
| <i>tportnum</i>        |            | Port number, default: 15002          |
| <i>tportnum-ignore</i> | (Optional) | Port number, default: 15002          |

## Command Mode

- /exe/configure/onep/tls



# port control

[no] port control <port-control-name>

## Syntax Description

| Syntax Description       |            |                                      |
|--------------------------|------------|--------------------------------------|
| no                       | (Optional) | Negate a command or set its defaults |
| port                     |            | ITD port                             |
| control                  |            | control                              |
| <i>port-control-name</i> |            | Port control name                    |

## Command Mode

- /exec/configure/itd-inout

# port control

[no] port control <port-control-name>

## Syntax Description

| Syntax Description |                          |   |
|--------------------|--------------------------|---|
|                    | no                       | (Optional) Negate a command or set its defaults |
|                    | port                     | ITD port  |
|                    | control                  | control   |
|                    | <i>port-control-name</i> | Port control name                               |

## Command Mode

- /exec/configure/itd-inout

# port control

[no] port control <port-control-name>

## Syntax Description

| Syntax Description       |            |                                      |
|--------------------------|------------|--------------------------------------|
| no                       | (Optional) | Negate a command or set its defaults |
| port                     |            | PLB port                             |
| control                  |            | control                              |
| <i>port-control-name</i> |            | Port control name                    |

## Command Mode

- /exec/configure/plb-inout

## port destination

```
{ port { destination | source } <port> } | { no port { destination | source } }
```

### Syntax Description

| Syntax Description |  |                                       |
|--------------------|--|---------------------------------------|
| no                 |  | Negate a command or set its defaults  |
| port               |  | specify flow port address             |
| source             |  | specify flow source port address      |
| destination        |  | specify flow destination port address |
| <i>port</i>        |  | port number                           |

### Command Mode

- /exec/configure/configngoamprofileflow

# power efficient-ethernet auto

[no] power efficient-ethernet auto

## Syntax Description

| Syntax Description |            |   |
|--------------------|------------|---|
| no                 | (Optional) | Negate a command or set its defaults      |
| power              |            | Configure EEE for the port                |
| efficient-ethernet |            | Configure Energy Efficient Ethernet (EEE) |
| auto               |            | Auto negotiate EEE                        |

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-eth-base

# power efficient-ethernet sleep threshold aggressive

[no] power efficient-ethernet sleep threshold aggressive

## Syntax Description

| Syntax Description |            |   |
|--------------------|------------|---|
| no                 | (Optional) | Negate a command or set its defaults          |
| power              |            | Configure EEE for the port                    |
| efficient-ethernet |            | Configure Energy Efficient Ethernet (EEE)     |
| sleep              |            | EEE LPI sleep configuration                   |
| threshold          |            | EEE LPI sleep threshold                       |
| aggressive         |            | Enable/ Disable EEE LPI aggressive sleep mode |

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-eth-base

# power redundancy-mode combined

[no] power redundancy-mode combined

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 | (Optional) Negate a command or set its defaults    |  |
| power              | Configure power supply                             |  |
| redundancy-mode    | Configure power supply redundancy mode             |  |
| combined           | Configure power supply redundancy mode as combined |  |

## Command Mode

- /exec/configure

# power redundancy-mode combined force

[no] power redundancy-mode combined force

## Syntax Description

| Syntax Description |                 |  |
|--------------------|-----------------|--|
|                    | no              | (Optional) Negate a command or set its defaults    |
|                    | power           | Configure power supply                             |
|                    | redundancy-mode | Configure power supply redundancy mode             |
|                    | combined        | Configure power supply redundancy mode as combined |
|                    | force           | Force combined mode without prompting              |

## Command Mode

- /exec/configure



# power redundancy-mode insrc-redundant

[no] power redundancy-mode insrc-redundant

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults                          |
| power              | Configure power supply   |
| redundancy-mode    | Configure power supply redundancy mode                                   |
| insrc-redundant    | Configure power supply redundancy mode as grid/AC input source redundant |

## Command Mode

- /exec/configure

# power redundancy-mode ps-redundant

[no] power redundancy-mode ps-redundant

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults                   |
| power              |            | Configure power supply                                 |
| redundancy-mode    |            | Configure power supply redundancy mode                 |
| ps-redundant       |            | Configure power supply redundancy mode as PS redundant |

## Command Mode

- /exec/configure

## power reserve

[no] power reserve <percentage>

### Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| power              | Configure power supply                          |
| reserve            | Override default power reservation              |
| <i>percentage</i>  | please enter a percentage                       |

### Command Mode

- /exec/configure

# poweroff

[no] poweroff { module <module> | <s0> <santa-cruz-range> }

## Syntax Description

| Syntax Description      |            |                                      |
|-------------------------|------------|--------------------------------------|
| no                      | (Optional) | Negate a command or set its defaults |
| poweroff                |            | Power off a module in the switch     |
| module                  |            | enter a module number                |
| <i>module</i>           |            | please enter the module number       |
| <i>s0</i>               |            | Power off a specific xbar            |
| <i>santa-cruz-range</i> |            | please enter the xbar number         |

## Command Mode

- /exec/configure

# pps

pps <pps> <burst> | no pps [ <pps> ] [ <burst> ]

## Syntax Description

|                           |              |                                      |
|---------------------------|--------------|--------------------------------------|
| <b>Syntax Description</b> | <i>no</i>    | Negate a command or set its defaults |
|                           | <i>pps</i>   | OSPF packets per second              |
|                           | <i>pps</i>   | Packets per second value             |
|                           | <i>burst</i> | Burst value                          |

## Command Mode

- /exec/configure/router-ospf /exec/configure/router-ospf/vrf

# pps

pps <pps> <burst> | no pps [ <pps> ] [ <burst> ]

## Syntax Description

|                           |              |                                      |
|---------------------------|--------------|--------------------------------------|
| <b>Syntax Description</b> | no           | Negate a command or set its defaults |
|                           | pps          | OSPFv3 packets per second            |
|                           | <i>pps</i>   | Packets per second value             |
|                           | <i>burst</i> | Burst value                          |

## Command Mode

- /exec/configure/router-ospf3 /exec/configure/router-ospf3/vrf

# precision milliseconds

{ { no | default } precision | precision { milliseconds | microseconds } }

## Syntax Description

| Syntax Description |                               |
|--------------------|-------------------------------|
| no                 |                               |
| <i>precision</i>   | milliseconds                  |
| default            | Set a command to its defaults |
| precision          | Set precision of measurement  |
| microseconds       | Precision microseconds        |
| milliseconds       | Precision milliseconds        |

## Command Mode

- /exec/configure/ip-sla/jitter

# preempt

[no] preempt [ delay { minimum <min-delay> } ]

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| preempt            | Overthrow lower priority designated routers     |
| delay              | (Optional) Wait before preempting               |
| minimum            | (Optional) Delay atleast this long              |
| <i>min-delay</i>   | (Optional) Number of seconds for minimum delay  |

## Command Mode

- /exec/configure/if-eth-any/global



# preempt

[no] preempt | preempt

## Syntax Description

---

**Syntax Description**

---

no      Negate a command or set its defaults

---

preempt    Enable preemption of lower priority Master

---

## Command Mode

- /exec/configure/if-eth-any/vrrpv3

# preempt

[no] preempt

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

preempt Enable preemption of lower priority master

---

## Command Mode

- /exec/configure/if-eth-any/vrrp

# preempt delay minimum

[no] preempt delay | preempt delay minimum <secs>

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | Negate a command or set its defaults       |
| preempt            | Enable preemption of lower priority Master |
| delay              | Wait before preempting                     |
| minimum            | Delay at least this long                   |
| secs               | Seconds to delay                           |

## Command Mode

- /exec/configure/if-eth-any/vrrpv3

```
preempt delay minimum reload sync preempt delay reload minimum sync preempt delay sync minimum reload preempt delay reload sync minimum preempt
delay sync reload minimum preempt delay minimum sync reload preempt delay reload sync preempt delay sync reload preempt delay minimum sync preempt
delay sync minimum preempt delay minimum reload preempt delay reload minimum preempt delay minimum preempt delay reload preempt delay sync preempt
```

# preempt delay minimum reload sync preempt delay reload minimum sync preempt delay sync minimum reload preempt delay reload sync minimum preempt delay sync reload minimum preempt delay minimum sync reload preempt delay reload sync preempt delay sync reload preempt delay minimum sync preempt delay sync minimum preempt delay minimum reload preempt delay reload minimum preempt delay minimum preempt delay reload preempt delay sync preempt

```
preempt delay minimum <min-delay> reload <rel-delay> sync <sync-delay> | preempt delay reload <rel-delay>
minimum <min-delay> sync <sync-delay> | preempt delay sync <sync-delay> minimum <min-delay> reload
<rel-delay> | preempt delay reload <rel-delay> sync <sync-delay> minimum <min-delay> | preempt delay
sync <sync-delay> reload <rel-delay> minimum <min-delay> | preempt delay minimum <min-delay> sync
<sync-delay> reload <rel-delay> | preempt delay reload <rel-delay> sync <sync-delay> | preempt delay sync
<sync-delay> reload <rel-delay> | preempt delay minimum <min-delay> sync <sync-delay> | preempt delay
sync <sync-delay> minimum <min-delay> | preempt delay minimum <min-delay> reload <rel-delay> | preempt
delay reload <rel-delay> | preempt delay sync <sync-delay> | preempt | no preempt | no preempt delay [ { minimum
[ <min-delay> ] [ [ reload [ <rel-delay> ] ] [ sync [ <sync-delay> ] ] [ sync [ <sync-delay> ] ] [ reload [
<rel-delay> ] ] ] | reload [ <rel-delay> ] [ [ minimum [ <min-delay> ] ] [ sync [ <sync-delay> ] ] [ sync [
<sync-delay> ] ] [ minimum [ <min-delay> ] ] ] | sync [ <sync-delay> ] [ [ reload [ <rel-delay> ] ] [ minimum
[ <min-delay> ] ] ] [ minimum [ <min-delay> ] ] [ reload [ <rel-delay> ] ] ] } ]
```

## Syntax Description

| Syntax Description | Description                             |
|--------------------|---|
| no                 | Negate a command or set its defaults    |
| preempt            | Overthrow lower priority Active routers |
| delay              | Wait before preempting                  |
| minimum            | Delay at least this long                |
| <i>min-delay</i>   | Number of seconds for minimum delay     |
| reload             | Delay after reload                      |
| <i>rel-delay</i>   | Number of seconds for reload delay      |
| sync               | Wait for IP redundancy clients          |
| <i>sync-delay</i>  | Number of seconds for sync delay        |
| <i>minimum</i>     | reload                                  |

preempt delay minimum reload sync preempt delay reload minimum sync preempt delay sync minimum reload preempt delay reload sync minimum preempt  
delay sync reload minimum preempt delay minimum sync reload preempt delay reload sync preempt delay sync reload preempt delay minimum sync preempt  
delay sync minimum preempt delay minimum reload preempt delay reload minimum preempt delay minimum preempt delay reload preempt delay sync preempt

### Command Mode

- /exec/configure/if-eth-any/hsrp\_ipv4 /exec/configure/if-eth-any/hsrp\_ipv6

# prefix out

[ no | default ] { prefix-list <prfxlist-name> } { out | in }

## Syntax Description

| Syntax Description   |            |                                      |
|----------------------|------------|--------------------------------------|
| no                   | (Optional) | Negate a command or set its defaults |
| default              | (Optional) | Inherit values from a peer template  |
| prefix-list          |            | Apply prefix-list                    |
| <i>prfxlist-name</i> |            | Name of prefix-list                  |
| out                  |            | Apply policy to outgoing routes      |
| in                   |            | Apply policy to incoming routes      |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-vpnv4
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv4-mdt
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-vpnv6
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-link-state
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-l2vpn-vpls
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv4-mvpn
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv6-mvpn
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-l2vpn-evpn
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv4-label
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv6-label

# priority-flow-control auto-restore multiplier

[no] priority-flow-control auto-restore multiplier { <val> }

## Syntax Description

| Syntax Description    |             |                    |
|-----------------------|-------------|--------------------|
| no                    | (Optional)  | Negate the command |
| priority-flow-control | pfc related | commands           |
| auto-restore          | auto        | restore            |
| multiplier            | Auto        | restore multiplier |
| val                   | Auto        | multiplier value   |

## Command Mode

- /exec/configure

# priority-flow-control fixed-restore multiplier

[no] priority-flow-control fixed-restore multiplier { <val> }

## Syntax Description

| Syntax Description    |            |                    |
|-----------------------|------------|--------------------|
| no                    | (Optional) | Negate the command |
| priority-flow-control | pfc        | related commands   |
| fixed-restore         | fixed      | restore            |
| multiplier            | Fixed      | restore multiplier |
| val                   | Fixed      | multiplier value   |

## Command Mode

- /exec/configure



# priority-flow-control mode

[no] priority-flow-control mode { auto | on | off } [ force ]

## Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| priority-flow-control | Enable/Disable PFC                              |  |
| mode                  | PFC Mode  |  |
| auto                  | Set Auto Mode                                   |  |
| on                    | Force PFC to On                                 |  |
| off                   | Force PFC to Off                                |  |
| force                 | (Optional) Force apply PFC config               |  |

## Command Mode

- /exec/configure/if-switching /exec/configure/if-routing /exec/configure/if-port-channel /exec/configure/if-port-channel-sub

# priority-flow-control override-interface mode off

[no] priority-flow-control override-interface mode off

## Syntax Description

| Syntax Description    |            |  |
|-----------------------|------------|--|
| no                    | (Optional) | Negate a command or set its defaults           |
| priority-flow-control |            | Global priority-flow-control settings          |
| override-interface    |            | Overrides interface priority-flow-control mode |
| mode                  |            | Priority-flow-control mode                     |
| off                   |            | Off  |

## Command Mode

- /exec/configure

# priority-flow-control recover interface

```
priority-flow-control recover interface <if_list> [ qos-group <qgrp-num> ] [ module <module_idx> ] [ instance <inst> ]
```

## Syntax Description

### Syntax Description

|                       |  |
|-----------------------|--|
| priority-flow-control | Change PFC settings                              |
| recover               | Recover PFC queue from stuck state               |
| interface             | Interface  |
| <i>if_list</i>        | List of interfaces                               |
| qos-group             | (Optional) No-drop class to be recovered         |
| <i>qgrp-num</i>       | (Optional) qos-group number of the no-drop class |
| module                | (Optional) Slot/module                           |
| <i>module_idx</i>     | (Optional) Slot/module number                    |
| instance              | (Optional) ASIC Instance Number                  |
| <i>inst</i>           | (Optional) ASIC Instance Number in Decimal       |

## Command Mode

- /exec

## priority-flow-control tah-recover interface

priority-flow-control tah-recover interface <if\_list> [ qos-group <qos> ] [ module <module> ]

### Syntax Description

#### Syntax Description

|                       |  |
|-----------------------|--|
| priority-flow-control | Change PFC settings                              |
| tah-recover           | Recover PFC queue from stuck state               |
| interface             | Interface  |
| <i>if_list</i>        | List of interfaces                               |
| qos-group             | (Optional) No-drop class to be recovered         |
| <i>qos</i>            | (Optional) qos-group number of the no-drop class |
| module                | (Optional) Slot/module                           |
| <i>module</i>         | (Optional) Slot/module number                    |

### Command Mode

- /exec

# priority-flow-control watch-dog-interval on

[no] priority-flow-control watch-dog-interval { on | off }

## Syntax Description

| Syntax Description    |   |
|-----------------------|---|
| no                    | (Optional) Negate a command or set its defaults |
| priority-flow-control | Enable/Disable PFC                              |
| watch-dog-interval    | Watch dog interval                              |
| on                    | PFC watch-dog interval to On                    |
| off                   | PFC watch-dog interval to Off                   |

## Command Mode

- /exec/configure/if-switching /exec/configure/if-routing /exec/configure/if-port-channel /exec/configure/if-port-channel-sub

# priority-flow-control watch-dog-interval on

[no] priority-flow-control watch-dog-interval { on | off }

## Syntax Description

| Syntax Description    |                |                             |
|-----------------------|----------------|-----------------------------|
| no                    | (Optional)     | Negate the command          |
| priority-flow-control | Enable/Disable | PFC                         |
| watch-dog-interval    | Watch dog      | interval                    |
| on                    | Enable PFC     | watch-dog interval globally |
| off                   | Disable PFC    | watch-dog interval globally |

## Command Mode

- /exec/configure

# priority-flow-control watch-dog internal-interface-multiplier

[no] priority-flow-control watch-dog internal-interface-multiplier { <val> }

## Syntax Description

| Syntax Description            |  |   |
|-------------------------------|--|---|
| no                            |  | (Optional) Negate the command   |
| priority-flow-control         |  | pfc related commands  |
| watch-dog                     |  | watch dog interval  |
| internal-interface-multiplier |  | Internal Interface Multiplier   |
| val                           |  | Multiplier value for internal interfaces, 0 to disable the feature on internal interfaces |

## Command Mode

- /exec/configure

# priority-flow-control watch-dog interval

[no] priority-flow-control watch-dog interval <interval-val>

## Syntax Description

| Syntax Description    |            |                      |
|-----------------------|------------|----------------------|
| no                    | (Optional) | Negate the command   |
| priority-flow-control | pfc        | related commands     |
| watch-dog             | watch dog  | interval             |
| interval              | Poll       | interval             |
| <i>interval-val</i>   | Watch dog  | interval value in ms |

## Command Mode

- /exec/configure



# priority-flow-control watch-dog shutdown-multiplier

[no] priority-flow-control watch-dog shutdown-multiplier { <val> }

## Syntax Description

|                           |                       |                               |
|---------------------------|-----------------------|-------------------------------|
| <b>Syntax Description</b> | no                    | (Optional) Negate the command |
|                           | priority-flow-control | pfc related commands          |
|                           | watch-dog             | watch dog interval            |
|                           | shutdown-multiplier   | Shutdown multiplier           |
|                           | val                   | Shutdown multiplier           |

## Command Mode

- /exec/configure

# priority

priority <priority> [ forwarding-threshold lower <lower-value> upper <upper-value> ] | no priority [ forwarding-threshold ]

## Syntax Description

| Syntax Description   |            |                                      |
|----------------------|------------|--------------------------------------|
| no                   |            | Negate a command or set its defaults |
| priority             |            | Priority level                       |
| <i>priority</i>      |            | Priority value                       |
| forwarding-threshold | (Optional) | Set forwarding threshold             |
| lower                | (Optional) | Set lower threshold value            |
| <i>lower-value</i>   | (Optional) | Lower threshold value                |
| upper                | (Optional) | Set upper threshold value            |
| <i>upper-value</i>   | (Optional) | Upper threshold value                |

## Command Mode

- /exec/configure/if-eth-any/hsrp\_ipv4 /exec/configure/if-eth-any/hsrp\_ipv6

# priority2

[no] priority2 [ level2 <value> ]

## Syntax Description

---

**Syntax Description**

---

no (Optional) Negate a command or set its defaults

---

priority2 Configure traffic class priority

---

level2 (Optional) Specify level of priority

---

*value* (Optional) Strict-priority level (1=hi 2=med 3=lo)

---

## Command Mode

- /exec/configure/policy-map/type/queuing/class

# priority

priority <value> | no priority

## Syntax Description

---

### Syntax Description

---

no Negate a command or set its defaults

---

priority Configure Bundle priority

---

*value* Priority value

---

## Command Mode

- /exec/configure/anycast

# priority

[no] priority [ level <value> ]

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

priority Configure traffic class priority

---

level (Optional) Specify level of priority

---

value (Optional) Value of level, lower the number higher the priority

---

## Command Mode

- /exec/configure/policy-map/type/queuing/class

# priority

{ priority <pri-value> } | { no priority }

## Syntax Description

|                           |                  |                                      |
|---------------------------|------------------|--------------------------------------|
| <b>Syntax Description</b> | no               | Negate a command or set its defaults |
|                           | priority         | Priority level                       |
|                           | <i>pri-value</i> | Priority Value                       |

## Command Mode

- /exec/configure/if-eth-any/glbp

# priority

[no] priority | priority <val>

## Syntax Description

|                           |                 |                                      |
|---------------------------|-----------------|--------------------------------------|
| <b>Syntax Description</b> | <i>no</i>       | Negate a command or set its defaults |
|                           | <i>priority</i> | Priority of this VRRP group          |
|                           | <i>val</i>      | Priority level                       |

## Command Mode

- /exec/configure/if-eth-any/vrrpv3

# priority

```
{ priority <priority_value> [ forwarding-threshold lower <lower-value> upper <upper-value> ] | no priority
[ forwarding-threshold ] }
```

## Syntax Description

| Syntax Description    |            |                                      |
|-----------------------|------------|--------------------------------------|
| no                    |            | Negate a command or set its defaults |
| priority              |            | Configure the vr priority            |
| <i>priority_value</i> |            | Configure the vr priority            |
| forwarding-threshold  | (Optional) | Set forwarding threshold             |
| lower                 | (Optional) | Set lower threshold value            |
| <i>lower-value</i>    | (Optional) | Lower threshold value                |
| upper                 | (Optional) | Set upper threshold value            |
| <i>upper-value</i>    | (Optional) | Upper threshold value                |

## Command Mode

- /exec/configure/if-eth-any/vrrp



# priority

[no] priority | priority <setup\_prio> [ <hold\_prio> ]

## Syntax Description

| Syntax Description |                                      |
|--------------------|--------------------------------------|
| no                 | Negate a command or set its defaults |
| priority           | Specify LSP priority                 |
| <i>setup_prio</i>  | setup priority                       |
| <i>hold_prio</i>   | (Optional) hold priority             |

## Command Mode

- /exec/configure/te/lsp-attr

# priority

[no] priority | priority <setup\_pri> [ <hold\_pri> ]

## Syntax Description

|                           |                  |                                      |
|---------------------------|------------------|--------------------------------------|
| <b>Syntax Description</b> | no               | Negate a command or set its defaults |
|                           | priority         | tunnel priority                      |
|                           | <i>setup_pri</i> | setup priority                       |
|                           | <i>hold_pri</i>  | (Optional) hold priority             |

## Command Mode

- /exec/configure/if-te /exec/configure/tunnel-te/cbts-member

# private-vlan

[no] private-vlan <pvlan-type>

## Syntax Description

|                           |                   |   |
|---------------------------|-------------------|---|
| <b>Syntax Description</b> | no                | (Optional) Negate a command or set its defaults |
|                           | private-vlan      | Configure a private VLAN                        |
|                           | <i>pvlan-type</i> | PVLAN Type                                      |

## Command Mode

- /exec/configure/vlan

# private-vlan association

```
{ private-vlan association [ { add | remove } ] <secondary_vlans> } | { no private-vlan association [ <secondary_vlans> ] }
```

## Syntax Description

| Syntax Description     |            |  |
|------------------------|------------|--|
| private-vlan           |            | Configure a private VLAN                       |
| association            |            | Add association between private VLANs          |
| add                    | (Optional) | Add a VLAN to private VLAN list                |
| remove                 | (Optional) | Remove a VLAN from private VLAN list           |
| no                     |            | Negate a command or set its defaults           |
| <i>secondary_vlans</i> |            | VLAN IDs of the private VLANs to be configured |

## Command Mode

- /exec/configure/vlan

# private-vlan mapping

```
{ private-vlan mapping [ { add | remove } ] <secondary_vlans> } | { no private-vlan mapping [ <secondary_vlans> ] }
```

## Syntax Description

| Syntax Description     |            |  |
|------------------------|------------|--|
| private-vlan           |            | Configure a private VLAN                                 |
| mapping                |            | Set the private VLAN interface mapping                   |
| add                    | (Optional) | Add a VLAN to private VLAN list                          |
| remove                 | (Optional) | Remove a VLAN from private VLAN list                     |
| no                     |            | Negate a command or set its defaults                     |
| <i>secondary_vlans</i> |            | Secondary VLAN IDs of the private VLAN interface mapping |

## Command Mode

- /exec/configure/if-vlan

# private-vlan release resource

```
private-vlan release resource { [ vlan <vlan-id> ] | global }
```

## Syntax Description

### Syntax Description

|                |   |
|----------------|---|
| private-vlan   | Show information about private VLAN                       |
| release        | release   |
| resource       | resource  |
| vlan           | (Optional) VLAN status                                    |
| global         | global rid  |
| <i>vlan-id</i> | (Optional) VLAN IDs of the private VLANs to be configured |

## Command Mode

- /exec

# private-vlan synchronize

private-vlan synchronize

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | private-vlan Set private-vlan synchronization |
|                           | synchronize Synchronize vlans                 |

## Command Mode

- /exec/configure/spanning-tree/mst/configuration

# probe-interval

probe-interval <probeinterval-val> | no probe-interval

## Syntax Description

| Syntax Description       |  |   |
|--------------------------|--|---|
| no                       |  | Negate a command or set its defaults                              |
| probe-interval           |  | OpenFlow controller probe interval timer (default is 180 seconds) |
| <i>probeinterval-val</i> |  | probe interval timer value in secs                                |

## Command Mode

- /exec/configure/openflow/switch



# probe-interval

probe-interval <probeinterval-val> | no probe-interval

## Syntax Description

| Syntax Description       |   |
|--------------------------|---|
| no                       | Negate a command or set its defaults                              |
| probe-interval           | OpenFlow controller probe interval timer (default is 180 seconds) |
| <i>probeinterval-val</i> | probe interval timer value in secs                                |

## Command Mode

- /exec/configure/openflow/switch/sub-switch

# probe

[no] probe <probe-id> [ control <status> ] [ host <host-name> ] [ frequency <freq-num> | timeout <timeout> | retry-down-count <count> | retry-up-count <up-count> | ip <ip-addr> ]

## Syntax Description

### Syntax Description

|                  |   |
|------------------|---|
| no               | (Optional) Negate a command or set its defaults |
| probe            | Catena device-group node probe                  |
| <i>probe-id</i>  | Probe mode                                      |
| control          | (Optional) control protocol                     |
| <i>status</i>    | (Optional) control protocol status              |
| host             | (Optional) Host name/Target address             |
| <i>host-name</i> | (Optional) DNS Target IP Address or Hostname    |
| frequency        | (Optional) Frequency in seconds                 |
| <i>freq-num</i>  | (Optional) Frequency in seconds                 |
| timeout          | (Optional) Timeout in seconds                   |
| <i>timeout</i>   | (Optional) Timeout in seconds                   |
| retry-down-count | (Optional) Retry-count when node goes down      |
| <i>count</i>     | (Optional) Count                                |
| retry-up-count   | (Optional) Retry-count when node comes back up  |
| <i>up-count</i>  | (Optional) Count                                |
| ip               | (Optional) ip address for probe                 |
| <i>ip-addr</i>   | (Optional) IP4 prefix in format i.i.i.i         |

## Command Mode

- /exec/configure/catena-device-grp

# probe

[no] probe <probe-id-icmp> [ frequency <freq-num> | timeout <timeout> | retry-down-count <count> | retry-up-count <up-count> ] +

## Syntax Description

| Syntax Description   |            |                                      |
|----------------------|------------|--------------------------------------|
| no                   | (Optional) | Negate a command or set its defaults |
| probe                |            | ITD probe                            |
| <i>probe-id-icmp</i> |            | Service mode                         |
| frequency            | (Optional) | Frequency                            |
| <i>freq-num</i>      | (Optional) | Frequency                            |
| timeout              | (Optional) | Timeout                              |
| <i>timeout</i>       | (Optional) | Timeout                              |
| retry-down-count     | (Optional) | Retry-count when node goes down      |
| <i>count</i>         | (Optional) | Count                                |
| retry-up-count       | (Optional) | Retry-count when node comes back up  |
| <i>up-count</i>      | (Optional) | Count                                |

## Command Mode

- /exec/configure/itd-dg-node

# probe

[no] probe <probe-id-icmp> [ frequency <freq-num> | timeout <timeout> | retry-down-count <count> | retry-up-count <up-count> | ip <ip-addr> ] +

## Syntax Description

### Syntax Description

|                      |   |
|----------------------|---|
| no                   | (Optional) Negate a command or set its defaults |
| probe                | ITD probe                                       |
| <i>probe-id-icmp</i> | Service mode                                    |
| frequency            | (Optional) Frequency                            |
| <i>freq-num</i>      | (Optional) Frequency                            |
| timeout              | (Optional) Timeout                              |
| <i>timeout</i>       | (Optional) Timeout                              |
| retry-down-count     | (Optional) Retry-count when node goes down      |
| <i>count</i>         | (Optional) Count                                |
| retry-up-count       | (Optional) Retry-count when node comes back up  |
| <i>up-count</i>      | (Optional) Count                                |
| ip                   | (Optional) ip address for probe                 |
| <i>ip-addr</i>       | (Optional) IP4 prefix in format i.i.i.i         |

## Command Mode

- /exec/configure/itd-dg-node-standby

# probe

[no] probe <probe-id-icmp> [ frequency <freq-num> | timeout <timeout> | retry-down-count <count> | retry-up-count <up-count> ] +

## Syntax Description

| Syntax Description   |            |                                      |
|----------------------|------------|--------------------------------------|
| no                   | (Optional) | Negate a command or set its defaults |
| probe                |            | ITD probe                            |
| <i>probe-id-icmp</i> |            | Service mode                         |
| frequency            | (Optional) | Frequency                            |
| <i>freq-num</i>      | (Optional) | Frequency                            |
| timeout              | (Optional) | Timeout                              |
| <i>timeout</i>       | (Optional) | Timeout                              |
| retry-down-count     | (Optional) | Retry-count when node goes down      |
| <i>count</i>         | (Optional) | Count                                |
| retry-up-count       | (Optional) | Retry-count when node comes back up  |
| <i>up-count</i>      | (Optional) | Count                                |

## Command Mode

- /exec/configure/itd-device-group

# probe

[no] probe <probe-id-icmp> [ frequency <freq-num> | timeout <timeout> | retry-down-count <count> | retry-up-count <up-count> | ip <ip-addr> ] +

## Syntax Description

### Syntax Description

|                      |   |
|----------------------|---|
| no                   | (Optional) Negate a command or set its defaults |
| probe                | ITD probe                                       |
| <i>probe-id-icmp</i> | Service mode                                    |
| frequency            | (Optional) Frequency in seconds                 |
| <i>freq-num</i>      | (Optional) Frequency in seconds                 |
| timeout              | (Optional) Timeout in seconds                   |
| <i>timeout</i>       | (Optional) Timeout in seconds                   |
| retry-down-count     | (Optional) Retry-count when node goes down      |
| <i>count</i>         | (Optional) Count                                |
| retry-up-count       | (Optional) Retry-count when node comes back up  |
| <i>up-count</i>      | (Optional) Count                                |
| ip                   | (Optional) ip address for probe                 |
| <i>ip-addr</i>       | (Optional) IP4 prefix in format i.i.i.i         |

## Command Mode

- /exec/configure/itd-dg-node

# probe

[no] probe <probe-id-icmp> [ frequency <freq-num> | timeout <timeout> | retry-down-count <count> | retry-up-count <up-count> | ip <ip-addr> ] +

## Syntax Description

| Syntax Description   |            |                                      |
|----------------------|------------|--------------------------------------|
| no                   | (Optional) | Negate a command or set its defaults |
| probe                |            | ITD probe                            |
| <i>probe-id-icmp</i> |            | Service mode                         |
| frequency            | (Optional) | Frequency in seconds                 |
| <i>freq-num</i>      | (Optional) | Frequency in seconds                 |
| timeout              | (Optional) | Timeout in seconds                   |
| <i>timeout</i>       | (Optional) | Timeout in seconds                   |
| retry-down-count     | (Optional) | Retry-count when node goes down      |
| <i>count</i>         | (Optional) | Count                                |
| retry-up-count       | (Optional) | Retry-count when node comes back up  |
| <i>up-count</i>      | (Optional) | Count                                |
| ip                   | (Optional) | ip address for probe                 |
| <i>ip-addr</i>       | (Optional) | IP4 prefix in format i.i.i.i         |

## Command Mode

- /exec/configure/itd-dg-node-standby

# probe

[no] probe <probe-id-icmp> [ frequency <freq-num> | timeout <timeout> | retry-down-count <count> | retry-up-count <up-count> ] +

## Syntax Description

| Syntax Description   |            |                                      |
|----------------------|------------|--------------------------------------|
| no                   | (Optional) | Negate a command or set its defaults |
| probe                |            | ITD probe                            |
| <i>probe-id-icmp</i> |            | Service mode                         |
| frequency            | (Optional) | Frequency in seconds                 |
| <i>freq-num</i>      | (Optional) | Frequency in seconds                 |
| timeout              | (Optional) | Timeout in seconds                   |
| <i>timeout</i>       | (Optional) | Timeout in seconds                   |
| retry-down-count     | (Optional) | Retry-count when node goes down      |
| <i>count</i>         | (Optional) | Count                                |
| retry-up-count       | (Optional) | Retry-count when node comes back up  |
| <i>up-count</i>      | (Optional) | Count                                |

## Command Mode

- /exec/configure/itd-device-group



# probe

[no] probe <probe-id-icmp> [ frequency <freq-num> | timeout <timeout> | retry-down-count <count> | retry-up-count <up-count> | ip <ip-addr> ] +

## Syntax Description

| Syntax Description   |            |                                      |
|----------------------|------------|--------------------------------------|
| no                   | (Optional) | Negate a command or set its defaults |
| probe                |            | PLB probe                            |
| <i>probe-id-icmp</i> |            | Service mode                         |
| frequency            | (Optional) | Frequency in seconds                 |
| <i>freq-num</i>      | (Optional) | Frequency in seconds                 |
| timeout              | (Optional) | Timeout in seconds                   |
| <i>timeout</i>       | (Optional) | Timeout in seconds                   |
| retry-down-count     | (Optional) | Retry-count when node goes down      |
| <i>count</i>         | (Optional) | Count                                |
| retry-up-count       | (Optional) | Retry-count when node comes back up  |
| <i>up-count</i>      | (Optional) | Count                                |
| ip                   | (Optional) | ip address for probe                 |
| <i>ip-addr</i>       | (Optional) | IP4 prefix in format i.i.i.i         |

## Command Mode

- /exec/configure/plb-dg-node

# probe

[no] probe <probe-id-icmp> [ frequency <freq-num> | timeout <timeout> | retry-down-count <count> | retry-up-count <up-count> | ip <ip-addr> ] +

## Syntax Description

| Syntax Description   |            |                                      |
|----------------------|------------|--------------------------------------|
| no                   | (Optional) | Negate a command or set its defaults |
| probe                |            | PLB probe                            |
| <i>probe-id-icmp</i> |            | Service mode                         |
| frequency            | (Optional) | Frequency in seconds                 |
| <i>freq-num</i>      | (Optional) | Frequency in seconds                 |
| timeout              | (Optional) | Timeout in seconds                   |
| <i>timeout</i>       | (Optional) | Timeout in seconds                   |
| retry-down-count     | (Optional) | Retry-count when node goes down      |
| <i>count</i>         | (Optional) | Count                                |
| retry-up-count       | (Optional) | Retry-count when node comes back up  |
| <i>up-count</i>      | (Optional) | Count                                |
| ip                   | (Optional) | ip address for probe                 |
| <i>ip-addr</i>       | (Optional) | IP4 prefix in format i.i.i.i         |

## Command Mode

- /exec/configure/plb-dg-node-standby

# probe

[no] probe <probe-id-icmp> [ frequency <freq-num> | timeout <timeout> | retry-down-count <count> | retry-up-count <up-count> ] +

## Syntax Description

| Syntax Description   |            |                                      |
|----------------------|------------|--------------------------------------|
| no                   | (Optional) | Negate a command or set its defaults |
| probe                |            | PLB probe                            |
| <i>probe-id-icmp</i> |            | Service mode                         |
| frequency            | (Optional) | Frequency in seconds                 |
| <i>freq-num</i>      | (Optional) | Frequency in seconds                 |
| timeout              | (Optional) | Timeout in seconds                   |
| <i>timeout</i>       | (Optional) | Timeout in seconds                   |
| retry-down-count     | (Optional) | Retry-count when node goes down      |
| <i>count</i>         | (Optional) | Count                                |
| retry-up-count       | (Optional) | Retry-count when node comes back up  |
| <i>up-count</i>      | (Optional) | Count                                |

## Command Mode

- /exec/configure/plb-device-group

# probe get

[no] probe <probe-id-http> get [ <url-name> | cache | frequency <freq-num> | timeout <timeout> | retry-down-count <count> | retry-up-count <up-count> | ip <ip-addr> ] +

## Syntax Description

### Syntax Description

|                      |   |
|----------------------|---|
| no                   | (Optional) Negate a command or set its defaults                                     |
| probe                | ITD probe   |
| <i>probe-id-http</i> | Service mode  |
| get                  | Host name/Target address  |
| <i>url-name</i>      | (Optional) Specify only the user input text/filename. http://<node-ip>/<user input> |
| cache                | (Optional) Use cache  |
| frequency            | (Optional) Frequency  |
| <i>freq-num</i>      | (Optional) Frequency  |
| timeout              | (Optional) Timeout  |
| <i>timeout</i>       | (Optional) Timeout  |
| retry-down-count     | (Optional) Retry-count when node goes down  |
| <i>count</i>         | (Optional) Count  |
| retry-up-count       | (Optional) Retry-count when node comes back up                                      |
| <i>up-count</i>      | (Optional) Count  |
| ip                   | (Optional) ip address for probe   |
| <i>ip-addr</i>       | (Optional) IP4 prefix in format i.i.i.i   |

## Command Mode

- /exec/configure/itd-dg-node

# probe get

[no] probe <probe-id-http> get [ <url-name> | cache | frequency <freq-num> | timeout <timeout> | retry-down-count <count> | retry-up-count <up-count> | ip <ip-addr> ] +

## Syntax Description

### Syntax Description

|                      |   |
|----------------------|---|
| no                   | (Optional) Negate a command or set its defaults                                     |
| probe                | ITD probe   |
| <i>probe-id-http</i> | Service mode  |
| get                  | Host name/Target address  |
| <i>url-name</i>      | (Optional) Specify only the user input text/filename. http://<node-ip>/<user input> |
| cache                | (Optional) Use cache  |
| frequency            | (Optional) Frequency  |
| <i>freq-num</i>      | (Optional) Frequency  |
| timeout              | (Optional) Timeout  |
| <i>timeout</i>       | (Optional) Timeout  |
| retry-down-count     | (Optional) Retry-count when node goes down  |
| <i>count</i>         | (Optional) Count  |
| retry-up-count       | (Optional) Retry-count when node comes back up                                      |
| <i>up-count</i>      | (Optional) Count  |
| ip                   | (Optional) ip address for probe   |
| <i>ip-addr</i>       | (Optional) IP4 prefix in format i.i.i.i   |

## Command Mode

- /exec/configure/itd-dg-node-standby

# probe get

[no] probe <probe-id-http> get [ <url-name> | cache | frequency <freq-num> | timeout <timeout> | retry-down-count <count> | retry-up-count <up-count> ] +

## Syntax Description

### Syntax Description

|                      |   |
|----------------------|---|
| no                   | (Optional) Negate a command or set its defaults                                     |
| probe                | ITD probe   |
| <i>probe-id-http</i> | Service mode  |
| get                  | Host name/Target address  |
| <i>url-name</i>      | (Optional) Specify only the user input text/filename. http://<node-ip>/<user input> |
| cache                | (Optional) Use cache  |
| frequency            | (Optional) Frequency  |
| <i>freq-num</i>      | (Optional) Frequency  |
| timeout              | (Optional) Timeout  |
| <i>timeout</i>       | (Optional) Timeout  |
| retry-down-count     | (Optional) Retry-count when node goes down  |
| <i>count</i>         | (Optional) Count  |
| retry-up-count       | (Optional) Retry-count when node comes back up                                      |
| <i>up-count</i>      | (Optional) Count  |

## Command Mode

- /exec/configure/itd-device-group

# probe get

[no] probe <probe-id-http> get <url-name> [ cache | frequency <freq-num> | timeout <timeout> | retry-down-count <count> | retry-up-count <up-count> | ip <ip-addr> ] +

## Syntax Description

| Syntax Description   |  |
|----------------------|--|
| no                   | (Optional) Negate a command or set its defaults                          |
| probe                | ITD probe  |
| <i>probe-id-http</i> | Service mode   |
| get                  | Host name/Target address   |
| <i>url-name</i>      | Specify only the user input text/filename. http://<node-ip>/<user input> |
| cache                | (Optional) Use cache   |
| frequency            | (Optional) Frequency   |
| <i>freq-num</i>      | (Optional) Frequency   |
| timeout              | (Optional) Timeout   |
| <i>timeout</i>       | (Optional) Timeout   |
| retry-down-count     | (Optional) Retry-count when node goes down                               |
| <i>count</i>         | (Optional) Count   |
| retry-up-count       | (Optional) Retry-count when node comes back up                           |
| <i>up-count</i>      | (Optional) Count   |
| ip                   | (Optional) ip address for probe  |
| <i>ip-addr</i>       | (Optional) IP4 prefix in format i.i.i.i                                  |

## Command Mode

- /exec/configure/itd-dg-node

# probe get

[no] probe <probe-id-http> get <url-name> [ cache | frequency <freq-num> | timeout <timeout> | retry-down-count <count> | retry-up-count <up-count> | ip <ip-addr> ] +

## Syntax Description

| Syntax Description   |            |  |
|----------------------|------------|--|
| no                   | (Optional) | Negate a command or set its defaults                                     |
| probe                |            | ITD probe  |
| <i>probe-id-http</i> |            | Service mode   |
| get                  |            | Host name/Target address   |
| <i>url-name</i>      |            | Specify only the user input text/filename. http://<node-ip>/<user input> |
| cache                | (Optional) | Use cache  |
| frequency            | (Optional) | Frequency  |
| <i>freq-num</i>      | (Optional) | Frequency  |
| timeout              | (Optional) | Timeout  |
| <i>timeout</i>       | (Optional) | Timeout  |
| retry-down-count     | (Optional) | Retry-count when node goes down  |
| <i>count</i>         | (Optional) | Count  |
| retry-up-count       | (Optional) | Retry-count when node comes back up                                      |
| <i>up-count</i>      | (Optional) | Count  |
| ip                   | (Optional) | ip address for probe   |
| <i>ip-addr</i>       | (Optional) | IP4 prefix in format i.i.i.i   |

## Command Mode

- /exec/configure/itd-dg-node



# probe get

[no] probe <probe-id-http> get <url-name> [ cache | frequency <freq-num> | timeout <timeout> | retry-down-count <count> | retry-up-count <up-count> ] +

## Syntax Description

| Syntax Description   |            |  |
|----------------------|------------|--|
| no                   | (Optional) | Negate a command or set its defaults                                     |
| probe                |            | ITD probe  |
| <i>probe-id-http</i> |            | Service mode   |
| get                  |            | Host name/Target address   |
| <i>url-name</i>      |            | Specify only the user input text/filename. http://<node-ip>/<user input> |
| cache                | (Optional) | Use cache  |
| frequency            | (Optional) | Frequency  |
| <i>freq-num</i>      | (Optional) | Frequency  |
| timeout              | (Optional) | Timeout  |
| <i>timeout</i>       | (Optional) | Timeout  |
| retry-down-count     | (Optional) | Retry-count when node goes down  |
| <i>count</i>         | (Optional) | Count  |
| retry-up-count       | (Optional) | Retry-count when node comes back up                                      |
| <i>up-count</i>      | (Optional) | Count  |

## Command Mode

- /exec/configure/itd-device-group

# probe host

[no] probe <probe-id-dns> host <host-name> [ frequency <freq-num> | timeout <timeout> | retry-down-count <count> | retry-up-count <up-count> | ip <ip-addr> ] +

## Syntax Description

| Syntax Description  |            |                                      |
|---------------------|------------|--------------------------------------|
| no                  | (Optional) | Negate a command or set its defaults |
| probe               |            | ITD probe                            |
| <i>probe-id-dns</i> |            | Service mode                         |
| host                |            | Host name/Target address             |
| <i>host-name</i>    |            | DNS Target IP Address or Hostname    |
| frequency           | (Optional) | Frequency                            |
| <i>freq-num</i>     | (Optional) | Frequency                            |
| timeout             | (Optional) | Timeout                              |
| <i>timeout</i>      | (Optional) | Timeout                              |
| retry-down-count    | (Optional) | Retry-count when node goes down      |
| <i>count</i>        | (Optional) | Count                                |
| retry-up-count      | (Optional) | Retry-count when node comes back up  |
| <i>up-count</i>     | (Optional) | Count                                |
| ip                  | (Optional) | ip address for probe                 |
| <i>ip-addr</i>      | (Optional) | IP4 prefix in format i.i.i.i         |

## Command Mode

- /exec/configure/itd-dg-node

# probe host

[no] probe <probe-id-dns> host <host-name> [ frequency <freq-num> | timeout <timeout> | retry-down-count <count> | retry-up-count <up-count> | ip <ip-addr> ] +

## Syntax Description

| Syntax Description  |            |                                      |
|---------------------|------------|--------------------------------------|
| no                  | (Optional) | Negate a command or set its defaults |
| probe               |            | ITD probe                            |
| <i>probe-id-dns</i> |            | Service mode                         |
| host                |            | Host name/Target address             |
| <i>host-name</i>    |            | DNS Target IP Address or Hostname    |
| frequency           | (Optional) | Frequency                            |
| <i>freq-num</i>     | (Optional) | Frequency                            |
| timeout             | (Optional) | Timeout                              |
| <i>timeout</i>      | (Optional) | Timeout                              |
| retry-down-count    | (Optional) | Retry-count when node goes down      |
| <i>count</i>        | (Optional) | Count                                |
| retry-up-count      | (Optional) | Retry-count when node comes back up  |
| <i>up-count</i>     | (Optional) | Count                                |
| ip                  | (Optional) | ip address for probe                 |
| <i>ip-addr</i>      | (Optional) | IP4 prefix in format i.i.i.i         |

## Command Mode

- /exec/configure/itd-dg-node-standby

# probe host

[no] probe <probe-id-dns> host <host-name> [ frequency <freq-num> | timeout <timeout> | retry-down-count <count> | retry-up-count <up-count> ] +

## Syntax Description

| Syntax Description  |            |                                      |
|---------------------|------------|--------------------------------------|
| no                  | (Optional) | Negate a command or set its defaults |
| probe               |            | ITD probe                            |
| <i>probe-id-dns</i> |            | Service mode                         |
| host                |            | Host name/Target address             |
| <i>host-name</i>    |            | DNS Target IP Address or Hostname    |
| frequency           | (Optional) | Frequency                            |
| <i>freq-num</i>     | (Optional) | Frequency                            |
| timeout             | (Optional) | Timeout                              |
| <i>timeout</i>      | (Optional) | Timeout                              |
| retry-down-count    | (Optional) | Retry-count when node goes down      |
| <i>count</i>        | (Optional) | Count                                |
| retry-up-count      | (Optional) | Retry-count when node comes back up  |
| <i>up-count</i>     | (Optional) | Count                                |

## Command Mode

- /exec/configure/itd-device-group

# probe host

[no] probe <probe-id-dns> host <host-name> [ frequency <freq-num> | timeout <timeout> | retry-down-count <count> | retry-up-count <up-count> | ip <ip-addr> ] +

## Syntax Description

| Syntax Description  |            |                                      |
|---------------------|------------|--------------------------------------|
| no                  | (Optional) | Negate a command or set its defaults |
| probe               |            | ITD probe                            |
| <i>probe-id-dns</i> |            | Service mode                         |
| host                |            | Host name/Target address             |
| <i>host-name</i>    |            | DNS Target IP Address or Hostname    |
| frequency           | (Optional) | Frequency                            |
| <i>freq-num</i>     | (Optional) | Frequency                            |
| timeout             | (Optional) | Timeout                              |
| <i>timeout</i>      | (Optional) | Timeout                              |
| retry-down-count    | (Optional) | Retry-count when node goes down      |
| <i>count</i>        | (Optional) | Count                                |
| retry-up-count      | (Optional) | Retry-count when node comes back up  |
| <i>up-count</i>     | (Optional) | Count                                |
| ip                  | (Optional) | ip address for probe                 |
| <i>ip-addr</i>      | (Optional) | IP4 prefix in format i.i.i.i         |

## Command Mode

- /exec/configure/itd-dg-node

# probe host

[no] probe <probe-id-dns> host <host-name> [ frequency <freq-num> | timeout <timeout> | retry-down-count <count> | retry-up-count <up-count> | ip <ip-addr> ] +

## Syntax Description

| Syntax Description  |            |                                      |
|---------------------|------------|--------------------------------------|
| no                  | (Optional) | Negate a command or set its defaults |
| probe               |            | ITD probe                            |
| <i>probe-id-dns</i> |            | Service mode                         |
| host                |            | Host name/Target address             |
| <i>host-name</i>    |            | DNS Target IP Address or Hostname    |
| frequency           | (Optional) | Frequency in seconds                 |
| <i>freq-num</i>     | (Optional) | Frequency in seconds                 |
| timeout             | (Optional) | Timeout in seconds                   |
| <i>timeout</i>      | (Optional) | Timeout in seconds                   |
| retry-down-count    | (Optional) | Retry-count when node goes down      |
| <i>count</i>        | (Optional) | Count                                |
| retry-up-count      | (Optional) | Retry-count when node comes back up  |
| <i>up-count</i>     | (Optional) | Count                                |
| ip                  | (Optional) | ip address for probe                 |
| <i>ip-addr</i>      | (Optional) | IP4 prefix in format i.i.i.i         |

## Command Mode

- /exec/configure/itd-dg-node-standby

# probe host

[no] probe <probe-id-dns> host <host-name> [ frequency <freq-num> | timeout <timeout> | retry-down-count <count> | retry-up-count <up-count> ] +

## Syntax Description

| Syntax Description  |            |                                      |
|---------------------|------------|--------------------------------------|
| no                  | (Optional) | Negate a command or set its defaults |
| probe               |            | ITD probe                            |
| <i>probe-id-dns</i> |            | Service mode                         |
| host                |            | Host name/Target address             |
| <i>host-name</i>    |            | DNS Target IP Address or Hostname    |
| frequency           | (Optional) | Frequency in seconds                 |
| <i>freq-num</i>     | (Optional) | Frequency in seconds                 |
| timeout             | (Optional) | Timeout in seconds                   |
| <i>timeout</i>      | (Optional) | Timeout in seconds                   |
| retry-down-count    | (Optional) | Retry-count when node goes down      |
| <i>count</i>        | (Optional) | Count                                |
| retry-up-count      | (Optional) | Retry-count when node comes back up  |
| <i>up-count</i>     | (Optional) | Count                                |

## Command Mode

- /exec/configure/itd-device-group

# probe host

[no] probe <probe-id-dns> host <host-name> [ frequency <freq-num> | timeout <timeout> | retry-down-count <count> | retry-up-count <up-count> | ip <ip-addr> ] +

## Syntax Description

| Syntax Description  |            |                                      |
|---------------------|------------|--------------------------------------|
| no                  | (Optional) | Negate a command or set its defaults |
| probe               |            | PLB probe                            |
| <i>probe-id-dns</i> |            | Service mode                         |
| host                |            | Host name/Target address             |
| <i>host-name</i>    |            | DNS Target IP Address or Hostname    |
| frequency           | (Optional) | Frequency in seconds                 |
| <i>freq-num</i>     | (Optional) | Frequency in seconds                 |
| timeout             | (Optional) | Timeout in seconds                   |
| <i>timeout</i>      | (Optional) | Timeout in seconds                   |
| retry-down-count    | (Optional) | Retry-count when node goes down      |
| <i>count</i>        | (Optional) | Count                                |
| retry-up-count      | (Optional) | Retry-count when node comes back up  |
| <i>up-count</i>     | (Optional) | Count                                |
| ip                  | (Optional) | ip address for probe                 |
| <i>ip-addr</i>      | (Optional) | IP4 prefix in format i.i.i.i         |

## Command Mode

- /exec/configure/plb-dg-node



# probe host

[no] probe <probe-id-dns> host <host-name> [ frequency <freq-num> | timeout <timeout> | retry-down-count <count> | retry-up-count <up-count> | ip <ip-addr> ] +

## Syntax Description

| Syntax Description  |            |                                      |
|---------------------|------------|--------------------------------------|
| no                  | (Optional) | Negate a command or set its defaults |
| probe               |            | PLB probe                            |
| <i>probe-id-dns</i> |            | Service mode                         |
| host                |            | Host name/Target address             |
| <i>host-name</i>    |            | DNS Target IP Address or Hostname    |
| frequency           | (Optional) | Frequency in seconds                 |
| <i>freq-num</i>     | (Optional) | Frequency in seconds                 |
| timeout             | (Optional) | Timeout in seconds                   |
| <i>timeout</i>      | (Optional) | Timeout in seconds                   |
| retry-down-count    | (Optional) | Retry-count when node goes down      |
| <i>count</i>        | (Optional) | Count                                |
| retry-up-count      | (Optional) | Retry-count when node comes back up  |
| <i>up-count</i>     | (Optional) | Count                                |
| ip                  | (Optional) | ip address for probe                 |
| <i>ip-addr</i>      | (Optional) | IP4 prefix in format i.i.i.i         |

## Command Mode

- /exec/configure/plb-dg-node-standby

# probe host

[no] probe <probe-id-dns> host <host-name> [ frequency <freq-num> | timeout <timeout> | retry-down-count <count> | retry-up-count <up-count> ] +

## Syntax Description

| Syntax Description  |            |                                      |
|---------------------|------------|--------------------------------------|
| no                  | (Optional) | Negate a command or set its defaults |
| probe               |            | PLB probe                            |
| <i>probe-id-dns</i> |            | Service mode                         |
| host                |            | Host name/Target address             |
| <i>host-name</i>    |            | DNS Target IP Address or Hostname    |
| frequency           | (Optional) | Frequency in seconds                 |
| <i>freq-num</i>     | (Optional) | Frequency in seconds                 |
| timeout             | (Optional) | Timeout in seconds                   |
| <i>timeout</i>      | (Optional) | Timeout in seconds                   |
| retry-down-count    | (Optional) | Retry-count when node goes down      |
| <i>count</i>        | (Optional) | Count                                |
| retry-up-count      | (Optional) | Retry-count when node comes back up  |
| <i>up-count</i>     | (Optional) | Count                                |

## Command Mode

- /exec/configure/plb-device-group

# probe port

[no] probe <probe-id> port <port-num> [ control <status> ] [ frequency <freq-num> | timeout <timeout> |  
 retry-down-count <count> | retry-up-count <up-count> | ip <ip-addr> ] +

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| probe              |            | ITD probe                            |
| <i>probe-id</i>    |            | Service mode                         |
| port               |            | Port                                 |
| <i>port-num</i>    |            | Port number                          |
| control            | (Optional) | control protocol                     |
| <i>status</i>      | (Optional) | control protocol status              |
| frequency          | (Optional) | Frequency                            |
| <i>freq-num</i>    | (Optional) | Frequency                            |
| timeout            | (Optional) | Timeout                              |
| <i>timeout</i>     | (Optional) | Timeout                              |
| retry-down-count   | (Optional) | Retry-count when node goes down      |
| <i>count</i>       | (Optional) | Count                                |
| retry-up-count     | (Optional) | Retry-count when node comes back up  |
| <i>up-count</i>    | (Optional) | Count                                |
| ip                 | (Optional) | ip address for probe                 |
| <i>ip-addr</i>     | (Optional) | IP4 prefix in format i.i.i.i         |

## Command Mode

- /exec/configure/itd-dg-node

# probe port

[no] probe <probe-id> port <port-num> [ control <status> ] [ frequency <freq-num> | timeout <timeout> | retry-down-count <count> | retry-up-count <up-count> | ip <ip-addr> ] +

## Syntax Description

### Syntax Description

|                  |   |
|------------------|---|
| no               | (Optional) Negate a command or set its defaults |
| probe            | ITD probe                                       |
| <i>probe-id</i>  | Service mode                                    |
| port             | Port  |
| <i>port-num</i>  | Port number                                     |
| control          | (Optional) control protocol                     |
| <i>status</i>    | (Optional) control protocol status              |
| frequency        | (Optional) Frequency                            |
| <i>freq-num</i>  | (Optional) Frequency                            |
| timeout          | (Optional) Timeout                              |
| <i>timeout</i>   | (Optional) Timeout                              |
| retry-down-count | (Optional) Retry-count when node goes down      |
| <i>count</i>     | (Optional) Count                                |
| retry-up-count   | (Optional) Retry-count when node comes back up  |
| <i>up-count</i>  | (Optional) Count                                |
| ip               | (Optional) ip address for probe                 |
| <i>ip-addr</i>   | (Optional) IP4 prefix in format i.i.i.i         |

## Command Mode

- /exec/configure/itd-dg-node-standby

# probe port

[no] probe <probe-id> port <port-num> [ control <status> ] [ frequency <freq-num> | timeout <timeout> |  
 retry-down-count <count> | retry-up-count <up-count> ] +

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| probe              |            | ITD probe                            |
| <i>probe-id</i>    |            | Service mode                         |
| port               |            | Port                                 |
| <i>port-num</i>    |            | Port number                          |
| control            | (Optional) | control protocol                     |
| <i>status</i>      | (Optional) | control protocol status              |
| frequency          | (Optional) | Frequency                            |
| <i>freq-num</i>    | (Optional) | Frequency                            |
| timeout            | (Optional) | Timeout                              |
| <i>timeout</i>     | (Optional) | Timeout                              |
| retry-down-count   | (Optional) | Retry-count when node goes down      |
| <i>count</i>       | (Optional) | Count                                |
| retry-up-count     | (Optional) | Retry-count when node comes back up  |
| <i>up-count</i>    | (Optional) | Count                                |

## Command Mode

- /exec/configure/itd-device-group

# probe port

[no] probe <probe-id> port <port-num> [ control <status> ] [ frequency <freq-num> | timeout <timeout> | retry-down-count <count> | retry-up-count <up-count> | ip <ip-addr> ] +

## Syntax Description

### Syntax Description

|                  |   |
|------------------|---|
| no               | (Optional) Negate a command or set its defaults |
| probe            | ITD probe                                       |
| <i>probe-id</i>  | Service mode                                    |
| port             | Port  |
| <i>port-num</i>  | Port number                                     |
| control          | (Optional) control protocol                     |
| <i>status</i>    | (Optional) control protocol status              |
| frequency        | (Optional) Frequency in seconds                 |
| <i>freq-num</i>  | (Optional) Frequency in seconds                 |
| timeout          | (Optional) Timeout in seconds                   |
| <i>timeout</i>   | (Optional) Timeout in seconds                   |
| retry-down-count | (Optional) Retry-count when node goes down      |
| <i>count</i>     | (Optional) Count                                |
| retry-up-count   | (Optional) Retry-count when node comes back up  |
| <i>up-count</i>  | (Optional) Count                                |
| ip               | (Optional) ip address for probe                 |
| <i>ip-addr</i>   | (Optional) IP4 prefix in format i.i.i.i         |

## Command Mode

- /exec/configure/itd-dg-node

# probe port

[no] probe <probe-id> port <port-num> [ control <status> ] [ frequency <freq-num> | timeout <timeout> |  
 retry-down-count <count> | retry-up-count <up-count> | ip <ip-addr> ] +

## Syntax Description

### Syntax Description

|                  |   |
|------------------|---|
| no               | (Optional) Negate a command or set its defaults |
| probe            | ITD probe                                       |
| <i>probe-id</i>  | Service mode                                    |
| port             | Port  |
| <i>port-num</i>  | Port number                                     |
| control          | (Optional) control protocol                     |
| <i>status</i>    | (Optional) control protocol status              |
| frequency        | (Optional) Frequency in seconds                 |
| <i>freq-num</i>  | (Optional) Frequency in seconds                 |
| timeout          | (Optional) Timeout in seconds                   |
| <i>timeout</i>   | (Optional) Timeout in seconds                   |
| retry-down-count | (Optional) Retry-count when node goes down      |
| <i>count</i>     | (Optional) Count                                |
| retry-up-count   | (Optional) Retry-count when node comes back up  |
| <i>up-count</i>  | (Optional) Count                                |
| ip               | (Optional) ip address for probe                 |
| <i>ip-addr</i>   | (Optional) IP4 prefix in format i.i.i.i         |

## Command Mode

- /exec/configure/itd-dg-node-standby

# probe port

[no] probe <probe-id> port <port-num> [ control <status> ] [ frequency <freq-num> | timeout <timeout> | retry-down-count <count> | retry-up-count <up-count> ] +

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| probe              |            | ITD probe                            |
| <i>probe-id</i>    |            | Service mode                         |
| port               |            | Port                                 |
| <i>port-num</i>    |            | Port number                          |
| control            | (Optional) | control protocol                     |
| <i>status</i>      | (Optional) | control protocol status              |
| frequency          | (Optional) | Frequency in seconds                 |
| <i>freq-num</i>    | (Optional) | Frequency in seconds                 |
| timeout            | (Optional) | Timeout in seconds                   |
| <i>timeout</i>     | (Optional) | Timeout in seconds                   |
| retry-down-count   | (Optional) | Retry-count when node goes down      |
| <i>count</i>       | (Optional) | Count                                |
| retry-up-count     | (Optional) | Retry-count when node comes back up  |
| <i>up-count</i>    | (Optional) | Count                                |

## Command Mode

- /exec/configure/itd-device-group



# probe port

[no] probe <probe-id> port <port-num> [ control <status> ] [ frequency <freq-num> | timeout <timeout> |  
 retry-down-count <count> | retry-up-count <up-count> | ip <ip-addr> ] +

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| probe              |            | PLB probe                            |
| <i>probe-id</i>    |            | Service mode                         |
| port               |            | Port                                 |
| <i>port-num</i>    |            | Port number                          |
| control            | (Optional) | control protocol                     |
| <i>status</i>      | (Optional) | control protocol status              |
| frequency          | (Optional) | Frequency in seconds                 |
| <i>freq-num</i>    | (Optional) | Frequency in seconds                 |
| timeout            | (Optional) | Timeout in seconds                   |
| <i>timeout</i>     | (Optional) | Timeout in seconds                   |
| retry-down-count   | (Optional) | Retry-count when node goes down      |
| <i>count</i>       | (Optional) | Count                                |
| retry-up-count     | (Optional) | Retry-count when node comes back up  |
| <i>up-count</i>    | (Optional) | Count                                |
| ip                 | (Optional) | ip address for probe                 |
| <i>ip-addr</i>     | (Optional) | IP4 prefix in format i.i.i.i         |

## Command Mode

- /exec/configure/plb-dg-node

# probe port

[no] probe <probe-id> port <port-num> [ control <status> ] [ frequency <freq-num> | timeout <timeout> | retry-down-count <count> | retry-up-count <up-count> | ip <ip-addr> ] +

## Syntax Description

### Syntax Description

|                  |   |
|------------------|---|
| no               | (Optional) Negate a command or set its defaults |
| probe            | PLB probe                                       |
| <i>probe-id</i>  | Service mode                                    |
| port             | Port  |
| <i>port-num</i>  | Port number                                     |
| control          | (Optional) control protocol                     |
| <i>status</i>    | (Optional) control protocol status              |
| frequency        | (Optional) Frequency in seconds                 |
| <i>freq-num</i>  | (Optional) Frequency in seconds                 |
| timeout          | (Optional) Timeout in seconds                   |
| <i>timeout</i>   | (Optional) Timeout in seconds                   |
| retry-down-count | (Optional) Retry-count when node goes down      |
| <i>count</i>     | (Optional) Count                                |
| retry-up-count   | (Optional) Retry-count when node comes back up  |
| <i>up-count</i>  | (Optional) Count                                |
| ip               | (Optional) ip address for probe                 |
| <i>ip-addr</i>   | (Optional) IP4 prefix in format i.i.i.i         |

## Command Mode

- /exec/configure/plb-dg-node-standby

# probe port

[no] probe <probe-id> port <port-num> [ control <status> ] [ frequency <freq-num> | timeout <timeout> | retry-down-count <count> | retry-up-count <up-count> ] +

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| probe              |            | PLB probe                            |
| <i>probe-id</i>    |            | Service mode                         |
| port               |            | Port                                 |
| <i>port-num</i>    |            | Port number                          |
| control            | (Optional) | control protocol                     |
| <i>status</i>      | (Optional) | control protocol status              |
| frequency          | (Optional) | Frequency in seconds                 |
| <i>freq-num</i>    | (Optional) | Frequency in seconds                 |
| timeout            | (Optional) | Timeout in seconds                   |
| <i>timeout</i>     | (Optional) | Timeout in seconds                   |
| retry-down-count   | (Optional) | Retry-count when node goes down      |
| <i>count</i>       | (Optional) | Count                                |
| retry-up-count     | (Optional) | Retry-count when node comes back up  |
| <i>up-count</i>    | (Optional) | Count                                |

## Command Mode

- /exec/configure/plb-device-group

# promiscuous-mode off

promiscuous-mode { off | on } | no promiscuous-mode [ { off | on } ]

## Syntax Description

---

### Syntax Description

---

|                  |   |
|------------------|---|
| no               | Negate a command or set its defaults    |
| promiscuous-mode | Configure promiscuous mode for the port |
| off              | Disable promiscuous mode                |
| on               | Enable promiscuous mode                 |

---

## Command Mode

- /exec/configure/if-port-channel /exec/configure/if-ethernet-all /exec/configure/if-eth-base

# propagate-sgt

[no] propagate-sgt

## Syntax Description

---

**Syntax Description**

propagate-sgt Enable SGT propagation from this port (the default use the no form to disable)

---

## Command Mode

- /exec/configure/cts-dot1x /exec/configure/cts-manual

# protection

[no] protection | protection [ fast-reroute [ bw-protect ] ]

## Syntax Description

---

**Syntax Description**

---

no           Negate a command or set its defaults

---

protection   Enable failure protection

---

fast-reroute (Optional) Enable fast-reroute failure protection

---

bw-protect (Optional) Enable BW protection

---

## Command Mode

- /exec/configure/te/lsp-attr

# protocol-version

protocol-version { <10> | <13> | negotiate } | no protocol-version

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults              |
| protocol-version   |  | Set OpenFlow protocol version                     |
| 10                 |  | Use only OF 1.0 protocol to connect to controller |
| 13                 |  | Use only OF 1.3 protocol to connect to controller |
| negotiate          |  | Negotiate protocol with controller                |

## Command Mode

- /exec/configure/openflow/switch

# protocol-version

protocol-version { <10> | <13> | negotiate } | no protocol-version

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults              |
| protocol-version   |  | Set OpenFlow protocol version                     |
| 10                 |  | Use only OF 1.0 protocol to connect to controller |
| 13                 |  | Use only OF 1.3 protocol to connect to controller |
| negotiate          |  | Negotiate protocol with controller                |

## Command Mode

- /exec/configure/openflow/switch/sub-switch



# protocol

{ protocol <num> } | { no protocol }

## Syntax Description

---

### Syntax Description

---

no      Negate a command or set its defaults

---

protocol    specify flow protocol number

---

*num*      flow protocol number

---

## Command Mode

- /exec/configure/configngoamprofileflow

# protocol shutdown

[no] protocol shutdown

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| protocol           | OSPF protocol                                   |
| shutdown           | Shutdown the OSPF protocol instance             |

## Command Mode

- /exec/configure/router-ospf /exec/configure/router-ospf/vrf

# protocol shutdown

[no] protocol shutdown

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | no (Optional) Negate a command or set its defaults |
|                           | protocol OSPF protocol                             |
|                           | shutdown shutdown the OSPF protocol instance       |

## Command Mode

- /exec/configure/router-ospf3 /exec/configure/router-ospf3/vrf

# ptp

[no] ptp

## Syntax Description

---

### Syntax Description

---

**no** (Optional) Negate a command or set its defaults

---

**ptp** Precision Time Protocol (IEEE 1588) Subsystem

---

## Command Mode

- /exec/configure/if-eth-base /exec/configure/if-ethernet-all

# ptp announce interval

```
[no] ptp announce interval { <log-seconds> | smpte-2059-2 <smpte-log-seconds> | aes67 <aes-log-seconds>
}
```

## Syntax Description

| Syntax Description       |  |   |
|--------------------------|--|---|
| ptp                      |  | Precision Time Protocol (IEEE 1588) Subsystem |
| announce                 |  | announce                                      |
| interval                 |  | interval                                      |
| <i>log-seconds</i>       |  | log seconds                                   |
| smpte-2059-2             |  | SMPTE-2059-2                                  |
| <i>smpte-log-seconds</i> |  | SMPTE-2059-2 log seconds                      |
| aes67                    |  | AES67-2015                                    |
| <i>aes-log-seconds</i>   |  | AES67-2015 log seconds                        |

## Command Mode

- /exec/configure/if-eth-base /exec/configure/if-ethernet-all

# ptp announce timeout

[no] ptp announce timeout { <val> | smpte-2059-2 <smpte-val> | aes67 <aes-val> }

## Syntax Description

| Syntax Description |          |   |
|--------------------|----------|---|
| ptp                |          | Precision Time Protocol (IEEE 1588) Subsystem |
| announce           | announce |   |
| timeout            | timeout  |   |
| smpte-2059-2       |          | SMPTE-2059-2                                  |
| aes67              |          | AES67-2015                                    |
| <i>val</i>         |          | val   |
| <i>smpte-val</i>   |          | SMPTE-2059-2 val                              |
| <i>aes-val</i>     |          | AES67-2015 val                                |

## Command Mode

- /exec/configure/if-eth-base /exec/configure/if-ethernet-all

# ptp delay-request minimum interval

[no] ptp delay-request minimum interval { <log-seconds> | smpte-2059-2 <smpte-log-seconds> | aes67 <aes-log-seconds> }

## Syntax Description

| Syntax Description       |  |   |
|--------------------------|--|---|
| ptp                      |  | Precision Time Protocol (IEEE 1588) Subsystem |
| delay-request            |  | delay-request                                 |
| minimum                  |  | minimum                                       |
| interval                 |  | interval                                      |
| smpte-2059-2             |  | SMPTE-2059-2                                  |
| aes67                    |  | AES67-2015                                    |
| <i>log-seconds</i>       |  | log seconds                                   |
| <i>smpte-log-seconds</i> |  | SMPTE-2059-2 log seconds                      |
| <i>aes-log-seconds</i>   |  | AES67-2015 log seconds                        |

## Command Mode

- /exec/configure/if-eth-base /exec/configure/if-ethernet-all

# ptp domain

[no] ptp domain <domain-val>

## Syntax Description

---

**Syntax Description**

---

|     |   |
|-----|---|
| ptp | Precision Time Protocol (IEEE 1588) Subsystem |
|-----|---|

---

|        |                  |
|--------|------------------|
| domain | ptp clock domain |
|--------|------------------|

---

|                   |                    |
|-------------------|--------------------|
| <i>domain-val</i> | Enter domain value |
|-------------------|--------------------|

---

## Command Mode

- /exec/configure



# ptp offload

[no] ptp offload

## Syntax Description

---

**Syntax Description**

ptp Precision Time Protocol (IEEE 1588) Subsystem

---

offload Allows increasing number of PTP sessions per system by offloading some timers to linecard

---

## Command Mode

- /exec/configure

# ptp priority1

[no] ptp priority1 <val>

## Syntax Description

|                           |            |   |
|---------------------------|------------|---|
| <b>Syntax Description</b> | ptp        | Precision Time Protocol (IEEE 1588) Subsystem |
|                           | priority1  | priority1                                     |
|                           | <i>val</i> | priority1                                     |

## Command Mode

- /exec/configure

# ptp priority2

[no] ptp priority2 <val>

## Syntax Description

|                           |                  |   |
|---------------------------|------------------|---|
| <b>Syntax Description</b> | <i>ptp</i>       | Precision Time Protocol (IEEE 1588) Subsystem |
|                           | <i>priority2</i> | <i>priority1</i>                              |
|                           | <i>val</i>       | <i>priority2</i>                              |

## Command Mode

- /exec/configure

## ptp source

```
[no] ptp source <src-ip> [ vrf { <vrf-name> | <vrf-cfg-name> } ]
```

### Syntax Description

| Syntax Description  |  |   |
|---------------------|--|---|
| ptp                 |  | Precision Time Protocol (IEEE 1588) Subsystem |
| source              |  | source IP address                             |
| <i>src-ip</i>       |  | IPv4 address (A.B.C.D) of source              |
| vrf                 |  | (Optional) vrf to be used for hello messages  |
| <i>vrf-name</i>     |  | (Optional) vrf to be used for hellos          |
| <i>vrf-cfg-name</i> |  | (Optional) Configurable VRF name              |

### Command Mode

- /exec/configure

# ptp sync interval

[no] ptp sync interval { <log-seconds> | smpte-2059-2 <smpte-log-seconds> | aes67 <aes-log-seconds> }

## Syntax Description

| Syntax Description       |  |   |
|--------------------------|--|---|
| ptp                      |  | Precision Time Protocol (IEEE 1588) Subsystem |
| sync                     |  | sync  |
| interval                 |  | interval                                      |
| smpte-2059-2             |  | SMPTE-2059-2                                  |
| aes67                    |  | AES67-2015                                    |
| <i>log-seconds</i>       |  | log seconds                                   |
| <i>smpte-log-seconds</i> |  | SMPTE-2059-2 log seconds                      |
| <i>aes-log-seconds</i>   |  | AES67-2015 log seconds                        |

## Command Mode

- /exec/configure/if-eth-base /exec/configure/if-ethernet-all

# ptp time-sync

[no] ptp time-sync <value>

## Syntax Description

|                           |                  |   |
|---------------------------|------------------|---|
| <b>Syntax Description</b> | <i>ptp</i>       | Precision Time Protocol (IEEE 1588) Subsystem |
|                           | <i>time-sync</i> | ptp time sync register                        |
|                           | <i>value</i>     | default reg value 0x40000000                  |

## Command Mode

- /exec/configure

# ptp transport ipv4 ucast master

[no] ptp transport ipv4 ucast master

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ptp                | Precision Time Protocol (IEEE 1588) Subsystem   |
| transport          | unicast support                                 |
| ipv4               | ipv4  |
| ucast              | ipv4 unicast                                    |
| master             | master mode                                     |

## Command Mode

- /exec/configure/if-eth-base /exec/configure/if-ethernet-all

## ptp transport ipv4 ucast slave

[no] ptp transport ipv4 ucast slave

### Syntax Description

| Syntax Description |            |   |
|--------------------|------------|---|
| no                 | (Optional) | Negate a command or set its defaults          |
| ptp                |            | Precision Time Protocol (IEEE 1588) Subsystem |
| transport          | unicast    | support                                       |
| ipv4               | ipv4       |   |
| ucast              | ipv4       | unicast                                       |
| slave              | slave      | mode  |

### Command Mode

- /exec/configure/if-eth-base /exec/configure/if-ethernet-all



## ptp ucast-source

```
[no] ptp ucast-source <src-ip> [ vrf { <vrf-name> | <vrf-cfg-name> } ]
```

### Syntax Description

|                           |                     |   |
|---------------------------|---------------------|---|
| <b>Syntax Description</b> | <b>ptp</b>          | Precision Time Protocol (IEEE 1588) Subsystem |
|                           | <b>ucast-source</b> | source IP address for ucast messages          |
|                           | <i>src-ip</i>       | IPv4 address (A.B.C.D) of source              |
|                           | <b>vrf</b>          | (Optional) vrf to be used for hello messages  |
|                           | <i>vrf-name</i>     | (Optional) vrf to be used for hellos          |
|                           | <i>vrf-cfg-name</i> | (Optional) Configurable VRF name              |

### Command Mode

- /exec/configure/if-eth-base /exec/configure/if-ethernet-all

# ptp vlan

[no] ptp vlan <vlan>

## Syntax Description

---

### Syntax Description

---

ptp Precision Time Protocol (IEEE 1588) Subsystem

---

vlan vlan

---

*vlan* vlan

---

## Command Mode

- /exec/configure/if-eth-base /exec/configure/if-ethernet-all

## publish-event sub-system type

```
publish-event sub-system <sub-system-id> type <event-type> { [ arg1 <data1> ] [ arg2 <data2> ] [ arg3
<data3> ] [ arg4 <data4> ] }
```

### Syntax Description

#### Syntax Description

|                      |   |
|----------------------|---|
| publish-event        | Publish an application specific event                                   |
| sub-system           | Sub-system ID to which the application event belongs                    |
| <i>sub-system-id</i> | Sub-system ID value   |
| type                 | Event type value  |
| <i>event-type</i>    | Event type value  |
| arg1                 | (Optional) User specified data to be passed when the event is published |
| <i>data1</i>         | (Optional) User specified data value                                    |
| arg2                 | (Optional) User specified data to be passed when the event is published |
| <i>data2</i>         | (Optional) User specified data value                                    |
| arg3                 | (Optional) User specified data to be passed when the event is published |
| <i>data3</i>         | (Optional) User specified data value                                    |
| arg4                 | (Optional) User specified data to be passed when the event is published |
| <i>data4</i>         | (Optional) User specified data value                                    |

### Command Mode

- /exec

# purge ip route

```
purge ip route [ vrf { <vrf-name> | <vrf-known-name> | <vrf-all> } ] <all>
```

## Syntax Description

| Syntax Description    |  |   |
|-----------------------|--|---|
| purge                 |  | Purge                                       |
| ip                    |  | IPv4  |
| route                 |  | Purge routing information                   |
| vrf                   |  | (Optional) VRF                              |
| <i>vrf-name</i>       |  | (Optional) VRF name                         |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name                   |
| vrf-all               |  | (Optional) Display information for all VRFs |
| all                   |  | Purge all routes                            |

## Command Mode

- /exec

# purge ipv6 route

```
purge ipv6 route [ vrf { <vrf-name> | <vrf-known-name> | <vrf-all> } ] <all>
```

## Syntax Description

| Syntax Description    |  |   |
|-----------------------|--|---|
| purge                 |  | Purge                                       |
| ipv6                  |  | IPv6  |
| route                 |  | Purge routing information                   |
| vrf                   |  | (Optional) VRF                              |
| <i>vrf-name</i>       |  | (Optional) VRF name                         |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name                   |
| vrf-all               |  | (Optional) Display information for all VRFs |
| all                   |  | Purge all routes                            |

## Command Mode

- /exec

# purge module running-config

purge module <module> running-config

## Syntax Description

| Syntax Description |       |  |
|--------------------|-------|--|
| purge              |       | Deletes unused data                            |
| module             |       | Purge configuration for non-existent modules   |
| <i>module</i>      |       | Enter module number                            |
| running-config     | purge | running configuration for non-existent modules |

## Command Mode

- /exec

# push

push [ <name> ]

## Syntax Description

---

### Syntax Description

---

push push current mode to stack or save it under name

---

*name* (Optional) name

---

## Command Mode

- /global

# pwd

pwd

## Syntax Description

---

### Syntax Description

---

**pwd** View current directory

---

## Command Mode

- /exec



# python

python [ <uri> [ <pyargs> ] + ]

## Syntax Description

---

### Syntax Description

---

**python** run a python command/script, or enter python mode (if no arg)

---

*uri* (Optional) path to a python file

---

*pyargs* (Optional) python command line arguments (maximum 32)

---

## Command Mode

- /exec

# python execute virtual-service command

python execute virtual-service <service> command [ <pyargs> ] +

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| python             | run a python command/script, or enter python mode (if no arg) |  |
| execute            | execute a virtual service command                             |  |
| virtual-service    | virtual service to execute the command                        |  |
| command            | command to execute  |  |
| <i>service</i>     | name of existing virtual service                              |  |
| <i>pyargs</i>      | (Optional) command and args (maximum 32)                      |  |

## Command Mode

- /exec

# python instance

[no] python instance <inst> [ <uri> [ <pyargs> ] + ] | python instance <inst> <uri> [ <pyargs> ] +

## Syntax Description

### Syntax Description

|                 |   |
|-----------------|---|
| <i>no</i>       | Negate a command or set its defaults                          |
| <i>python</i>   | run a python command/script, or enter python mode (if no arg) |
| <i>instance</i> | label with an instance number                                 |
| <i>inst</i>     | instance number   |
| <i>uri</i>      | (Optional) path to a python file                              |
| <i>pyargs</i>   | (Optional) python command line arguments (maximum 32)         |

## Command Mode

- /exec/configure





## Q Commands

---

- [qos copy policy-map type network-qos prefix, on page 3322](#)
- [qos copy policy-map type queuing prefix, on page 3323](#)
- [qos qos-policies statistics, on page 3324](#)
- [qos shared-policer, on page 3325](#)
- [qos statistics, on page 3329](#)
- [qualify udf, on page 3330](#)
- [queue-limit, on page 3331](#)
- [queue-limit2, on page 3332](#)
- [queue-limit3, on page 3333](#)

## qos copy policy-map type network-qos prefix

qos copy policy-map type network-qos <pmap-nq-enum-name-dc3> { prefix | suffix } <ix-name>

### Syntax Description

#### Syntax Description

|                              |  |
|------------------------------|--|
| copy                         | Copy (Clone) template  |
| policy-map                   | Configure a policy map   |
| type                         | Specify the type of this policy-map                            |
| network-qos                  | Network QoS policy   |
| <i>pmap-nq-enum-name-dc3</i> |  |
| prefix                       | Policy map name prefix   |
| suffix                       | Policy map name suffix   |
| <i>ix-name</i>               | Suffix/Prefix name, max size counted together with policy name |

### Command Mode

- /exec

## qos copy policy-map type queuing prefix

qos copy policy-map type queuing <pmap-name-que-temp> { prefix | suffix } <ix-name>

### Syntax Description

| Syntax Description        |  |  |
|---------------------------|--|--|
| copy                      |  | Copy (Clone) template  |
| policy-map                |  | Configure a policy map   |
| type                      |  | Specify the type of this policy-map                            |
| queuing                   |  | Queuing policy   |
| <i>pmap-name-que-temp</i> |  | Policy-map name  |
| prefix                    |  | Policy map name prefix   |
| suffix                    |  | Policy map name suffix   |
| <i>ix-name</i>            |  | Suffix/Prefix name, max size counted together with policy name |

### Command Mode

- /exec

# qos qos-policies statistics

[no] qos qos-policies statistics

## Syntax Description

---

|                           |    |   |
|---------------------------|----|---|
| <b>Syntax Description</b> | no | (Optional) Negate a command or set its defaults |
|---------------------------|----|---|

---

|              |                       |
|--------------|-----------------------|
| qos-policies | All qos type policies |
|--------------|-----------------------|

---

|            |            |
|------------|------------|
| statistics | statistics |
|------------|------------|

---

## Command Mode

- /exec/configure



## qos shared-policer

```
{ qos shared-policer [ type qos ] <policer-name> { [ cir ] { <cir-val> [ bps | kbps | mbps | gbps | pps ] | percent
<cir-perc> } [ [ bc ] { <committed-burst> [ bytes | kbytes | mbytes | ms | us | packets ] } ] [ pir { <pir-val> [
bps2 | kbps2 | mbps2 | gbps2 | pps2 ] | percent <pir-perc> } [ [ be ] { <extended-burst> [ bytes2 | kbytes2 |
mbytes2 | ms2 | us2 | packets2 ] } ] ] [ conform { transmit | set-prec-transmit { <prec-val> | <prec-enum> } |
set-dscp-transmit { <dscp-val> | <dscp-enum> } | set-cos-transmit <cos-val> | set-discard-class-transmit
<disc-class-val> | set-qos-transmit <qos-grp-val> | set-mpls-exp-imposition-transmit <exp-value-imp> |
set-mpls-exp-topmost-transmit <exp-value-top> } [ exceed { transmit1 | drop1 | set <exc-frm-field>
<exc-to-field> table cir-markdown-map | set-prec-transmit1 { <prec-val1> | <prec-enum1> } | set-dscp-transmit1
{ <dscp-val1> | <dscp-enum1> } | set-cos-transmit1 <cos-val1> | set-discard-class-transmit1 <disc-class-val1>
| set-qos-transmit1 <qos-grp-val1> | set-mpls-exp-imposition-transmit1 <exp-value-imp1> |
set-mpls-exp-topmost-transmit1 <exp-value-top1> } ] [ violate { drop2 | set <vio-frm-field> <vio-to-field>
table2 pir-markdown-map | set-prec-transmit2 { <prec-val2> | <prec-enum2> } | set-dscp-transmit2 {
<dscp-val2> | <dscp-enum2> } | set-cos-transmit2 <cos-val2> | set-discard-class-transmit2 <disc-class-val2>
| set-qos-transmit2 <qos-grp-val2> | set-mpls-exp-imposition-transmit2 <exp-value-imp2> |
set-mpls-exp-topmost-transmit2 <exp-value-top2> } ] ] } | no qos shared-policer [ type qos ] <policer-name>
}
```

### Syntax Description

#### Syntax Description

|                     |  |
|---------------------|--|
| no                  | Negate a command or set its defaults               |
| shared-policer      | Shared policer                                     |
| <i>policer-name</i> | Shared policer name                                |
| type                | (Optional) Specify the type of shared-policer      |
| qos                 | QoS Global Commands                                |
| cir                 | (Optional) Specify committed information rate      |
| bc                  | (Optional) Specify committed burst                 |
| percent             | Specify rate as percentage of interface data-rate  |
| <i>cir-perc</i>     | Percentage   |
| <i>pir-perc</i>     | (Optional) Percentage                              |
| pir                 | (Optional) Specify peak information rate           |
| be                  | (Optional) Specify extended burst (for 1R3C meter) |
| bps                 | (Optional) Bits per second                         |
| kbps                | (Optional) Kilo bits per second                    |
| mbps                | (Optional) Mega bits per second                    |
| gbps                | (Optional) Giga bits per second                    |

|                    |                                       |
|--------------------|---------------------------------------|
| pps                | (Optional) Packets per second         |
| bps2               | (Optional) Bits per second            |
| kbps2              | (Optional) Kilo Bits per second       |
| mbps2              | (Optional) Mega Bits per second       |
| gbps2              | (Optional) Giga Bits per second       |
| pps2               | (Optional) Packets per second         |
| bytes              | (Optional) Bytes                      |
| kbytes             | (Optional) Kilo bytes                 |
| mbytes             | (Optional) Mega bytes                 |
| us                 | (Optional) Micro second(s)            |
| ms                 | (Optional) Milli second(s)            |
| packets            | (Optional) Packets                    |
| bytes2             | (Optional) Bytes                      |
| kbytes2            | (Optional) Kilo Bytes                 |
| mbytes2            | (Optional) Mega Bytes                 |
| ms2                | (Optional) Milli seconds              |
| us2                | (Optional) Micro seconds              |
| packets2           | (Optional) Packets                    |
| conform            | (Optional) Specify a conform action   |
| exceed             | (Optional) Specify a exceed action    |
| violate            | (Optional) Specify a violate action   |
| transmit           | (Optional) Transmit packet            |
| transmit1          | (Optional) Transmit packet            |
| drop1              | (Optional) Drop packet                |
| drop2              | (Optional) Drop packet                |
| set-prec-transmit  | (Optional) Set precedence and send it |
| set-prec-transmit1 | (Optional) Set precedence and send it |
| set-prec-transmit2 | (Optional) Set precedence and send it |
| <i>prec-val</i>    | (Optional) Precedence value           |

|                             |  |
|-----------------------------|--|
| <i>prec-val1</i>            | (Optional) Precedence value              |
| <i>prec-val2</i>            | (Optional) Precedence value              |
| <i>prec-enum</i>            | (Optional)                               |
| <i>prec-enum1</i>           | (Optional)                               |
| <i>prec-enum2</i>           | (Optional)                               |
| set-dscp-transmit           | (Optional) Set dscp and send it          |
| set-dscp-transmit1          | (Optional) Set dscp and send it          |
| set-dscp-transmit2          | (Optional) Set dscp and send it          |
| <i>dscp-val</i>             | (Optional) DSCP value                    |
| <i>dscp-val1</i>            | (Optional) DSCP value                    |
| <i>dscp-val2</i>            | (Optional) DSCP value                    |
| <i>dscp-enum</i>            | (Optional)                               |
| <i>dscp-enum1</i>           | (Optional)                               |
| <i>dscp-enum2</i>           | (Optional)                               |
| set-cos-transmit            | (Optional) Set cos and send it           |
| set-cos-transmit1           | (Optional) Set cos and send it           |
| set-cos-transmit2           | (Optional) Set cos and send it           |
| <i>cos-val</i>              | (Optional) new cos value                 |
| <i>cos-val1</i>             | (Optional) new cos value                 |
| <i>cos-val2</i>             | (Optional) new cos value                 |
| set-discard-class-transmit  | (Optional) Set discard class and send it |
| set-discard-class-transmit1 | (Optional) Set discard class and send it |
| set-discard-class-transmit2 | (Optional) Set discard class and send it |
| <i>disc-class-val</i>       | (Optional) new discard-class value       |
| <i>disc-class-val1</i>      | (Optional) new discard-class value       |
| <i>disc-class-val2</i>      | (Optional) new discard-class value       |
| set-qos-transmit            | (Optional) Set qos-group and send it     |
| set-qos-transmit1           | (Optional) Set qos-group and send it     |
| set-qos-transmit2           | (Optional) Set qos-group and send it     |

|                                   |   |
|-----------------------------------|---|
| <i>qos-grp-val</i>                | (Optional) QoS group value                                    |
| <i>qos-grp-val1</i>               | (Optional) QoS group value                                    |
| <i>qos-grp-val2</i>               | (Optional) QoS group value                                    |
| set-mpls-exp-imposition-transmit  | (Optional) set-mpls-exp-imposition-transmit                   |
| set-mpls-exp-imposition-transmit1 | (Optional) set-mpls-exp-imposition-transmit                   |
| set-mpls-exp-imposition-transmit2 | (Optional) set-mpls-exp-imposition-transmit                   |
| <i>exp-value-imp</i>              | (Optional) MPLS imposition value                              |
| <i>exp-value-imp1</i>             | (Optional) MPLS imposition value                              |
| <i>exp-value-imp2</i>             | (Optional) MPLS imposition value                              |
| set-mpls-exp-topmost-transmit     | (Optional) Set MPLS topmost label                             |
| set-mpls-exp-topmost-transmit1    | (Optional) Set MPLS topmost label                             |
| set-mpls-exp-topmost-transmit2    | (Optional) Set MPLS topmost label                             |
| <i>exp-value-top</i>              | (Optional) MPLS topmost value                                 |
| <i>exp-value-top1</i>             | (Optional) MPLS topmost value                                 |
| <i>exp-value-top2</i>             | (Optional) MPLS topmost value                                 |
| set                               | (Optional) Set a particular value using table or markdown map |
| <i>exc-frm-field</i>              | (Optional)  |
| <i>exc-to-field</i>               | (Optional)  |
| <i>vio-frm-field</i>              | (Optional)  |
| <i>vio-to-field</i>               | (Optional)  |
| table                             | (Optional) Set using the table-map                            |
| table2                            | (Optional) Set using the table-map                            |
| cir-markdown-map                  | (Optional) Markdown map table name for exceed action          |
| pir-markdown-map                  | (Optional) Markdown map table name for violate action         |

### Command Mode

- /exec/configure

# qos statistics

[no] qos statistics

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | no      (Optional) Negate a command or set its defaults |
|                           | statistics statistics                                   |

## Command Mode

- /exec/configure

# qualify udf

[no] <udf\_tcam\_type> qualify udf { <udf\_name> } +

## Syntax Description

| Syntax Description   |   |  |
|----------------------|---|--|
| no                   | (Optional) Negate a command or set its defaults |  |
| <i>udf_tcam_type</i> | Region type                                     |  |
| qualify              | Configure UDFs to be qualified for span region  |  |
| udf                  | Configure UDF names                             |  |
| <i>udf_name</i>      | UDF name  |  |

## Command Mode

- /exec/configure/tcam-templ

# queue-limit

[no] queue-limit [ cos <cos-val> ] { <q-size> [ packets | bytes | kbytes | mbytes | ms | us ] | percent <perc-q-size> | dynamic <alpha> }

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults                           |
| queue-limit        | Configure queue size for the class  |
| cos                | (Optional) IEEE 802.1Q Class of Service                                   |
| cos-val            | (Optional) 802.1Q Class of Service value                                  |
| percent            | Specify queue size in Percentage  |
| perc-q-size        | Queue size in percentage of total tx/rx buffer size                       |
| dynamic            | Queue size in dynamic alpha factor  |
| alpha              | 0-1/128, 1-1/64, 2-1/32, 3-1/16, 4-1/8, 5-1/4, 6-1/2, 7-1, 8-2, 9-4, 10-8 |
| packets            | (Optional) Packets  |
| bytes              | (Optional) Bytes  |
| kbytes             | (Optional) Kilo bytes   |
| mbytes             | (Optional) Mega bytes   |
| ms                 | (Optional) Milli second(s)  |
| us                 | (Optional) Micro second(s)  |

## Command Mode

- /exec/configure/policy-map/type/queuing/class

## queue-limit2

```
[no] queue-limit2 [ cos2 <cos-val> ] { <q-size> [ packets | bytes | kbytes | mbytes | ms | us ] | percent2
<perc-q-size> | dynamic2 <alpha> }
```

### Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults                           |
| queue-limit2       | Configure queue size for the class  |
| cos2               | (Optional) IEEE 802.1Q Class of Service                                   |
| cos-val            | (Optional) 802.1Q Class of Service value                                  |
| percent2           | Specify queue size in Percentage  |
| perc-q-size        | Queue size in percentage of total tx/rx buffer size                       |
| dynamic2           | Queue size in dynamic alpha factor  |
| alpha              | 0-1/128, 1-1/64, 2-1/32, 3-1/16, 4-1/8, 5-1/4, 6-1/2, 7-1, 8-2, 9-4, 10-8 |
| packets            | (Optional) Packets  |
| bytes              | (Optional) Bytes  |
| kbytes             | (Optional) Kilo bytes   |
| mbytes             | (Optional) Mega bytes   |
| ms                 | (Optional) Milli second(s)  |
| us                 | (Optional) Micro second(s)  |

### Command Mode

- /exec/configure/policy-map/type/queuing/class



# queue-limit3

```
[no] queue-limit3 [ cos3 <cos-val> ] { <q-size> [ packets | bytes | kbytes | mbytes | ms | us ] | percent3
<perc-q-size> | dynamic3 <alpha> }
```

## Syntax Description

### Syntax Description

|              |   |
|--------------|---|
| no           | (Optional) Negate a command or set its defaults                       |
| queue-limit3 | Configure queue size for the class                                    |
| cos3         | (Optional) IEEE 802.1Q Class of Service                               |
| cos-val      | (Optional) 802.1Q Class of Service value                              |
| percent3     | Specify queue size in Percentage                                      |
| perc-q-size  | Queue size in percentage of total tx/rx buffer size                   |
| dynamic3     | Queue size in dynamic alpha factor                                    |
| alpha        | 0-1/8, 1-1/4, 2-1/2, 3-3/4, 4-9/8, 5-15/8, 6-3, 7-5, 8-8, 9-14, 10-18 |
| packets      | (Optional) Packets  |
| bytes        | (Optional) Bytes  |
| kbytes       | (Optional) Kilo bytes   |
| mbytes       | (Optional) Mega bytes   |
| ms           | (Optional) Milli second(s)  |
| us           | (Optional) Micro second(s)  |

## Command Mode

- /exec/configure/policy-map/type/queuing/class





## R Commands

---

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# radius-server deadline

[no] radius-server deadline <i0>

## Syntax Description

|                           |               |  |
|---------------------------|---------------|--|
| <b>Syntax Description</b> | no            | (Optional) Negate a command or set its defaults    |
|                           | radius-server | Configure RADIUS related parameters                |
|                           | deadline      | duration for which non-reachable server is skipped |
|                           | i0            | Length of time, in minutes                         |

## Command Mode

- /exec/configure



# radius-server directed-request

[no] radius-server directed-request

## Syntax Description

|                           |                  |   |
|---------------------------|------------------|---|
| <b>Syntax Description</b> | no               | (Optional) Negate a command or set its defaults |
|                           | radius-server    | Configure RADIUS related parameters             |
|                           | directed-request | enable direct authentication requests to server |

## Command Mode

- /exec/configure

## radius-server host key 0 6 7

```
{ { [ no ] radius-server host <hostipname> { { key { 0 <s0> | 6 <s6> | 7 <s1> | <s2> } [ pac ] [ auth-port <i0>
[ acct-port <i1> ] ] } | { [ auth-port1 <i2> ] [ acct-port1 <i3> ] } } [ { authentication [ accounting [ timeout
<i4> ] [ retransmit <i5> ] ] } | { [ accounting1 ] [ timeout1 <i6> ] [ retransmit1 <i7> ] } } ] | { no radius-server
host <hostipname> key } }
```

### Syntax Description

| Syntax Description | key           | 0  |
|--------------------|---------------|--|
|                    | no            | (Optional) Negate a command or set its defaults    |
|                    | radius-server | Configure RADIUS related parameters                |
|                    | host          | RADIUS server's DNS name or its IP address         |
|                    | hostipname    | IPV4/IPV6 address or DNS name                      |
|                    | key           | RADIUS shared secret                               |
|                    | pac           | (Optional) Secure Radius Enable                    |
|                    | 0             | RADIUS shared secret(clear text)                   |
|                    | s0            | RADIUS shared secret(clear text)                   |
|                    | accounting    | (Optional) Use for accounting                      |
|                    | retransmit    | (Optional) RADIUS server retransmit count          |
|                    | i5            | (Optional) RADIUS server retransmit count          |
|                    | timeout       | (Optional) RADIUS server timeout period in seconds |
|                    | i4            | (Optional) RADIUS server timeout period in seconds |
|                    | retransmit1   | (Optional) RADIUS server retransmit count          |
|                    | i7            | (Optional) RADIUS server retransmit count          |
|                    | auth-port     | (Optional) RADIUS server's port for authentication |
|                    | i0            | (Optional) port number                             |
|                    | timeout1      | (Optional) RADIUS server timeout period in seconds |
|                    | i6            | (Optional) RADIUS server timeout period in seconds |
|                    | acct-port     | (Optional) RADIUS server's port for accounting     |
|                    | i1            | (Optional) port number                             |
|                    | accounting1   | (Optional) Use for accounting                      |

|                |  |
|----------------|--|
| authentication | (Optional) Use for authentication                  |
| 6              | RADIUS shared secret(type-6 encrypted)             |
| s6             | RADIUS shared secret(encrypted)                    |
| 7              | RADIUS shared secret(encrypted)                    |
| s7             | RADIUS shared secret(encrypted)                    |
| auth-port1     | (Optional) RADIUS server's port for authentication |
| i2             | (Optional) port number                             |
| s2             | RADIUS shared secret(clear text)                   |
| acct-port1     | (Optional) RADIUS server's port for accounting     |
| i3             | (Optional) port number                             |

**Command Mode**

- /exec/configure

# radius-server host test

```
[no] radius-server host { <hostipname> } test { { username <s0> { [ password <s1> [ idle-time <i1> ] ] } | [ idle-time <i1> ] } } | { password <s1> [ idle-time <i1> ] } | { idle-time <i1> } }
```

## Syntax Description

### Syntax Description

|                   |  |
|-------------------|--|
| <i>username</i>   | <s0>   |
| no                | (Optional) Negate a command or set its defaults    |
| radius-server     | Configure RADIUS related parameters                |
| host              | RADIUS server's DNS name or its IP address         |
| <i>hostipname</i> | IPV4/IPV6 address or DNS name                      |
| test              | Parameters to send test packets                    |
| <i>s0</i>         | user name  |
| password          | (Optional) user password in test packets           |
| <i>s1</i>         | (Optional) user password                           |
| idle-time         | (Optional) time interval for monitoring the server |
| <i>i1</i>         | (Optional) time period in minutes                  |

## Command Mode

- /exec/configure

# radius-server key 0 6 7

```
{ { [ no ] radius-server key { 0 <s0> | 6 <s6> | 7 <s1> | <s2> } } | { no radius-server key } }
```

## Syntax Description

| Syntax Description | Description                                     |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| radius-server      | Configure RADIUS related parameters             |
| key                | Global RADIUS server shared secret              |
| 0                  | default RADIUS shared secret(clear text)        |
| s0                 | default RADIUS shared secret(clear text)        |
| 6                  | default RADIUS shared secret(type-6 encrypted)  |
| s6                 | default RADIUS shared secret(type-6 encrypted)  |
| 7                  | default RADIUS shared secret(encrypted)         |
| s1                 | default RADIUS shared secret(encrypted)         |
| s2                 | default RADIUS shared secret(clear text)        |

## Command Mode

- /exec/configure

# radius-server pss-clean

[no] radius-server pss-clean

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| radius-server      | Configure RADIUS related parameters             |
| pss-clean          | Erase PSS                                       |

## Command Mode

- /exec/configure

# radius-server retransmit

[no] radius-server retransmit <i0>

## Syntax Description

|                           |               |   |
|---------------------------|---------------|---|
| <b>Syntax Description</b> | no            | (Optional) Negate a command or set its defaults |
|                           | radius-server | Configure RADIUS related parameters             |
|                           | retransmit    | Global RADIUS server retransmit count           |
|                           | <i>i0</i>     | Global RADIUS server retransmit count           |

## Command Mode

- /exec/configure

# radius-server test

```
[no] radius-server test { { username <s0> { [ password <s1> [ idle-time <i1> ] ] | [ idle-time <i1> ] } } | { password <s1> [ idle-time <i1> ] } | { idle-time <i1> } }
```

## Syntax Description

### Syntax Description

|                 |  |
|-----------------|--|
| <i>username</i> | <s0>   |
| no              | (Optional) Negate a command or set its defaults    |
| radius-server   | Configure RADIUS related parameters                |
| test            | Parameters to send test packets                    |
| <i>s0</i>       | user name  |
| password        | (Optional) user password in test packets           |
| <i>s1</i>       | (Optional) user password                           |
| idle-time       | (Optional) time interval for monitoring the server |
| <i>i1</i>       | (Optional) time period in minutes                  |

## Command Mode

- /exec/configure



# radius-server timeout

[no] radius-server timeout <i0>

## Syntax Description

|                           |               |   |
|---------------------------|---------------|---|
| <b>Syntax Description</b> | no            | (Optional) Negate a command or set its defaults |
|                           | radius-server | Configure RADIUS related parameters             |
|                           | timeout       | Global RADIUS server timeout period in seconds  |
|                           | <i>i0</i>     | RADIUS server timeout period in seconds         |

## Command Mode

- /exec/configure

# random-detect

```
[no] random-detect [ { minimum-threshold <min-thresh> { packets | bytes | kbytes | mbytes }
maximum-threshold <max-thresh> { packets1 | bytes1 | kbytes1 | mbytes1 } drop-probability <drop-prob>
weight <weight> [ cap-average ] } | threshold { burst-optimized | mesh-optimized } } [ ecn ]
```

## Syntax Description

### Syntax Description

|                   |  |
|-------------------|--|
| no                | (Optional) Negate a command or set its defaults  |
| random-detect     | Configure WRED parameters  |
| threshold         | (Optional) Threshold   |
| burst-optimized   | (Optional) Threshold optimized for bursty traffic  |
| mesh-optimized    | (Optional) Threshold optimized for mesh traffic  |
| minimum-threshold | (Optional) Specify minimum threshold for WRED  |
| maximum-threshold | (Optional) Specify maximum threshold for WRED  |
| <i>max-thresh</i> | (Optional) Maximum threshold value   |
| packets           | (Optional) Packets   |
| bytes             | (Optional) Bytes   |
| kbytes            | (Optional) Kilo bytes  |
| mbytes            | (Optional) Mega bytes  |
| packets1          | (Optional) Packets   |
| bytes1            | (Optional) Bytes   |
| kbytes1           | (Optional) Kilo Bytes  |
| mbytes1           | (Optional) Mega Bytes  |
| drop-probability  | (Optional) Drop Probability at Maximum Threshold   |
| <i>drop-prob</i>  | (Optional) Drop Probability Value  |
| weight            | (Optional) Queue length weight   |
| <i>weight</i>     | (Optional) Queue length weight   |
| cap-average       | (Optional) If average queue length is more, replace average queue length with current queue length |
| ecn               | (Optional) ECN   |

## Command Mode

- /exec/configure/policy-map/type/queuing/class

## random-detect2 minimum-threshold2 maximum-threshold2

```
[no] random-detect2 minimum-threshold2 <min-thresh2> { packets2 | bytes2 | kbytes2 | mbytes2 }
maximum-threshold2 <max-thresh2> { packets3 | bytes3 | kbytes3 | mbytes3 } [ drop-probability2 <drop-prob2>
weight2 <weight2> [ cap-average2 ] ]
```

### Syntax Description

#### Syntax Description

|                    |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults  |
| random-detect2     | Configure WRED parameters  |
| minimum-threshold2 | Specify minimum threshold for WRED   |
| maximum-threshold2 | Specify maximum threshold for WRED   |
| packets2           | Packets  |
| bytes2             | Bytes  |
| kbytes2            | Kilo Bytes   |
| mbytes2            | Mega Bytes   |
| packets3           | Packets  |
| bytes3             | Bytes  |
| kbytes3            | Kilo Bytes   |
| mbytes3            | Mega Bytes   |
| drop-probability2  | (Optional) Drop Probability at Maximum Threshold   |
| <i>drop-prob2</i>  | (Optional) Drop Probability Value  |
| weight2            | (Optional) Queue length weight   |
| <i>weight2</i>     | (Optional) Queue length weight   |
| cap-average2       | (Optional) If average queue length is more, replace average queue length with current queue length |

### Command Mode

- /exec/configure/policy-map/type/queuing/class

# random-detect2 non-ecn minimum-threshold2 maximum-threshold2 drop

```
[no] random-detect2 non-ecn minimum-threshold2 <min-thresh2> { packets2 | bytes2 | kbytes2 | mbytes2 }
maximum-threshold2 <max-thresh2> { packets3 | bytes3 | kbytes3 | mbytes3 } { drop-probability2 <drop-prob2>
}
```

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| random-detect2     | Configure WRED parameters                       |  |
| non-ecn            | Configure WRED parameters for non-ecn           |  |
| minimum-threshold2 | Specify minimum threshold for WRED              |  |
| maximum-threshold2 | Specify maximum threshold for WRED              |  |
| packets2           | Packets   |  |
| bytes2             | Bytes   |  |
| kbytes2            | Kilo Bytes                                      |  |
| mbytes2            | Mega Bytes                                      |  |
| packets3           | Packets   |  |
| bytes3             | Bytes   |  |
| kbytes3            | Kilo Bytes                                      |  |
| mbytes3            | Mega Bytes                                      |  |
| drop-probability2  | Drop Probability at Maximum Threshold           |  |
| <i>drop-prob2</i>  | Drop Probability Value                          |  |

## Command Mode

- /exec/configure/policy-map/type/queuing/class

## random-detect

```
[no] random-detect { cos <cos-list> [ minimum-threshold ] { <min-thresh> [ packets | bytes | kbytes | mbytes
| ms | us ] | percent <min-percent-of-qsize> } [ maximum-threshold ] { <max-thresh> [ packets1 | bytes1 |
kbytes1 | mbytes1 | ms1 | us1 ] | percent1 <max-percent-of-qsize> } }
```

### Syntax Description

#### Syntax Description

|                             |   |
|-----------------------------|---|
| no                          | (Optional) Negate a command or set its defaults |
| random-detect               | Configure WRED parameters                       |
| cos                         | Parameters for each cos value                   |
| <i>cos-list</i>             | List of class-of-service values                 |
| minimum-threshold           | (Optional) Specify minimum threshold for WRED   |
| maximum-threshold           | (Optional) Specify maximum threshold for WRED   |
| <i>max-thresh</i>           | Maximum threshold value                         |
| percent                     | Specify thresholds in percent                   |
| percent1                    | Specify thresholds in percent                   |
| <i>min-percent-of-qsize</i> | Minimum threshold percent of queue size         |
| <i>max-percent-of-qsize</i> | Maximum threshold percent of queue size         |
| packets                     | (Optional) Packets                              |
| bytes                       | (Optional) Bytes                                |
| kbytes                      | (Optional) Kilo bytes                           |
| mbytes                      | (Optional) Mega bytes                           |
| ms                          | (Optional) Milli second(s)                      |
| us                          | (Optional) Micro second(s)                      |
| packets1                    | (Optional) Packets                              |
| bytes1                      | (Optional) Bytes                                |
| kbytes1                     | (Optional) Kilo Bytes                           |
| mbytes1                     | (Optional) Mega Bytes                           |
| ms1                         | (Optional) Milli second(s)                      |
| us1                         | (Optional) Micro second(s)                      |

**Command Mode**

- /exec/configure/policy-map/type/queuing/class

## random-detect cos-based

```
[no] random-detect cos-based [ aggregate [ minimum-threshold ] { <min-thresh> [ packets | bytes | kbytes |
mbytes | ms | us ] | percent <min-percent-of-qsize> } [ maximum-threshold ] { <max-thresh> [ packets1 |
bytes1 | kbytes1 | mbytes1 | ms1 | us1 ] | percent1 <max-percent-of-qsize> } ]
```

### Syntax Description

#### Syntax Description

|                             |  |
|-----------------------------|--|
| no                          | (Optional) Negate a command or set its defaults                        |
| random-detect               | Configure WRED parameters  |
| cos-based                   | Configure WRED parameters for cos-based mode                           |
| aggregate                   | (Optional) Configure WRED parameters to same value for all sub-classes |
| minimum-threshold           | (Optional) Specify minimum threshold for WRED                          |
| maximum-threshold           | (Optional) Specify maximum threshold for WRED                          |
| <i>max-thresh</i>           | (Optional) Maximum threshold value                                     |
| percent                     | (Optional) Specify thresholds in percent                               |
| percent1                    | (Optional) Specify thresholds in percent                               |
| <i>min-percent-of-qsize</i> | (Optional) Minimum threshold percent of queue size                     |
| <i>max-percent-of-qsize</i> | (Optional) Maximum threshold percent of queue size                     |
| packets                     | (Optional) Packets   |
| bytes                       | (Optional) Bytes   |
| kbytes                      | (Optional) Kilo bytes  |
| mbytes                      | (Optional) Mega bytes  |
| ms                          | (Optional) Milli second(s)   |
| us                          | (Optional) Micro second(s)   |
| packets1                    | (Optional) Packets   |
| bytes1                      | (Optional) Bytes   |
| kbytes1                     | (Optional) Kilo Bytes  |
| mbytes1                     | (Optional) Mega Bytes  |
| ms1                         | (Optional) Milli second(s)   |
| us1                         | (Optional) Micro second(s)   |



**Command Mode**

- /exec/configure/policy-map/type/queuing/class

## rate-limit cpu direction pps action log

[no] rate-limit cpu direction { input | output | both } pps <pps-val> action log

### Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| rate-limit         | set packet per second rate limit                |
| cpu                | Supervisor CPU limits                           |
| direction          | input/output direction                          |
| input              | set max input packet rate                       |
| output             | set max output packet rate                      |
| both               | set max input and output packet rate            |
| pps                | packet per second                               |
| <i>pps-val</i>     | pps value                                       |
| action             | log action                                      |
| log                | write a syslog message if PPS hits rate-limit   |

### Command Mode

- /exec/configure

## rate-limit cpu direction pps action log

[no] rate-limit cpu direction { input | output | both } pps <pps-val> action log

### Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| rate-limit         | set packet per second rate limit                |
| cpu                | Supervisor CPU limits                           |
| direction          | input/output direction                          |
| input              | set max input packet rate                       |
| output             | set max output packet rate                      |
| both               | set max input and output packet rate            |
| pps                | packet per second                               |
| <i>pps-val</i>     | pps value                                       |
| action             | log action                                      |
| log                | write a syslog message if PPS hits rate-limit   |

### Command Mode

- /exec/configure/if-eth-base /exec/configure/if-eth-any /exec/configure/if-mgmt-config

## rate-limit packet\_in burst

rate-limit packet\_in <packetin-val> burst <burst-val> | no rate-limit

### Syntax Description

| Syntax Description  |  |   |
|---------------------|--|---|
| no                  |  | Negate a command or set its defaults          |
| rate-limit          |  | OpenFlow rate limit to controller             |
| packet_in           |  | packet in rate (pps)                          |
| <i>packetin-val</i> |  | packets per second                            |
| burst               |  | Maximum number of packets to controller (pps) |
| <i>burst-val</i>    |  | packets per second                            |

### Command Mode

- /exec/configure/openflow/switch

# rate-limit packet\_in burst

rate-limit packet\_in <packetin-val> burst <burst-val> | no rate-limit

## Syntax Description

| Syntax Description  |  |   |
|---------------------|--|---|
| no                  |  | Negate a command or set its defaults          |
| rate-limit          |  | OpenFlow rate limit to controller             |
| packet_in           |  | packet in rate (pps)                          |
| <i>packetin-val</i> |  | packets per second                            |
| burst               |  | Maximum number of packets to controller (pps) |
| <i>burst-val</i>    |  | packets per second                            |

## Command Mode

- /exec/configure/openflow/switch/sub-switch

# rate-mode

rate-mode <ratemode> [ force ] | no rate-mode [ <ratemode> ] [ force ]

## Syntax Description

### Syntax Description

|                 |  |
|-----------------|--|
| no              | Negate a command or set its defaults                                     |
| rate-mode       | Enter the rate mode  |
| force           | (Optional) This option will shutdown all ports in port-group momentarily |
| <i>ratemode</i> | Interface port speed   |

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-eth-base

# rd auto

```
{ rd { auto | <ext-comm-rd-aa2nn4> | <ext-comm-rd-aa4nn2> } } | { no rd [ { auto | <ext-comm-rd-aa2nn4> | <ext-comm-rd-aa4nn2> } ] }
```

## Syntax Description

| Syntax Description        |  |   |
|---------------------------|--|---|
| no                        |  | Negate a command or set its defaults              |
| rd                        |  | VPN Route Distinguisher                           |
| auto                      |  | Generate RD automatically                         |
| <i>ext-comm-rd-aa4nn2</i> |  | VPN route distinguisher in aa4:nn or ip:nn format |
| <i>ext-comm-rd-aa2nn4</i> |  | VPN route distinguisher in aa:nn format           |

## Command Mode

- /exec/configure/vrf

# rd auto

```
{ rd { auto | <ext-comm-rd-aa2nn4> | <ext-comm-rd-aa4nn2> } } | { no rd [ { auto | <ext-comm-rd-aa2nn4> | <ext-comm-rd-aa4nn2> } ] }
```

## Syntax Description

| Syntax Description        |  |   |
|---------------------------|--|---|
| no                        |  | Negate a command or set its defaults              |
| rd                        |  | VPN Route Distinguisher                           |
| auto                      |  | Generate RD automatically                         |
| <i>ext-comm-rd-aa2nn4</i> |  | VPN route distinguisher in aa:nn format           |
| <i>ext-comm-rd-aa4nn2</i> |  | VPN route distinguisher in aa4:nn or ip:nn format |

## Command Mode

- /exec/configure/evpn/evi



# reconnect-interval

reconnect-interval <interval> | no reconnect-interval [ <interval> ]

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults    |
| reconnect-interval |  | Configure connection reconnect interval |
| <i>interval</i>    |  | Interval in seconds                     |

## Command Mode

- /exec/configure/router-bgp/vrf-cmds

# record-route

[no] record-route

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| record-route       | Record the route used by the LSP                |

## Command Mode

- /exec/configure/te/lsp-attr

# record-route

[no] record-route

## Syntax Description

|                           |              |   |
|---------------------------|--------------|---|
| <b>Syntax Description</b> | no           | (Optional) Negate a command or set its defaults |
|                           | record-route | record the route used by the tunnel             |

## Command Mode

- /exec/configure/if-te /exec/configure/tunnel-te/cbts-member

# record

[no] record <recordname>

## Syntax Description

---

### Syntax Description

---

|        |                            |
|--------|----------------------------|
| record | Specify Flow Record to use |
|--------|----------------------------|

---

*recordname* Name of record

---

## Command Mode

- /exec/configure/nfm-monitor

# record netflow-original

[no] record netflow-original

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| record             | Specify Flow Record to use                     |
| netflow-original   | Traditional IPv4 input NetFlow with origin ASs |

## Command Mode

- /exec/configure/nfm-monitor

# record netflow

```
[no] record netflow { ipv4 { original-input | original-output } }
```

## Syntax Description

| Syntax Description | record          | Specify Flow Record to use                  |
|--------------------|-----------------|---|
|                    | netflow         | Traditional NetFlow collection schemes      |
|                    | ipv4            | Traditional IPv4 NetFlow collection schemes |
|                    | original-input  | Traditional IPv4 input NetFlow              |
|                    | original-output | Traditional IPv4 output NetFlow             |

## Command Mode

- /exec/configure/nfm-monitor

# record netflow

```
[no] record netflow { ipv6 { original-input | original-output } }
```

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| record             |  | Specify Flow Record to use             |
| netflow            |  | Traditional NetFlow collection schemes |
| ipv6               |  | IPv6 collection schemes                |
| original-input     |  | Input NetFlow                          |
| original-output    |  | Output NetFlow                         |

## Command Mode

- /exec/configure/nfm-monitor

# record netflow

```
[no] record netflow { layer2-switched { input } }
```

## Syntax Description

---

**Syntax Description**

|                 |   |
|-----------------|---|
| record          | Specify Flow Record to use                |
| netflow         | Traditional NetFlow collection schemes    |
| layer2-switched | Traditional L2 NetFlow collection schemes |
| input           | Input NetFlow                             |

---

## Command Mode

- /exec/configure/nfm-monitor



# record netflow protocol-port

[no] record netflow protocol-port

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| record             |  | Specify Flow Record to use             |
| netflow            |  | Traditional NetFlow collection schemes |
| protocol-port      |  | Protocol and Ports aggregation scheme  |

## Command Mode

- /exec/configure/nfm-monitor

# redistribute bgp

```
{ redistribute { { bgp <as> } | { eigrp | isis | ospfv3 | rip } <ptag> | static | direct | amt | lisp } route-map {
<policy-name> | <rtr_pol_name> } } | { no redistribute { { bgp <as> } | { eigrp | isis | ospfv3 | rip } <ptag> |
static | direct | amt | lisp } [ route-map { <policy-name> | <rtr_pol_name> } ] }
```

## Syntax Description

### Syntax Description

|              |  |
|--------------|--|
| no           | Negate a command or set its defaults                   |
| redistribute | Redistribute information from another routing protocol |
| bgp          | Border Gateway Protocol (BGP)                          |
| as           | Autonomous system number                               |
| eigrp        | Enhanced Interior Gateway Protocol (EIGRP)             |
| isis         | ISO Intermediate-to-Intermediate (IS-IS)               |
| ospfv3       | Open Shortest Path First (OSPFv3)                      |
| rip          | Routing Information Protocol (RIP)                     |
| ptag         | Process Tag  |
| static       | Static   |
| direct       | Directly connected                                     |
| amt          | AMT anycast prefix                                     |
| lisp         | LISP EID-prefixes                                      |
| route-map    | Policy to constrain redistribution                     |
| policy-name  | Route-map name   |
| rtr_pol_name | An existing routing-rules policy                       |

## Command Mode

- /exec/configure/router-ospf3/router-ospf3-af-ipv6 /exec/configure/router-ospf3/vrf/router-ospf3-af-ipv6

# redistribute bgp eigrp isis ospf rip static direct amt lisp route-map

```
{ redistribute { bgp <as> | { eigrp | isis | ospf | rip } <ptag> | static | direct | amt | lisp } route-map {
<policy-name> | <rtr_pol_name> } } | { no redistribute { bgp <as> | { eigrp | isis | ospf | rip } <ptag> | static
| direct | amt | lisp } [ route-map { <policy-name> | <rtr_pol_name> } ] }
```

## Syntax Description

### Syntax Description

|              |  |
|--------------|--|
| no           | Negate a command or set its defaults                   |
| redistribute | Redistribute information from another routing protocol |
| bgp          | Border Gateway Protocol (BGP)                          |
| as           | Autonomous system number                               |
| isis         | ISO Intermediate-to-Intermediate (IS-IS)               |
| ospf         | Open Shortest Path First (OSPFv2)                      |
| eigrp        | Enhanced Interior Gateway Protocol (EIGRP)             |
| rip          | Routing Information Protocol (RIP)                     |
| ptag         | Protocol Tag   |
| static       | Static   |
| direct       | Directly connected                                     |
| amt          | AMT anycast prefix                                     |
| lisp         | LISP EID-prefixes                                      |
| route-map    | Policy to constrain redistribution                     |
| policy-name  | Route-map name   |
| rtr_pol_name | An existing routing-rules policy                       |

## Command Mode

- /exec/configure/router-ospf /exec/configure/router-ospf/vrf

# redistribute filter route-map

[no] redistribute filter route-map { <map-name> | <rtr\_pol\_name> }

## Syntax Description

| Syntax Description  |            |  |
|---------------------|------------|--|
| no                  | (Optional) | Negate a command or set its defaults                   |
| redistribute        |            | Redistribute information from another routing protocol |
| filter              |            | Filter redistributed routes                            |
| route-map           |            | Route-map to constrain redistribution                  |
| <i>map-name</i>     |            | A 'routing-rules' route-map name                       |
| <i>rtr_pol_name</i> |            | An existing routing-rules policy                       |

## Command Mode

- /exec/configure/otv-isis/otv-isis-vrf-common

# redistribute maximum-prefix

```
{ redistribute maximum-prefix <maximum> [ <threshold> ] [ warning-only | withdraw [ <retries> <timeout>
]] } | { no redistribute maximum-prefix <maximum> [ <threshold> ] [ warning-only | withdraw [ <retries>
<timeout> ] ] }
```

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 |            | Negate a command or set its defaults                           |
| redistribute       |            | Redistribute information from another routing protocol         |
| maximum-prefix     |            | Maximum number of prefixes redistributed to protocol           |
| <i>maximum</i>     |            | Maximum number of IP prefixes redistributed                    |
| <i>threshold</i>   | (Optional) | Threshold value (%) at which to generate a warning message     |
| warning-only       | (Optional) | Log a warning message when limit is exceeded                   |
| withdraw           | (Optional) | Withdraw all redistributed routes                              |
| <i>retries</i>     | (Optional) | Number of times to retry to get the redistributed routes again |
| <i>timeout</i>     | (Optional) | Timeout between each retries                                   |

## Command Mode

- /exec/configure/router-ospf /exec/configure/router-ospf/vrf

# redistribute maximum-prefix

```
redistribute maximum-prefix <maximum> [ <threshold> ] [ warning-only | withdraw [ <retries> <timeout> ] ] | no redistribute maximum-prefix [ <maximum> [ <threshold> ] [ warning-only | withdraw [ <retries> <timeout> ] ] ]
```

## Syntax Description

### Syntax Description

|                  |  |
|------------------|--|
| no               | Negate a command or set its defaults                       |
| redistribute     | Redistribute information from another routing protocol     |
| maximum-prefix   | Max number of prefixes redistributed                       |
| <i>maximum</i>   | max number   |
| <i>threshold</i> | (Optional) Threshold in %, at which message is generated   |
| warning-only     | (Optional) Warning msg is logged when max is reached       |
| withdraw         | (Optional) Withdraw all redistributed routes               |
| <i>retries</i>   | (Optional) No of times to retry to get redist routes again |
| <i>timeout</i>   | (Optional) Time between the retries                        |

## Command Mode

- /exec/configure/router-isis/router-isis-vrf-common /exec/configure/router-isis/router-isis-af-ipv4

# redistribute maximum-prefix

```
redistribute maximum-prefix <maximum> [ <threshold> ] [ warning-only | withdraw [ <retries> <timeout>
] ] | no redistribute maximum-prefix [ <maximum> [ <threshold> ] [ warning-only | withdraw [ <retries>
<timeout> ] ] ]
```

## Syntax Description

### Syntax Description

|                             |   |
|-----------------------------|---|
| <code>no</code>             | Negate a command or set its defaults                          |
| <code>redistribute</code>   | Redistribute information from another routing protocol        |
| <code>maximum-prefix</code> | Max number of prefixes redistributed                          |
| <i>maximum</i>              | max number  |
| <i>threshold</i>            | (Optional) Threshold in %, at which message is generated      |
| <code>warning-only</code>   | (Optional) Warning msg is logged when max is reached          |
| <code>withdraw</code>       | (Optional) Withdraw all redistributed routes                  |
| <i>retries</i>              | (Optional) No of times to retry to get redistrib routes again |
| <i>timeout</i>              | (Optional) Time between the retries                           |

## Command Mode

- /exec/configure/router-isis/router-isis-af-ipv6

# redistribute maximum-prefix

```
{ redistribute maximum-prefix <maximum> [ <threshold> ] [ warning-only | withdraw [ <retries> <timeout> ] ] } | { no redistribute maximum-prefix }
```

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 |            | Negate a command or set its defaults                           |
| redistribute       |            | Redistribute information from another routing protocol         |
| maximum-prefix     |            | Maximum number of prefixes redistributed to protocol           |
| <i>maximum</i>     |            | Maximum number of IP prefixes redistributed                    |
| <i>threshold</i>   | (Optional) | Threshold value (%) at which to generate a warning message     |
| warning-only       | (Optional) | Log a warning message when limit is exceeded                   |
| withdraw           | (Optional) | Withdraw all redistributed routes                              |
| <i>retries</i>     | (Optional) | Number of times to retry to get the redistributed routes again |
| <i>timeout</i>     | (Optional) | Timeout between each retries                                   |

## Command Mode

- /exec/configure/router-ospf3/router-ospf3-af-ipv6 /exec/configure/router-ospf3/vrf/router-ospf3-af-ipv6



# redistribute maximum-prefix

```
redistribute maximum-prefix <maximum> [ <threshold> ] [ warning-only | withdraw [ <retries> <timeout> ] ] | no redistribute maximum-prefix [ <maximum> [ <threshold> ] [ warning-only | withdraw [ <retries> <timeout> ] ] ]
```

## Syntax Description

### Syntax Description

|                             |  |
|-----------------------------|--|
| <code>no</code>             | Negate a command or set its defaults   |
| <code>redistribute</code>   | Redistribute information from another routing protocol                             |
| <code>maximum-prefix</code> | Max number of prefixes redistributed   |
| <i>maximum</i>              | max number   |
| <i>threshold</i>            | (Optional) Threshold in %, at which message is generated                           |
| <code>warning-only</code>   | (Optional) Warning msg is logged when threshold is reached                         |
| <code>withdraw</code>       | (Optional) Withdraw all redistributed routes                                       |
| <i>retries</i>              | (Optional) Number of attempts to receive redistributed routes after max is reached |
| <i>timeout</i>              | (Optional) Retry interval  |

## Command Mode

- /exec/configure/router-eigrp/router-eigrp-vrf-common /exec/configure/router-eigrp/router-eigrp-af-common

# redistribute route-map

[no] redistribute { bgp <as> | { eigrp | isis | ospfv3 | rip } <tag> | static | direct | amt | lisp } route-map <map-name>

## Syntax Description

### Syntax Description

|              |   |
|--------------|---|
| no           | (Optional) Negate a command or set its defaults     |
| redistribute | RIP redistribute routes from other routing protocol |
| bgp          | Border Gateway Protocol (BGP)                       |
| as           | Autonomous system number                            |
| eigrp        | Enhanced Interior Gateway Routing Protocol (EIGRP)  |
| isis         | Intermediate-to-intermediate (ISIS)                 |
| rip          | Routing Information Protocol (RIP)                  |
| ospfv3       | Open Shortest Path First (OSPFv3)                   |
| tag          | Process tag   |
| static       | Static routes                                       |
| direct       | Directly connected routes                           |
| amt          | AMT anycast prefix                                  |
| lisp         | LISP EID-prefixes                                   |
| route-map    | Policy to constrain redistribution                  |
| map-name     | Route-map name                                      |

## Command Mode

- /exec/configure/router-rip/router-rip-af-ipv6 /exec/configure/router-rip/router-rip-vrf-af-ipv6

# redistribute route-map

[no] redistribute { bgp <as> | { eigrp | isis | ospf | rip } <tag> | static | direct | amt | lisp } route-map <map-name>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults     |
| redistribute       | RIP redistribute routes from other routing protocol |
| bgp                | Border Gateway Protocol (BGP)                       |
| eigrp              | Enhanced Interior Gateway Routing Protocol (EIGRP)  |
| as                 | Autonomous system number                            |
| isis               | Intermediate-to-intermediate (ISIS)                 |
| rip                | Routing Information Protocol (RIP)                  |
| ospf               | Open Shortest Path First (OSPFv2)                   |
| tag                | Process tag   |
| static             | Static routes                                       |
| direct             | Directly connected routes                           |
| amt                | AMT anycast prefix                                  |
| lisp               | LISP EID-prefixes                                   |
| route-map          | Policy to constrain redistribution                  |
| map-name           | Route-map name                                      |

## Command Mode

- /exec/configure/router-rip/router-rip-af-ipv4 /exec/configure/router-rip/router-rip-vrf-af-ipv4

# redistribute route-map

```
[no] redistribute { static | direct | amt | lisp | am | hmm | { { eigrp | isis | ospf | rip } <tag> } } route-map
<rmap-name>
```

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| redistribute       | Configure redistribution                        |
| static             | Static routes                                   |
| direct             | Directly connected                              |
| isis               | ISO IS-IS                                       |
| ospf               | Open Shortest Path First (OSPF)                 |
| rip                | Routing Information Protocol (RIP)              |
| eigrp              | Enhanced Interior Gateway Protocol              |
| amt                | AMT anycast prefix                              |
| lisp               | LISP EID-prefixes in the non-default VRF        |
| am                 | AM routes (learned via ARP)                     |
| hmm                | HMM prefix                                      |
| route-map          | Route-map applied to redistributed routes       |
| <i>rmap-name</i>   | Route-map name                                  |
| <i>tag</i>         | Source protocol tag                             |

## Command Mode

- /exec/configure/router-bgp/router-bgp-af-ipv4 /exec/configure/router-bgp/router-bgp-vrf-af-ipv4

# redistribute route-map

[no] redistribute { static | direct | amt | lisp | am | hmm | { { eigrp | isis | ospfv3 | rip } <tag> } } route-map <rmap-name>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| redistribute       | Configure redistribution                        |
| static             | Static routes                                   |
| direct             | Directly connected                              |
| isis               | ISO IS-IS                                       |
| ospfv3             | Open Shortest Path First, version 3 (OSPFv3)    |
| rip                | Routing Information Protocol (RIP)              |
| eigrp              | Enhanced Interior Gateway Protocol              |
| amt                | AMT anycast prefix                              |
| lisp               | LISP EID-prefixes in the non-default VRF        |
| am                 | AM routes (learned via ARP)                     |
| hmm                | HMM prefix                                      |
| route-map          | Route-map applied to redistributed routes       |
| <i>rmap-name</i>   | Route-map name                                  |
| <i>tag</i>         | Source protocol tag                             |

## Command Mode

- /exec/configure/router-bgp/router-bgp-af-ipv6 /exec/configure/router-bgp/router-bgp-vrf-af-ipv6

# redistribute route-map

```
[no] redistribute { bgp <as> | { eigrp | isis | ospf | rip } <tag> | static | direct | amt } route-map { <map-name>
| <rtr_pol_name> }
```

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 | (Optional) Negate a command or set its defaults        |  |
| redistribute       | Redistribute information from another routing protocol |  |
| bgp                | Border Gateway Protocol (BGP)                          |  |
| as                 | Autonomous system number                               |  |
| isis               | IS-IS Routing for IPv4                                 |  |
| ospf               | Open Shortest Path First (OSPF)                        |  |
| eigrp              | Enhanced Interior Gateway Protocol                     |  |
| rip                | RIP for IPv4   |  |
| tag                | Process tag  |  |
| static             | Static routes  |  |
| direct             | Directly connected                                     |  |
| amt                | AMT anycast prefix                                     |  |
| route-map          | Route-map to constrain redistribution                  |  |
| map-name           | A 'routing-rules' route-map name                       |  |
| rtr_pol_name       | An existing routing-rules policy                       |  |

## Command Mode

- /exec/configure/router-isis/router-isis-vrf-common /exec/configure/router-isis/router-isis-af-ipv4

# redistribute route-map

```
[no] redistribute { bgp <as> | { eigrp | isis | ospfv3 | rip } <tag> | static | direct | amt } route-map { <map-name>
| <rtr_pol_name> }
```

## Syntax Description

### Syntax Description

|              |  |
|--------------|--|
| no           | (Optional) Negate a command or set its defaults        |
| redistribute | Redistribute information from another routing protocol |
| bgp          | Border Gateway Protocol (BGP)                          |
| as           | Autonomous system number                               |
| isis         | IS-IS Routing for IPv6                                 |
| ospfv3       | Open Shortest Path First (OSPF) V3                     |
| eigrp        | Enhanced Interior Gateway Protocol                     |
| rip          | RIP for IPv6 (RIPNG)                                   |
| tag          | Process tag  |
| static       | Static routes  |
| direct       | Directly connected                                     |
| amt          | AMT anycast prefix                                     |
| route-map    | Route-map to constrain redistribution                  |
| map-name     | A 'routing-rules' route-map name                       |
| rtr_pol_name | An existing routing-rules policy                       |

## Command Mode

- /exec/configure/router-isis/router-isis-af-ipv6

# redistribute route-map

```
[no] redistribute { bgp <as> | { eigrp | isis | ospf | rip } <tag> | static | direct | amt | lisp } route-map {
<map-name> | <rtr_pol_name> }
```

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 | (Optional) Negate a command or set its defaults        |  |
| redistribute       | Redistribute information from another routing protocol |  |
| bgp                | Border Gateway Protocol (BGP)                          |  |
| as                 | Autonomous system number                               |  |
| isis               | IS-IS Routing for IPv4                                 |  |
| ospf               | Open Shortest Path First (OSPF)                        |  |
| rip                | Routing Information Protocol (RIP)                     |  |
| eigrp              | Enhanced Interior Gateway Routing Protocol (EIGRP)     |  |
| tag                | Process tag  |  |
| static             | Static routes  |  |
| direct             | Directly connected                                     |  |
| lisp               | LISP EID-prefixes                                      |  |
| amt                | AMT Anycast prefix                                     |  |
| route-map          | Route-map to constrain redistribution                  |  |
| map-name           | Route-map name   |  |
| rtr_pol_name       | An existing routing-rules policy                       |  |

## Command Mode

- /exec/configure/router-eigrp/router-eigrp-vrf-common /exec/configure/router-eigrp/router-eigrp-af-ipv4



# redistribute route-map

```
[no] redistribute { bgp <as> | { eigrp | isis | ospfv3 | rip } <tag> | static | direct | amt | lisp } route-map {
<map-name> | <rtr_pol_name> }
```

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 | (Optional) Negate a command or set its defaults        |  |
| redistribute       | Redistribute information from another routing protocol |  |
| bgp                | Border Gateway Protocol (BGP)                          |  |
| as                 | Autonomous system number                               |  |
| isis               | IS-IS Routing for IPv4                                 |  |
| ospfv3             | Open Shortest Path First (OSPF) V3                     |  |
| rip                | Routing Information Protocol (RIP)                     |  |
| eigrp              | Enhanced Interior Gateway Routing Protocol (EIGRP)     |  |
| tag                | Process tag  |  |
| static             | Static routes  |  |
| direct             | Directly connected                                     |  |
| amt                | AMT Anycast prefix                                     |  |
| lisp               | LISP EID-prefixes                                      |  |
| route-map          | Route-map to constrain redistribution                  |  |
| map-name           | Route-map name   |  |
| rtr_pol_name       | An existing routing-rules policy                       |  |

## Command Mode

- /exec/configure/router-eigrp/router-eigrp-af-ipv6

# redundancy-group

[no] redundancy-group

## Syntax Description

|                           |                  |   |
|---------------------------|------------------|---|
| <b>Syntax Description</b> | no               | (Optional) Negate a command or set its defaults |
|                           | redundancy-group | Configure a redundancy-group node               |

## Command Mode

- /exec/configure/if-nve

# reference-bandwidth

[no] reference-bandwidth { <ref-bw-mbps> [ Mbps ] | <ref-bw-gbps> Gbps }

## Syntax Description

| Syntax Description  |            |  |
|---------------------|------------|--|
| no                  | (Optional) | Negate a command or set its defaults                         |
| reference-bandwidth |            | Change reference bandwidth used for setting interface metric |
| <i>ref-bw-mbps</i>  |            | Bandwidth in Mbps (Default)                                  |
| Mbps                | (Optional) | Specify in Mbps  |
| <i>ref-bw-gbps</i>  |            | Bandwidth in Gbps  |
| Gbps                |            | Specify in Gbps  |

## Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

# refresh profile-diff

refresh profile-diff <src-profile> <dest-profile> [ cleanup destination-profile ]

## Syntax Description

| Syntax Description  |            |  |
|---------------------|------------|--|
| refresh             |            | Refresh an applied config profile instance                         |
| profile-diff        |            | Generate the diff between source and destination profile instances |
| cleanup             | (Optional) | Profile cleanup options after diff calculation                     |
| destination-profile | (Optional) | Clean up destination profile after diff calculation                |
| <i>src-profile</i>  |            | Enter the name of the instance                                     |
| <i>dest-profile</i> |            | Enter the name of the include profile                              |

## Command Mode

- /exec

# refresh profile

[no] refresh profile <profile> <dest-profile> [ overwrite ]

## Syntax Description

| Syntax Description  |   |
|---------------------|---|
| no                  | (Optional) Negate a command or set its defaults                     |
| refresh             | Refresh config-profile  |
| profile             | Refresh an applied config-profile                                   |
| <i>profile</i>      | Enter the name of an applied profile as the source profile          |
| <i>dest-profile</i> | Enter the name of an unapplied profile as the destination profile   |
| overwrite           | (Optional) Override the source profile with the destination profile |

## Command Mode

- /exec

# register-database-mapping

{ [ no ] register-database-mapping }

## Syntax Description

|                           |                           |  |
|---------------------------|---------------------------|--|
| <b>Syntax Description</b> | no                        | (Optional) Negate a command or set its defaults    |
|                           | register-database-mapping | Register database-mapping EID-prefix to Map-Server |

## Command Mode

- /exec/configure/lisp-dynamic-eid /exec/configure/vrf/lisp-dynamic-eid

# register-route-notifications

{ [ no ] register-route-notifications }

## Syntax Description

---

### Syntax Description

no (Optional) Negate a command or set its defaults

---

register-route-notifications Register more-specific routes of the database-mapping EID-prefix to Map-Server

---

## Command Mode

- /exec/configure/lisp-dynamic-eid /exec/configure/vrf/lisp-dynamic-eid

# reload

reload

## Syntax Description

---

### Syntax Description

---

reload reboot the entire  
box

---

## Command Mode

- /exec



# reload ascii

reload ascii [ vdc-all ]

## Syntax Description

---

### Syntax Description

---

reload Power cycle

---

ascii Reload with ASCII startup-configuration

---

vdc-all (Optional) Perform for all vdc

---

## Command Mode

- /exec

# reload force

reload force

## Syntax Description

---

### Syntax Description

---

reload reboot the entire box

---

force reload without  
prompting

---

## Command Mode

- /exec

# reload kexec

reload kexec

## Syntax Description

---

### Syntax Description

---

`reload` reboot the entire box

---

`kexec` reboot using kexec

---

## Command Mode

- /exec

# reload kexec

```
reload kexec <s0> <s1>
```

## Syntax Description

---

### Syntax Description

---

`reload` reboot the entire box

---

`kexec` reboot using kexec

---

`s0` please enter the boot image name

---

`s1` please enter the isan image name

---

## Command Mode

- /exec

# reload module

reload module <module>

## Syntax Description

---

### Syntax Description

---

reload reboot the entire box

---

module reboot a specific module

---

*module* please enter the module number

---

## Command Mode

- /exec

# reload module force-dnld

reload module <module> force-dnld

## Syntax Description

---

### Syntax Description

---

reload    reboot the entire box

---

module    reboot a specific module

---

*module*    please enter the module number

---

force-dnld    reboot a specific module to force NetBoot and image download

---

## Command Mode

- /exec

# reload module hard

reload module <module> hard

## Syntax Description

---

### Syntax Description

---

reload reboot the entire box

---

module reboot a specific module

---

*module* please enter the module number

---

hard hard reboot a specific module

---

## Command Mode

- /exec

# reload non-interruptive

reload non-interruptive

## Syntax Description

|                           |                  |                             |
|---------------------------|------------------|-----------------------------|
| <b>Syntax Description</b> | reload           | reboot the entire box       |
|                           | non-interruptive | Reboot without interruption |

## Command Mode

- /exec



# reload power-cycle

reload power-cycle

## Syntax Description

| Syntax Description |                       |
|--------------------|-----------------------|
| reload             | reboot the entire box |
| power-cycle        | Power cycle ADM       |

## Command Mode

- /exec

# reload restore

reload restore [ delay <time-out> ] | no reload restore

## Syntax Description

### Syntax Description

|                 |  |
|-----------------|--|
| no              | Negate a command or set its defaults                                     |
| reload          | Settings for vpc action on reload with vpc configs                       |
| restore         | restore vpcs assuming peer is not functional                             |
| delay           | (Optional) Duration to wait before assuming peer dead and restoring vpcs |
| <i>time-out</i> | (Optional) Time-out for restoring vPC links (in seconds)                 |

## Command Mode

- /exec/configure/vpc-domain

# reload sync-adjacency

reload sync-adjacency

## Syntax Description

| Syntax Description |  |                            |
|--------------------|--|----------------------------|
| reload             |  | reboot the entire box      |
| sync-adjacency     |  | Reload with sync adjacency |

## Command Mode

- /exec

# reload sync-adjacency

reload sync-adjacency

## Syntax Description

| Syntax Description | reload         | reload with sync adjacency        |
|--------------------|----------------|-----------------------------------|
|                    | sync-adjacency | Reload with ARP/ND sync adjacency |

## Command Mode

- /exec

# reload vdc

reload vdc <d-vdc>

## Syntax Description

---

**Syntax Description**

---

vdc Restart the current vdc

---

reload Power cycle

---

*d-vdc* Enter Virtual Device Context <vdc-id>

---

## Command Mode

- /exec

# reload vdc

reload vdc

## Syntax Description

---

### Syntax Description

---

vdc Restart the current  
vdc

---

reload Power cycle

---

### Command Mode

- /exec

# remark

{ [ <seqno> ] | no } remark <comment>

## Syntax Description

| Syntax Description |                                      |
|--------------------|--------------------------------------|
| <i>no</i>          | Negate a command or set its defaults |
| <i>seqno</i>       | (Optional) Sequence number           |
| <i>remark</i>      | Access list entry comment            |
| <i>comment</i>     | Comment, up to 100 characters        |

## Command Mode

- /exec/configure/arpacl /exec/configure/timerange

# remark

```
{ [ <seqno> ] | no } remark <comment>
```

## Syntax Description

|                           |                |                                      |
|---------------------------|----------------|--------------------------------------|
| <b>Syntax Description</b> | <i>no</i>      | Negate a command or set its defaults |
|                           | <i>seqno</i>   | (Optional) Sequence number           |
|                           | <i>remark</i>  | Access list entry comment            |
|                           | <i>comment</i> | Comment, up to 100 characters        |

## Command Mode

- /exec/configure/ipacl /exec/configure/ipv6acl



# remark

{ [ <seqno> ] | no } remark <comment>

## Syntax Description

| Syntax Description |                                      |
|--------------------|--------------------------------------|
| <i>no</i>          | Negate a command or set its defaults |
| <i>seqno</i>       | (Optional) Sequence number           |
| <i>remark</i>      | Access list entry comment            |
| <i>comment</i>     | Comment, up to 100 characters        |

## Command Mode

- /exec/configure/macac1

# remote-as

```
{ remote-as <asn> } | { { no | default } remote-as [ <asn> ] }
```

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | Negate a command or set its defaults             |
| default            | Inherit values from a peer template              |
| remote-as          | Specify Autonomous System Number of the neighbor |
| asn                | Autonomous System Number                         |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor-sess

# remote

```
remote { { ip address { <ipaddress> } | hostname <host_name> } [ port <port_no> ] [ vrf { <vrf-name> |
<vrf-known-name> } ] | port <port_no> | vrf { <vrf-name> | <vrf-known-name> } } | no remote { ip address
| hostname | port }
```

## Syntax Description

### Syntax Description

|                       |  |
|-----------------------|--|
| no                    | Negate a command or set its defaults                     |
| remote                | Configure remote machine information                     |
| ip                    | Configure IP features                                    |
| address               | Configure IP address                                     |
| <i>ipaddress</i>      | Enter ipv4 address information                           |
| hostname              | Configure remote host name                               |
| <i>host_name</i>      | Enter name of the remote host                            |
| port                  | (Optional) Configure remote host tcp port                |
| <i>port_no</i>        | (Optional) Configure the host tcp port number            |
| vrf                   | (Optional) vrf via which the vCenter Server is reachable |
| <i>vrf-name</i>       | (Optional) Specify the vrf-name                          |
| <i>vrf-known-name</i> | (Optional) Known VRF name                                |

## Command Mode

- /exec/configure/vmt-conn

# remove-private-as

[ no | default ] remove-private-as [ all | replace-as ]

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults           |
| default            | (Optional) | Inherit values from a peer template            |
| remove-private-as  |            | Remove private AS number from outbound updates |
| all                | (Optional) | All  |
| replace-as         | (Optional) | Replace  |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor-sess

## remove-routes vni

remove-routes vni <vni-id>

### Syntax Description

---

**Syntax Description**

---

remove-routes NVE Peer

---

vni Virtual Network Identifier

---

*vni-id* VNI

---

### Command Mode

- /exec/configure/if-nve

# remove cli commands

remove cli commands <filename>

## Syntax Description

---

### Syntax Description

---

remove remove

---

cli cli

---

commands commands

---

*filename* filename

---

## Command Mode

- /exec

# reoptimize events link-up

[no] reoptimize events link-up | no reoptimize timers { delay { cleanup | installation } | frequency } | reoptimize timers { delay { cleanup <clean\_sec> | installation <inst\_sec> } | frequency <freq\_sec> }

## Syntax Description

### Syntax Description

|                  |   |
|------------------|---|
| no               | (Optional) Negate a command or set its defaults             |
| reoptimize       | Reoptimization parameters                                   |
| events           | Reoptimization triggers                                     |
| link-up          | Reoptimize tunnels on link up events                        |
| timers           | Reoptimization timers                                       |
| delay            | Delay reoptimization action                                 |
| cleanup          | Delay cleanup of reoptimized LSP                            |
| <i>clean_sec</i> | seconds to delay cleanup of replaced tunnel LSP             |
| installation     | Delay replacement of current LSP by reoptimized LSP         |
| <i>inst_sec</i>  | seconds to delay replacement of tunnel LSP                  |
| frequency        | Interval between reoptimization scans                       |
| <i>freq_sec</i>  | seconds between reoptimizations (0 disables reoptimization) |

## Command Mode

- /exec/configure/te

# replay-protection

[no] replay-protection

## Syntax Description

---

### Syntax Description

replay-protection Enable replay-protection (the default use the no form to disable)

---

### Command Mode

- /exec/configure/cts-dot1x /exec/configure/cts-manual



# replication-server

[no] replication-server <addr>

## Syntax Description

|                           |                    |   |
|---------------------------|--------------------|---|
| <b>Syntax Description</b> | no                 | (Optional) Negate a command or set its defaults |
|                           | replication-server | Configure a replication server                  |
|                           | <i>addr</i>        | Replication Server IP Address                   |

## Command Mode

- /exec/configure/if-nve

# report

report

## Syntax Description

---

### Syntax Description

---

report Show trigger  
report

---

## Command Mode

- /exec/elanms/se13

# report

report

## Syntax Description

---

### Syntax Description

---

report Show trigger  
report

---

## Command Mode

- /exec/elanms/sel4

# report

report

## Syntax Description

---

### Syntax Description

---

report Show trigger  
report

---

## Command Mode

- /exec/elanms/se15

# report

report

## Syntax Description

---

### Syntax Description

---

report Show trigger  
report

---

## Command Mode

- /exec/elanms/sel6

# report

report

## Syntax Description

---

### Syntax Description

---

report Show trigger  
report

---

## Command Mode

- /exec/elanms/sel7

# report

report

## Syntax Description

---

### Syntax Description

---

report Show trigger  
report

---

## Command Mode

- /exec/elanms/outsel0

# report

report

## Syntax Description

---

### Syntax Description

---

report Show trigger  
report

---

## Command Mode

- /exec/elanms/outse15



# request-data-size

{ { no | default } request-data-size | request-data-size <bytes-in-payload> }

## Syntax Description

| Syntax Description      |                               |
|-------------------------|-------------------------------|
| no                      |                               |
| default                 | Set a command to its defaults |
| request-data-size       | Request data size             |
| <i>bytes-in-payload</i> | Number of bytes in payload    |

## Command Mode

- /exec/configure/ip-sla/udp

# request-data-size

{ { no | default } request-data-size | request-data-size <bytes-in-payload> }

## Syntax Description

| Syntax Description      |                               |
|-------------------------|-------------------------------|
| no                      |                               |
| default                 | Set a command to its defaults |
| request-data-size       | Request data size             |
| <i>bytes-in-payload</i> | Number of bytes in payload    |

## Command Mode

- /exec/configure/ip-sla/icmpEcho

# request-data-size

{ { no | default } request-data-size | request-data-size <bytes-in-payload> }

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | no   |
|                           | default Set a command to its defaults              |
|                           | request-data-size Request data size                |
|                           | <i>bytes-in-payload</i> Number of bytes in payload |

## Command Mode

- /exec/configure/ip-sla/jitter

## resequence access

```
resequence { { <ip_ipv6_mac_arp> access-list } | time-range } <name> <number> <increment>
```

### Syntax Description

| Syntax Description           |  |   |
|------------------------------|--|---|
| <code>resequence</code>      |  | Resequence a list with sequence numbers |
| <code>ip_ipv6_mac_arp</code> |  | IP/IPv6/MAC/ARP                         |
| <code>access-list</code>     |  | Resequence an access list               |
| <code>time-range</code>      |  | Resequence a time-range                 |
| <code>name</code>            |  | List name                               |
| <code>number</code>          |  | Starting sequence number                |
| <code>increment</code>       |  | Step to increment the sequence number   |

### Command Mode

- /exec/configure

# reset

reset

## Syntax Description

---

### Syntax Description

---

`reset` Reset Trigger conditions

---

## Command Mode

- /exec/elanms/sel3

# reset

reset

## Syntax Description

---

### Syntax Description

---

`reset` Reset Trigger conditions

---

## Command Mode

- /exec/elanms/se14

# reset

reset

## Syntax Description

---

### Syntax Description

---

`reset` Reset Trigger conditions

---

## Command Mode

- /exec/efamns/sel5

# reset

reset

## Syntax Description

---

### Syntax Description

---

`reset` Reset Trigger conditions

---

## Command Mode

- /exec/elanms/sel6



# reset

reset

## Syntax Description

---

### Syntax Description

---

`reset` Reset Trigger conditions

---

## Command Mode

- /exec/elanms/sel7

# reset

reset

## Syntax Description

---

### Syntax Description

---

`reset` Reset Trigger conditions

---

## Command Mode

- /exec/elanms/outsel0

# reset

reset

## Syntax Description

---

### Syntax Description

---

`reset` Reset Trigger conditions

---

## Command Mode

- /exec/elanms/outsel5

# restart amt

restart amt

## Syntax Description

---

### Syntax Description

---

restart Manually restart a component

---

amt Restart the AMT multicast routing protocol

---

## Command Mode

- /exec

# restart bgp

```
restart bgp <as>
```

## Syntax Description

---

**Syntax Description**

---

*restart* Manually restart a component

---

*bgp* Border Gateway Protocol (BGP)

---

*as* Autonomous

---

## Command Mode

- /exec

# restart ecp

restart ecp

## Syntax Description

---

### Syntax Description

---

restart Manually restart  
ECP

---

ecp Restart ECP

---

## Command Mode

- /exec

# restart eigrp

```
restart eigrp <eigrp-ptag>
```

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| restart            |  | Manually restart a component                       |
| eigrp              |  | Enhanced Interior Gateway Routing Protocol (EIGRP) |
| <i>eigrp-ptag</i>  |  | Process tag  |

## Command Mode

- /exec

# restart igmp

restart igmp

## Syntax Description

---

### Syntax Description

---

restart Manually restart a component

---

igmp Restart the IGMP multicast routing protocol

---

## Command Mode

- /exec



# restart isis

restart isis <tag>

## Syntax Description

---

### Syntax Description

---

*restart* Manually restart a component

---

*isis* Intermediate System to Intermediate System (IS-IS)

---

*tag* Routing process tag

---

## Command Mode

- /exec

# restart l3vm

restart l3vm

## Syntax Description

---

### Syntax Description

---

restart Manually restart a component

---

l3vm Display VRF information

---

## Command Mode

- /exec

# restart lisp

restart lisp

## Syntax Description

---

### Syntax Description

---

restart Manually restart a component

---

lisp Restart the LISP Locator/ID Separation Protocol

---

## Command Mode

- /exec

# restart msdp

restart msdp

## Syntax Description

---

### Syntax Description

---

restart Manually restart a component

---

msdp Restart the MSDP multicast routing protocol

---

## Command Mode

- /exec

# restart orib

restart orib

## Syntax Description

---

### Syntax Description

---

restart Manually restart a component

---

orib OTV RIB (ORIB)

---

## Command Mode

- /exec

# restart ospf

```
restart ospf <tag>
```

## Syntax Description

---

### Syntax Description

---

*restart* Manually restart a component

---

*ospf* Open Shortest Path First (OSPF)

---

*tag* Process tag

---

## Command Mode

- /exec

# restart ospfv3

```
restart ospfv3 <tag>
```

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <i>restart</i> Manually restart a component               |
|                           | <i>ospfv3</i> Open Shortest Path First (OSPF) (Version 3) |
|                           | <i>tag</i> Process tag                                    |

## Command Mode

- /exec

# restart otv-isis

restart otv-isis <tag>

## Syntax Description

---

### Syntax Description

---

restart Manually restart a component

---

otv-isis Intermediate System to Intermediate System (IS-IS)

---

*tag* Routing process tag

---

## Command Mode

- /exec



# restart otv

restart otv

## Syntax Description

---

### Syntax Description

---

restart Manually restart a component

---

otv Overlay Transport Virtualization (OTV)

---

## Command Mode

- /exec

# restart pim

restart pim

## Syntax Description

---

### Syntax Description

---

restart Manually restart a component

---

pim Restart the PIM multicast routing protocol

---

## Command Mode

- /exec

# restart pim6

restart pim6

## Syntax Description

---

### Syntax Description

---

restart Manually restart a component

---

pim6 Restart the PIM6 multicast routing protocol

---

## Command Mode

- /exec

# restart pim stateless

restart pim stateless

## Syntax Description

---

### Syntax Description

---

restart Manually restart a component

---

pim Restart the PIM multicast routing protocol

---

stateless Restart PIM in stateless mode

---

## Command Mode

- /exec

# restart rip

restart rip <tag>

## Syntax Description

---

### Syntax Description

---

*restart* Manually restart a component

---

*rip* Routing Information Protocol (RIP)

---

*tag* Process ID

---

## Command Mode

- /exec

# restart rpm

restart rpm

## Syntax Description

---

### Syntax Description

---

restart Manually restart a component

---

rpm Route Policy Manager  
(RPM)

---

## Command Mode

- /exec

# restart rsvp

restart rsvp

## Syntax Description

---

### Syntax Description

---

restart Manually restart a process

---

rsvp RSVP process

---

## Command Mode

- /exec

# resync-database

resync-database

## Syntax Description

---

### Syntax Description

resync-database Re-synchronize switch-profile database

---

## Command Mode

- /exec/configure



# retain route-target all

[no] retain route-target { all | route-map <map-name> }

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults            |
| retain             | Retain the routes based on Target VPN Extended Communities |
| route-target       | Specify Target VPN Extended Communities                    |
| all                | All the routes regardless of Target-VPN community          |
| route-map          | Apply route-map to filter routes                           |
| <i>rmap-name</i>   | Route-map name   |

## Command Mode

- /exec/configure/router-bgp/router-bgp-af-vpnv4 /exec/configure/router-bgp/router-bgp-af-vpnv6  
/exec/configure/router-bgp/router-bgp-af-l2vpn-evpn

# retain route-target all

[no] retain route-target { all | route-map <rmap-name> }

## Syntax Description

### Syntax Description

|                  |  |
|------------------|--|
| no               | (Optional) Negate a command or set its defaults            |
| retain           | Retain the routes based on Target VPN Extended Communities |
| route-target     | Specify Target VPN Extended Communities                    |
| all              | All the routes regardless of Target-VPN community          |
| route-map        | Apply route-map to filter routes                           |
| <i>rmap-name</i> | Route-map name   |

## Command Mode

- /exec/configure/router-bgp/router-bgp-af-l2vpn-vpls

# retransmit-interval

```
{ { retransmit-interval <interval> } | { no retransmit-interval [ <interval> ] } }
```

## Syntax Description

|                           |                     |                                      |
|---------------------------|---------------------|--------------------------------------|
| <b>Syntax Description</b> | no                  | Negate a command or set its defaults |
|                           | retransmit-interval | Packet retransmission interval       |
|                           | <i>interval</i>     | (seconds)                            |

## Command Mode

- /exec/configure/router-ospf/router-ospf-vlink /exec/configure/router-ospf/vrf/router-ospf-vlink

# retransmit-interval

```
{ { retransmit-interval <interval> } | { no retransmit-interval [ <interval> ] } }
```

## Syntax Description

|                           |                     |                                      |
|---------------------------|---------------------|--------------------------------------|
| <b>Syntax Description</b> | no                  | Negate a command or set its defaults |
|                           | retransmit-interval | Packet retransmission interval       |
|                           | <i>interval</i>     | (seconds)                            |

## Command Mode

- /exec/configure/router-ospf/vrf/router-ospf-slink

# retransmit-interval

```
{ { retransmit-interval <interval> } | { no retransmit-interval [ <interval> ] } }
```

## Syntax Description

|                           |                     |                                      |
|---------------------------|---------------------|--------------------------------------|
| <b>Syntax Description</b> | no                  | Negate a command or set its defaults |
|                           | retransmit-interval | Packet retransmission interval       |
|                           | <i>interval</i>     | (seconds)                            |

## Command Mode

- /exec/configure/router-ospf3/router-ospf3-vlink /exec/configure/router-ospf3/vrf/router-ospf3-vlink

# revision

revision <rev-id> | no revision [ <rev-id> ]

## Syntax Description

---

### Syntax Description

---

no      Negate a command or set its defaults

---

revision    Set configuration revision number

---

*rev-id*    Configuration revision number

---

## Command Mode

- /exec/configure/spanning-tree/mst/configuration

# revocation-check crl

[no] revocation-check { crl [ none ] | none }

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults  |
| revocation-check   | Configure trustpoint revocation check methods    |
| crl                | Configure revocation check using crl             |
| none               | (Optional) Configure revocation check using none |
| none               | Configure revocation check using none            |

## Command Mode

- /exec/configure/trustpoint

# rewrite-evpn-rt-asn

[ no | default ] rewrite-evpn-rt-asn

## Syntax Description

| Syntax Description  |   |
|---------------------|---|
| no                  | (Optional) Negate a command or set its defaults |
| default             | (Optional) Inherit values from a peer template  |
| rewrite-evpn-rt-asn | Auto generate RTs for EBGP neighbor in EVPN AF  |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-l2vpn-evpn



# rfc1583compatibility

[no] rfc1583compatibility

## Syntax Description

| Syntax Description   |  |
|----------------------|--|
| no                   | (Optional) Negate a command or set its defaults            |
| rfc1583compatibility | Configure 1583 compatibility for external path preferences |

## Command Mode

- /exec/configure/router-ospf /exec/configure/router-ospf/vrf

# rip shutdown

[no] rip shutdown

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| rip                | RIP configuration commands                      |
| shutdown           | Shutdown RIP on this interface                  |

## Command Mode

- /exec/configure/if-igp

# rmdir

rmdir { <uri0> | <uri1> }

## Syntax Description

---

### Syntax Description

---

*rmdir* Delete a directory

---

*uri0* Delete a directory

---

*uri1* Delete a directory on expansion flash

---

## Command Mode

- /exec

# rmon alarm absolute rising-threshold falling-threshold

```
rmon alarm <i0> <s0> <i1> { absolute | delta } rising-threshold <i2> [ <i3> ] falling-threshold <i4> [ <i5> ]
[ owner <s1> ] | no rmon alarm <i0>
```

## Syntax Description

### Syntax Description

|                   |  |
|-------------------|--|
| no                | Negate a command or set its defaults                   |
| rmon              | Remote Monitoring                                      |
| alarm             | Configure an RMON alarm                                |
| <i>i0</i>         | Alarm number   |
| <i>s0</i>         | MIB object to monitor                                  |
| <i>i1</i>         | Sample interval  |
| absolute          | Test each sample directly                              |
| delta             | Test delta between samples                             |
| rising-threshold  | Configure the rising threshold                         |
| <i>i2</i>         | Rising threshold value                                 |
| <i>i3</i>         | (Optional) Event to fire on rising threshold crossing  |
| falling-threshold | Configure the falling threshold                        |
| <i>i4</i>         | Falling threshold value                                |
| <i>i5</i>         | (Optional) Event to fire on falling threshold crossing |
| owner             | (Optional) Specify an owner for the alarm              |
| <i>s1</i>         | (Optional) Alarm owner                                 |

## Command Mode

- /exec/configure

# rmon event

rmon event <i0> [ log ] [ trap <s0> ] [ description <s1> ] [ owner <s2> ] | no rmon event <i0>

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 |            | Negate a command or set its defaults   |
| rmon               |            | Remote Monitoring                      |
| event              |            | Configure an RMON event                |
| <i>i0</i>          |            | Event number                           |
| log                | (Optional) | Generate RMON log when the event fires |
| trap               | (Optional) | Generate SNMP trap when event fires    |
| <i>s0</i>          | (Optional) | SNMP community string                  |
| description        | (Optional) | Specify a description of the event     |
| <i>s1</i>          | (Optional) | Event description                      |
| owner              | (Optional) | Specify an owner for the event         |
| <i>s2</i>          | (Optional) | Event owner                            |

## Command Mode

- /exec/configure

# rmon hcalarm absolute startupalarm rising-threshold falling-threshold owner

```
rmon hcalarm <i0> <s0> <i1> { absolute | delta } startupalarm <i2> rising-threshold <i3> <i4> falling-threshold <i5> <i6> owner <s1> | no rmon hcalarm <i0>
```

## Syntax Description

### Syntax Description

|                   |   |
|-------------------|---|
| no                | Negate a command or set its defaults                        |
| rmon              | Remote Monitoring   |
| hcalarm           | Configure an High Capacity RMON alarm                       |
| <i>i0</i>         | Alarm number  |
| <i>s0</i>         | MIB object to monitor                                       |
| <i>i1</i>         | Sample interval   |
| absolute          | Test each sample directly                                   |
| delta             | Test delta between samples                                  |
| startupalarm      | Configure alarm type  |
| <i>i2</i>         | Startup alarm type, rising(1) falling(2) risingorfalling(3) |
| rising-threshold  | Configure the rising threshold                              |
| <i>i3</i>         | Rising threshold value in bytes                             |
| <i>i4</i>         | Event to fire on rising threshold crossing                  |
| falling-threshold | Configure the falling threshold                             |
| <i>i5</i>         | Falling threshold value in bytes                            |
| <i>i6</i>         | Event to fire on falling threshold crossing                 |
| owner             | Specify an owner for the alarm                              |
| <i>s1</i>         | Alarm owner   |

## Command Mode

- /exec/configure

# roaming-eid-prefix

```
{ [ no ] roaming-eid-prefix { <eid-prefix> | <eid-prefix6> } }
```

## Syntax Description

|                           |                    |   |
|---------------------------|--------------------|---|
| <b>Syntax Description</b> | no                 | (Optional) Negate a command or set its defaults |
|                           | roaming-eid-prefix | Configures what EID-prefixes allowed to roam    |
|                           | <i>eid-prefix</i>  | IPv4 roaming EID-prefix                         |

## Command Mode

- /exec/configure/lisp-dynamic-eid /exec/configure/vrf/lisp-dynamic-eid

# role feature-group name

[no] role feature-group name <arg6>

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| role               | Configure roles                                 |  |
| feature-group      | Configure role feature-group                    |  |
| name               | Feature-group name                              |  |
| arg6               | Enter feature-group name                        |  |

## Command Mode

- /exec/configure



# role name

[no] role name <arg2>

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <b>no</b> (Optional) Negate a command or set its defaults |
|                           | <b>role</b> Configure roles                               |
|                           | <b>name</b> Enter the role name                           |
|                           | <b>arg2</b> Enter the role name                           |

## Command Mode

- /exec/configure

# role priority

role priority <priority\_value> | no role priority

## Syntax Description

---

### Syntax Description

---

|                       |  |
|-----------------------|--|
| no                    | Negate a command or set its defaults                                       |
| role                  | Role related configuration   |
| priority              | Configure priority to be used during vPC role (primary/secondary) election |
| <i>priority_value</i> | specify priority value   |

---

## Command Mode

- /exec/configure/vpc-domain

# rollback progress stats

[no] rollback progress stats

## Syntax Description

| Syntax Description |                                |
|--------------------|--------------------------------|
| no                 | (Optional) negate the command  |
| rollback           | Rollback configuration         |
| progress           | Rollback progress              |
| stats              | Enable rollback progress stats |

## Command Mode

- /exec

# rollback running-config checkpoint

```
rollback running-config { checkpoint <chkpoint_name> | file <file_uri> } [ best-effort | stop-at-first-failure |
atomic ] [ verbose ]
```

## Syntax Description

### Syntax Description

|                       |   |
|-----------------------|---|
| rollback              | Rollback configuration  |
| running-config        | Rollback running configuration  |
| checkpoint            | Rollback running configuration to checkpoint                            |
| <i>chkpoint_name</i>  | Checkpoint name   |
| file                  | Rollback running configuration to configuration file                    |
| <i>file_uri</i>       | Checkpoint file path  |
| best-effort           | (Optional) Skip errors and proceed with rollback                        |
| stop-at-first-failure | (Optional) Stop rollback at the first error                             |
| atomic                | (Optional) Stop rollback and revert to original configuration (default) |
| verbose               | (Optional) Show the execution log                                       |

## Command Mode

- /exec

# route-map

route-map <rtmap-name> [ permit | deny ]

## Syntax Description

|                           |                   |  |
|---------------------------|-------------------|--|
| <b>Syntax Description</b> | route-map         | Create route-map or enter route-map command mode |
|                           | <i>rtmap-name</i> | Route-map name                                   |
|                           | permit            | (Optional) Route map permits set operations      |
|                           | deny              | (Optional) Route map denies set operations       |

## Command Mode

- /exec/configure

# route-map

```
route-map <rtmap-name> [ permit | deny ] <seq>
```

## Syntax Description

---

**Syntax Description**

---

|           |  |
|-----------|--|
| route-map | Create route-map or enter route-map command mode |
|-----------|--|

---

|                   |                |
|-------------------|----------------|
| <i>rtmap-name</i> | Route-map name |
|-------------------|----------------|

---

|        |   |
|--------|---|
| permit | (Optional) Route map permits set operations |
|--------|---|

---

|      |  |
|------|--|
| deny | (Optional) Route map denies set operations |
|------|--|

---

|            |  |
|------------|--|
| <i>seq</i> | Sequence to insert to/delete from existing route-map entry |
|------------|--|

---

## Command Mode

- /exec/configure

# route-map

[no] route-map { <rtmap-name> | <rtmap-name> } [ permit | deny ]

## Syntax Description

### Syntax Description

|                   |  |
|-------------------|--|
| no                | Negate a command or set its defaults             |
| route-map         | Create route-map or enter route-map command mode |
| <i>rtmap-name</i> | Route-map name                                   |
| <i>rtmap-name</i> | Known route-map name                             |
| permit            | (Optional) Route map permits set operations      |
| deny              | (Optional) Route map denies set operations       |

## Command Mode

- /exec/configure

# route-map

[no] route-map { <rtmap-name> | <rtmap-name> } [ permit | deny ] <seq>

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | Negate a command or set its defaults                       |
| route-map          | Create route-map or enter route-map command mode           |
| <i>rtmap-name</i>  | Route-map name   |
| <i>rtmap-name</i>  | Known route-map name                                       |
| permit             | (Optional) Route map permits set operations                |
| deny               | (Optional) Route map denies set operations                 |
| <i>seq</i>         | Sequence to insert to/delete from existing route-map entry |

## Command Mode

- /exec/configure



# route-map out

[ no | default ] route-map <rmap-name> { out | in }

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| default            | (Optional) Inherit values from a peer template  |
| route-map          | Apply route-map to neighbor                     |
| <i>rmap-name</i>   | Route-map name                                  |
| out                | Apply policy to outgoing routes                 |
| in                 | Apply policy to incoming routes                 |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-vpnv4
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv4-mdt
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-vpnv6
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-l2vpn-vpls
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv4-mvpn
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv6-mvpn
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-l2vpn-evpn
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv4-label
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv6-label

# route-map pbr-statistics

```
route-map <route-map-name> pbr-statistics | no route-map { <route-map-name> | <route-map-name> }
pbr-statistics
```

## Syntax Description

| Syntax Description    |  |  |
|-----------------------|--|--|
| no                    |  | Negate a command or set its defaults             |
| route-map             |  | Create route-map or enter route-map command mode |
| <i>route-map-name</i> |  | Route-map name                                   |
| <i>route-map-name</i> |  | Route-map name                                   |
| <i>route-map-name</i> |  | Known route-map name                             |
| pbr-statistics        |  | Statistics for policy based routing              |

## Command Mode

- /exec/configure

# route-reflector-client

[ no | default ] route-reflector-client

## Syntax Description

| Syntax Description     |            |  |
|------------------------|------------|--|
| no                     | (Optional) | Negate a command or set its defaults           |
| default                | (Optional) | Inherit values from a peer template            |
| route-reflector-client |            | Configure a neighbor as Route reflector client |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-l2vpn-evpn
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-vpnv4
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-vpnv6
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv4-mvpn
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv6-mvpn
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-link-state
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv4-label
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv6-label

# route-reflector-client

[ no | default ] route-reflector-client

## Syntax Description

| Syntax Description     |            |  |
|------------------------|------------|--|
| no                     | (Optional) | Negate a command or set its defaults           |
| default                | (Optional) | Inherit values from a peer template            |
| route-reflector-client |            | Configure a neighbor as Route reflector client |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv4-mdt  
/exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-l2vpn-vpls

## route-target both auto

```
{ route-target both { auto | <ext-comm-rt-aa2nn4> | <ext-comm-rt-aa4nn2> } [ evpn ] } | { no route-target
both [ auto | <ext-comm-rt-aa2nn4> | <ext-comm-rt-aa4nn2> ] [ evpn ] }
```

### Syntax Description

| Syntax Description        |  |   |
|---------------------------|--|---|
| no                        |  | Negate a command or set its defaults      |
| route-target              |  | Specify Target VPN Extended Communities   |
| both                      |  | Export And Import Target-VPN community    |
| auto                      |  | Generate route target automatically       |
| evpn                      |  | (Optional) Specify Target for EVPN routes |
| <i>ext-comm-rt-aa2nn4</i> |  | RT extcommunity in aa:nn format           |
| <i>ext-comm-rt-aa4nn2</i> |  | RT extcommunity in aa4:nn or ip:nn format |

### Command Mode

- /exec/configure/vrf-af-ipv4 /exec/configure/vrf-af-ipv6

# route-target both auto

```
{ route-target both { auto | <ext-comm-rt-aa2nn4> | <ext-comm-rt-aa4nn2> } } | { no route-target both { auto | <ext-comm-rt-aa2nn4> | <ext-comm-rt-aa4nn2> } }
```

## Syntax Description

| Syntax Description        |  |   |
|---------------------------|--|---|
| no                        |  | Negate a command or set its defaults      |
| route-target              |  | Specify Target VPN Extended Communities   |
| auto                      |  | Generate RT automatically                 |
| both                      |  | Export and Import Target-VPN community    |
| <i>ext-comm-rt-aa2nn4</i> |  | RT extcommunity in aa:nn format           |
| <i>ext-comm-rt-aa4nn2</i> |  | RT extcommunity in aa4:nn or ip:nn format |

## Command Mode

- /exec/configure/evpn/evi

## route-target export

```
{ route-target export { <ext-comm-rt-aa2nn4> | <ext-comm-rt-aa4nn2> } [ evpn ] } | { no route-target export
{ <ext-comm-rt-aa2nn4> | <ext-comm-rt-aa4nn2> } [ evpn ] }
```

### Syntax Description

| Syntax Description        |  |   |
|---------------------------|--|---|
| no                        |  | Negate a command or set its defaults      |
| route-target              |  | Specify Target VPN Extended Communities   |
| export                    |  | Export Target-VPN community               |
| evpn                      |  | (Optional) Specify Target for EVPN routes |
| <i>ext-comm-rt-aa4nn2</i> |  | RT extcommunity in aa4:nn or ip:nn format |
| <i>ext-comm-rt-aa2nn4</i> |  | RT extcommunity in aa:nn format           |

### Command Mode

- /exec/configure/vrf-af-ipv4 /exec/configure/vrf-af-ipv6

## route-target export auto

```
{ route-target export { auto | <ext-comm-rt-aa2nn4> | <ext-comm-rt-aa4nn2> } } | { no route-target export {
auto | <ext-comm-rt-aa2nn4> | <ext-comm-rt-aa4nn2> } }
```

### Syntax Description

| Syntax Description        |  |   |
|---------------------------|--|---|
| no                        |  | Negate a command or set its defaults      |
| route-target              |  | Specify Target VPN Extended Communities   |
| auto                      |  | Generate RT automatically                 |
| export                    |  | Export Target-VPN community               |
| <i>ext-comm-rt-aa2nn4</i> |  | RT extcommunity in aa:nn format           |
| <i>ext-comm-rt-aa4nn2</i> |  | RT extcommunity in aa4:nn or ip:nn format |

### Command Mode

- /exec/configure/evpn/evi



## route-target import

```
{ route-target import { <ext-comm-rt-aa2nn4> | <ext-comm-rt-aa4nn2> } [ evpn ] } | { no route-target import
{ <ext-comm-rt-aa2nn4> | <ext-comm-rt-aa4nn2> } [ evpn ] }
```

### Syntax Description

| Syntax Description        |  |   |
|---------------------------|--|---|
| no                        |  | Negate a command or set its defaults      |
| route-target              |  | Specify Target VPN Extended Communities   |
| import                    |  | Import Target-VPN community               |
| evpn                      |  | (Optional) Specify Target for EVPN routes |
| <i>ext-comm-rt-aa4nn2</i> |  | RT extcommunity in aa4:nn or ip:nn format |
| <i>ext-comm-rt-aa2nn4</i> |  | RT extcommunity in aa:nn format           |

### Command Mode

- /exec/configure/vrf-af-ipv4 /exec/configure/vrf-af-ipv6

## route-target import auto

```
{ route-target import { auto | <ext-comm-rt-aa2nn4> | <ext-comm-rt-aa4nn2> } } | { no route-target import
{ auto | <ext-comm-rt-aa2nn4> | <ext-comm-rt-aa4nn2> } }
```

### Syntax Description

| Syntax Description        |  |   |
|---------------------------|--|---|
| no                        |  | Negate a command or set its defaults      |
| route-target              |  | Specify Target VPN Extended Communities   |
| import                    |  | Import Target-VPN community               |
| auto                      |  | Generate RT automatically                 |
| <i>ext-comm-rt-aa2nn4</i> |  | RT extcommunity in aa:nn format           |
| <i>ext-comm-rt-aa4nn2</i> |  | RT extcommunity in aa4:nn or ip:nn format |

### Command Mode

- /exec/configure/evpn/evi

# route delete dampen interval

[no] route delete dampen interval <time>

## Syntax Description

### Syntax Description

|          |   |
|----------|---|
| no       | (Optional) Negate a command or set its defaults |
| route    | Display routing information                     |
| delete   | Dampen route delete update to hardware          |
| dampen   | Dampen update to hardware                       |
| interval | Dampen interval                                 |
| time     | Dampen interval in seconds                      |

## Command Mode

- /exec/configure

# router-id

[no] router-id <router-id>

## Syntax Description

---

|                           |    |   |
|---------------------------|----|---|
| <b>Syntax Description</b> | no | (Optional) Negate a command or set its defaults |
|---------------------------|----|---|

---

|  |           |  |
|--|-----------|--|
|  | router-id | Specify the IP address to use as router-id |
|--|-----------|--|

---

|  |                  |                                       |
|--|------------------|---------------------------------------|
|  | <i>router-id</i> | Manually configured router identifier |
|--|------------------|---------------------------------------|

---

## Command Mode

- /exec/configure/router-bgp/vrf-cmds

# router-id

```
{ { router-id <id> } | { no router-id [ <id> ] } }
```

## Syntax Description

|                           |                  |                                      |
|---------------------------|------------------|--------------------------------------|
| <b>Syntax Description</b> | <b>no</b>        | Negate a command or set its defaults |
|                           | <b>router-id</b> | Set OSPF process router-id           |
|                           | <b>id</b>        | Router ID Value                      |

## Command Mode

- /exec/configure/router-ospf /exec/configure/router-ospf/vrf

# router-id

```
router-id [ vrf { <vrf-name> | <vrf-known-name> } ] <interface> [ force ] | no router-id [ { vrf { <vrf-name>
| <vrf-known-name> } | <interface> [ force ] } ]
```

## Syntax Description

| Syntax Description    |  |
|-----------------------|--|
| no                    | Negate a command or set its defaults                   |
| router-id             | Select interface to prefer for LDP identifier address  |
| vrf                   | (Optional) VRF Routing/Forwarding instance information |
| <i>vrf-name</i>       | (Optional) VPN Routing/Forwarding instance name        |
| <i>vrf-known-name</i> | (Optional) Known VRF name                              |
| <i>interface</i>      |  |
| force                 | (Optional) Forcibly change the LDP router id           |

## Command Mode

- /exec/configure/ldp

# router-id

{ { router-id <id> } | { no router-id [ <id> ] } }

## Syntax Description

|                           |           |                                      |
|---------------------------|-----------|--------------------------------------|
| <b>Syntax Description</b> | no        | Negate a command or set its defaults |
|                           | router-id | Set OSPFv3 process router-id         |
|                           | <i>id</i> | Router ID Value                      |

## Command Mode

- /exec/configure/router-ospf3 /exec/configure/router-ospf3/vrf

# router-id

```
{ { [ eigrp ] router-id <id> } | { no [ eigrp ] router-id [ <id> ] } }
```

## Syntax Description

---

**Syntax Description**

---

|           |  |
|-----------|--|
| no        | Negate a command or set its defaults           |
| eigrp     | (Optional) EIGRP router configuration commands |
| router-id | router-id for this EIGRP process               |
| <i>id</i> | EIGRP Router-ID in IP address format           |

---

## Command Mode

- /exec/configure/router-eigrp/router-eigrp-vrf-common /exec/configure/router-eigrp/router-eigrp-af-common



# router bgp

[no] router bgp <as>

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <i>no</i> (Optional) Negate a command or set its defaults |
|                           | <i>router</i> Enable a routing process                    |
|                           | <i>bgp</i> Border Gateway Protocol (BGP)                  |
|                           | <i>as</i> Autonomous                                      |

## Command Mode

- /exec/configure

# router eigrp

[no] router eigrp <eigrp-ptag>

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults    |
| router             | Enable a routing process                           |
| eigrp              | Enhanced Interior Gateway Routing Protocol (EIGRP) |
| <i>eigrp-ptag</i>  | Process tag  |

## Command Mode

- /exec/configure

# router isis

[no] router isis <tag>

## Syntax Description

---

### Syntax Description

---

**no** (Optional) Negate a command or set its defaults

---

**router** Enable a routing process

---

**isis** Intermediate System to Intermediate System (IS-IS)

---

**tag** Routing process tag

---

## Command Mode

- /exec/configure

# router ospf

[no] router ospf <tag>

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <i>no</i> (Optional) Negate a command or set its defaults |
|                           | <i>router</i> Enable a routing process                    |
|                           | <i>ospf</i> Open Shortest Path First (OSPF)               |
|                           | <i>tag</i> Process tag                                    |

## Command Mode

- /exec/configure

# router ospfv3

[no] router ospfv3 <tag>

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <i>no</i> (Optional) Negate a command or set its defaults |
|                           | <i>router</i> Enable a routing process                    |
|                           | <i>ospfv3</i> Open Shortest Path First (OSPF) (Version 3) |
|                           | <i>tag</i> Process tag                                    |

## Command Mode

- /exec/configure

# router rip

[no] router rip <tag>

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <i>no</i> (Optional) Negate a command or set its defaults |
|                           | <del>router</del> Enable a routing process                |
|                           | <i>rip</i> Routing Information Protocol (RIP)             |
|                           | <i>tag</i> Process ID                                     |

## Command Mode

- /exec/configure

# routing-context vrf

```
routing-context vrf <vrf-known-name>
```

## Syntax Description

| Syntax Description    |                             |
|-----------------------|-----------------------------|
| routing-context       | Set the routing context     |
| vrf                   | The new routing-context VRF |
| <i>vrf-known-name</i> | Known VRF name              |

## Command Mode

- /exec

# routing ipv4 unicast nexthop-sorting

[no] routing ipv4 unicast nexthop-sorting

## Syntax Description

| Syntax Description |                 |   |
|--------------------|-----------------|---|
|                    | no              | (Optional) Negate a command or set its defaults |
|                    | routing         | Routing events                                  |
|                    | ipv4            | IP events                                       |
|                    | unicast         | unicast   |
|                    | nexthop-sorting | Sort nhs while storing                          |

## Command Mode

- /exec/configure



# routing ipv6 unicast nexthop-sorting

[no] routing ipv6 unicast nexthop-sorting

## Syntax Description

| Syntax Description |                        |                                      |
|--------------------|------------------------|--------------------------------------|
| no                 | (Optional)             | Negate a command or set its defaults |
| routing            |                        | Routing events                       |
| ipv6               |                        | Configure IPv6 features              |
| unicast            | unicast                |                                      |
| nexthop-sorting    | Sort nhs while storing |                                      |

## Command Mode

- /exec/configure

# rsakeypair

[no] rsakeypair <s0> [ <i0> ]

## Syntax Description

|                           |            |   |
|---------------------------|------------|---|
| <b>Syntax Description</b> | no         | (Optional) Negate a command or set its defaults |
|                           | rsakeypair | Configure trustpoint rsa key-pair details       |
|                           | s0         | key-pair label                                  |
|                           | i0         | (Optional) key-pair size                        |

## Command Mode

- /exec/configure/trustpoint

# rtr etr eid

[no] { rtr | etr | eid } { <locator> | <locator6> } [ strict | probe ] + <seq>

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults          |
| rtr                | Configure RTR in ELP ordered list                        |
| etr                | Configure ETR in ELP ordered list                        |
| eid                | Configure EID in ELP ordered list                        |
| <i>locator</i>     | IPv4 locator for RTR/ETR or EID                          |
| strict             | (Optional) ELP hop must be used in Explicit Locator Path |
| probe              | (Optional) RLOC-probe next-hop in ELP                    |
| <i>seq</i>         | Sequence to insert or delete RTR/ETR/EID ELP entry       |

## Command Mode

- /exec/configure/lisp-elp /exec/configure/vrf/lisp-elp

# rule

```
rule <number> { <action> } { { <permission> [ <featuretype> <name> ] } } | no rule <number>
```

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| <code>no</code>    |            | Negate a command or set its defaults |
| <code>rule</code>  |            | Enter the rule number                |
| <i>number</i>      |            | Enter the rule number                |
| <i>action</i>      |            | Action                               |
| <i>permission</i>  |            | Permission                           |
| <i>featuretype</i> | (Optional) | Feature type                         |
| <i>name</i>        | (Optional) | Enter the access entity name         |

## Command Mode

- /exec/configure/role

# rule command

```
rule <number> { <action> } { command <cmd_line> } | no rule <number>
```

## Syntax Description

### Syntax Description

|                      |  |
|----------------------|--|
| <code>no</code>      | Negate a command or set its defaults   |
| <code>rule</code>    | Enter the rule number  |
| <i>number</i>        | Enter the rule number  |
| <i>action</i>        | Action   |
| <code>command</code> | Command line   |
| <i>cmd_line</i>      | Enter the command (use space+' ' for command separator) e.g. config t role * |

## Command Mode

- /exec/configure/role

# rule oid

rule <number> <action> <permission> oid <snmp\_oid> | no rule <number>

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| rule               |  | Enter the rule number                |
| <i>number</i>      |  | Enter the rule number                |
| <i>action</i>      |  | Action                               |
| <i>permission</i>  |  | Permission                           |
| oid                |  | SNMP oid (up to 32 elements)         |
| <i>snmp_oid</i>    |  | Enter snmp oid instance name         |

## Command Mode

- /exec/configure/role

# run-script

run-script <uri0>

## Syntax Description

---

### Syntax Description

---

run-script Run shell scripts

---

*uri0* Enter script file name

---

## Command Mode

- /exec

# run-show-tech-script

run-show-tech-script <s0>

## Syntax Description

---

|                           |                      |                      |
|---------------------------|----------------------|----------------------|
| <b>Syntax Description</b> | run-show-tech-script | Run show tech script |
|---------------------------|----------------------|----------------------|

---

|           |       |
|-----------|-------|
| <i>s0</i> | fname |
|-----------|-------|

---

## Command Mode

- /exec



# run2 guestshell

```
run2 guestshell [ { <cmd_args> } ]
```

## Syntax Description

|                           |                         |                                   |
|---------------------------|-------------------------|-----------------------------------|
| <b>Syntax Description</b> | <code>run2</code>       | execute/run program!!!            |
|                           | <code>guestshell</code> | The guest shell Linux-bash        |
|                           | <code>cmd_args</code>   | (Optional) The command to execute |

## Command Mode

- /exec

# run bash

run bash [ <cmd> ]

## Syntax Description

---

### Syntax Description

---

run execute/run program

---

bash linux-bash

---

*cmd* (Optional) the command to execute

---

## Command Mode

- /exec



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---

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# sak-expiry-time

[no] sak-expiry-time <ts>

## Syntax Description

|                           |                 |                                    |
|---------------------------|-----------------|------------------------------------|
| <b>Syntax Description</b> | sak-expiry-time | Time in seconds to force SAK rekey |
|                           | <i>ts</i>       | time in seconds                    |

## Command Mode

- /exec/configure/macsec-policy

# sampler

[no] sampler <samplername>

## Syntax Description

---

### Syntax Description

---

|         |                     |
|---------|---------------------|
| sampler | Define a<br>Sampler |
|---------|---------------------|

---

|                    |                    |
|--------------------|--------------------|
| <i>samplername</i> | Name of<br>sampler |
|--------------------|--------------------|

---

## Command Mode

- /exec/configure



# sap hash-algorithm HMAC-SHA-1

{ [ no ] sap hash-algorithm HMAC-SHA-1 } | { sap hash-algorithm HMAC-MD5 }

## Syntax Description

### Syntax Description

|                |  |
|----------------|--|
| sap            | Specify preferred SAP negotiation parameters     |
| hash-algorithm | Hashing Algorithm to use during SAP protocol     |
| HMAC-SHA-1     | use HMAC-SHA-1 for hashing (default is HMAC-MD5) |
| HMAC-MD5       | use HMAC-MD5 for hashing                         |

## Command Mode

- /exec/configure/cts-dot1x /exec/configure/cts-manual

# sap modelist

[no] sap modelist <mode\_opt>

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| sap                | Specify preferred SAP negotiation parameters |
| modelist           | encryption mode                              |
| <i>mode_opt</i>    | modelist options                             |

## Command Mode

- /exec/configure/cts-dot1x

## sap pmk sap pmk use-dot1x

```
sap pmk <pmk> [ left-zero-padded ] [ modelist <mode_opt> ] | sap pmk use-dot1x [ modelist <mode_opt> ]
| no sap
```

### Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| sap                |            | Specify preferred SAP negotiation parameters   |
| pmk                |            | pairwise master key  |
| <i>pmk</i>         |            | 32 byte value specified as a string  |
| left-zero-padded   | (Optional) | Pad with zeros on the left if PMK length is less than 32 bytes                                   |
| modelist           | (Optional) | encryption mode  |
| <i>mode_opt</i>    | (Optional) | modelist options   |
| <i>modelist</i>    | (Optional) | <mode_opt>   |
| use-dot1x          |            | Use pmk generated after dot1x authentication. Use dot1x commands to configure dot1x on this port |

### Command Mode

- /exec/configure/cts-manual

# save

save <uri0>

## Syntax Description

---

### Syntax Description

---

save Save the current configuration session to uri

---

*uri0* Enter the complete uri where the session is to be stored

---

## Command Mode

- /exec/configure

# scale-factor module

[no] scale-factor <sf-value> module <module-number>

## Syntax Description

| Syntax Description   |            |  |
|----------------------|------------|--|
| no                   | (Optional) | Negate a command or set its defaults         |
| scale-factor         |            | Scale factor                                 |
| <i>sf-value</i>      |            | Specify scale factor value from 0.10 to 2.00 |
| module               |            | Module                                       |
| <i>module-number</i> |            | specify module number                        |

## Command Mode

- /exec/configure/ctrl-plane

## scheduler aaa-authentication

```
{ scheduler aaa-authentication { password { 0 <s0> | 7 <s1> | <s2> } | username <s3> password { 01 <s4> |
71 <s5> | <s6> } } | no scheduler aaa-authentication { password [ { 0 <s0> | 7 <s1> | <s2> } ] | username <s3>
password [ { 01 <s4> | 71 <s5> | <s6> } ] } }
```

### Syntax Description

#### Syntax Description

|                    |  |
|--------------------|--|
| no                 | Negate a command or set its defaults                           |
| scheduler          | Config commands for scheduler                                  |
| aaa-authentication | Password for AAA authentication(of logged in user)             |
| password           | Specify the password of logged in user(for AAA authentication) |
| 0                  | Password (clear text) of logged in user                        |
| s0                 | password (clear text) of logged in user                        |
| 7                  | Encrypted password of logged in user                           |
| s1                 | Encrypted password (for AAA authentication)                    |
| s2                 | Password (clear text) of logged in user                        |
| username           | logged in user name  |
| s3                 | user name (for AAA authentication)                             |
| password           | Specify the password of logged in user(for AAA authentication) |
| 01                 | Password (clear text) of logged in user                        |
| s4                 | password (clear text) of logged in user                        |
| 71                 | Encrypted password of logged in user                           |
| s5                 | Encrypted password (for AAA authentication)                    |
| s6                 | Password (clear text) of logged in user                        |

### Command Mode

- /exec/configure

# scheduler enable

[no] scheduler enable

## Syntax Description

|                           |           |   |
|---------------------------|-----------|---|
| <b>Syntax Description</b> | no        | (Optional) Negate a command or set its defaults |
|                           | scheduler | Config commands for scheduler                   |
|                           | enable    | Command to enable/disable features              |

## Command Mode

- /exec/configure

# scheduler job name

[no] scheduler job name <s0>

## Syntax Description

|                           |           |   |
|---------------------------|-----------|---|
| <b>Syntax Description</b> | no        | (Optional) Negate a command or set its defaults |
|                           | scheduler | Config commands for scheduler                   |
|                           | job       | Define a job                                    |
|                           | name      | Specify a name for the job                      |
|                           | s0        | Name of the job                                 |

## Command Mode

- /exec/configure



# scheduler logfile size

{ scheduler logfile size <i0> | no scheduler logfile size [ <i0> ] }

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| scheduler          |  | Config commands for scheduler        |
| logfile            |  | Scheduler log file configuration     |
| size               |  | Specify the log file size            |
| i0                 |  | Size of the file in KB               |

## Command Mode

- /exec/configure

# scheduler schedule name

[no] scheduler schedule name <s0>

## Syntax Description

|                           |           |   |
|---------------------------|-----------|---|
| <b>Syntax Description</b> | no        | (Optional) Negate a command or set its defaults |
|                           | scheduler | Config commands for scheduler                   |
|                           | schedule  | Define a schedule                               |
|                           | name      | Specify a name for the schedule                 |
|                           | s0        | Name of the schedule                            |

## Command Mode

- /exec/configure

# scheduler transport email

```
{ scheduler transport email { from <s0> | reply-to <s1> | smtp-server <host0> [ port <i1> ] } | no scheduler transport email { from | reply-to | smtp-server } }
```

## Syntax Description

### Syntax Description

|             |  |
|-------------|--|
| no          | Negate a command or set its defaults                   |
| scheduler   | Config commands for scheduler                          |
| transport   | Configure transport related configuration              |
| email       | Configure email transport related configuration        |
| from        | Configure from email address                           |
| s0          | Provide from email address, example: SJ-9500-1@xyz.com |
| reply-to    | Configure replyto email address                        |
| s1          | Provide reply-to email address, example: admin@xyz.com |
| smtp-server | Configure SMTP server address                          |
| host0       | SMTP server(DNS name or IPv4 or IPv6 address)          |
| port        | (Optional) Configure SMTP server port (default:25)     |
| i1          | (Optional) SMTP server port                            |

## Command Mode

- /exec/configure

# scp

scp [ <recurse> ] <from> [ <hyphen> ] <src-path>

## Syntax Description

### Syntax Description

scp Launch scp subsystem

*recurse* (Optional) -r recurse

*from* -f scp from

*hyphen* (Optional) --

*src-path* from URL

## Command Mode

- /exec

# scp

scp [ <recurse> ] [ <directory> ] [ <verbose> ] <to> [ <hyphen> ] <dst-path>

## Syntax Description

| Syntax Description | scp              | Launch scp subsystem    |
|--------------------|------------------|-------------------------|
|                    | <i>recurse</i>   | (Optional) -r recurse   |
|                    | <i>directory</i> | (Optional) -d directory |
|                    | <i>verbose</i>   | (Optional) -v verbose   |
|                    | <i>to</i>        | -t scp to               |
|                    | <i>hyphen</i>    | (Optional) --           |
|                    | <i>dst-path</i>  | to URL                  |

## Command Mode

- /exec

# scripting tcl init

scripting tcl init <uri0> | no scripting tcl init

## Syntax Description

|                           |             |                                      |
|---------------------------|-------------|--------------------------------------|
| <b>Syntax Description</b> | no          | Negate a command or set its defaults |
|                           | scripting   | Configure scripting parameters       |
|                           | tcl         | Specify scripting parameter for tcl  |
|                           | init        | Specify init parameters              |
|                           | <i>uri0</i> | Tcl init script name                 |

## Command Mode

- /exec

# scripting tcl recursion-limit

scripting tcl recursion-limit <limit> | no scripting tcl recursion-limit

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| scripting          |  | Configure scripting parameters       |
| tcl                |  | Specify scripting parameter for tcl  |
| recursion-limit    |  | Specify recursion-limit              |
| <i>limit</i>       |  | Specify limit                        |

## Command Mode

- /exec

# search

search <failure\_desc>

## Syntax Description

---

### Syntax Description

---

|        |                        |
|--------|------------------------|
| search | Search for information |
|--------|------------------------|

---

|                     |                           |
|---------------------|---------------------------|
| <i>failure_desc</i> | Brief problem description |
|---------------------|---------------------------|

---

## Command Mode

- /exec



# section

| section <pattern>

## Syntax Description

---

### Syntax Description

| Pipe command output to filter

---

section show lines that include the pattern as well as the subsequent lines that are more indented than matching line

---

*pattern* the pattern (regular expression) to match

---

## Command Mode

- /output

# secure-handoff

{ [ no ] secure-handoff }

## Syntax Description

---

### Syntax Description

no (Optional) Negate a command or set its defaults

---

secure-handoff Confirm dynamic-eid discovery by probing for remote host

---

## Command Mode

- /exec/configure/lisp-dynamic-eid /exec/configure/vrf/lisp-dynamic-eid

# security-policy

[no] security-policy <policy>

## Syntax Description

---

**Syntax Description**

---

security-policy Configure Security  
policy

---

*policy* Security Policy options

---

## Command Mode

- /exec/configure/macsec-policy

# sed

| sed [ -n ] + <expr>

## Syntax Description

---

### Syntax Description

---

| Pipe command output to filter

---

sed Stream Editor

---

-n (Optional) suppress automatic printing of pattern space

---

*expr* Edition command (script)

---

## Command Mode

- /output

# segment-routing mpls

[no] segment-routing mpls

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| segment-routing    | segment-routing properties                      |
| mpls               | MPLS configuration commands                     |

## Command Mode

- /exec/configure

# send-community

[ no | default ] send-community [ both | standard ]

## Syntax Description

| Syntax Description |            |   |
|--------------------|------------|---|
| no                 | (Optional) | Negate a command or set its defaults            |
| default            | (Optional) | Inherit values from a peer template             |
| send-community     |            | Send Community attribute to this neighbor       |
| both               | (Optional) | Send Standard and Extended Community attributes |
| standard           | (Optional) | Send Standard Community attribute               |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-vpnv4
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-vpnv6
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-l2vpn-evpn
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv4-mvpn
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv6-mvpn
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-link-state
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv4-label
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv6-label

# send-community

[ no | default ] send-community [ both | extended | standard ]

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults            |
| default            | (Optional) Inherit values from a peer template             |
| send-community     | Send Community attribute to this neighbor                  |
| both               | (Optional) Send Standard and Extended Community attributes |
| extended           | (Optional) Send Extended Community attribute               |
| standard           | (Optional) Send Standard Community attribute               |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv4-mdt  
/exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-l2vpn-vpls

# send-community extended

[ no | default ] send-community extended

## Syntax Description

| Syntax Description |                         |                                      |
|--------------------|-------------------------|--------------------------------------|
| no                 | (Optional)              | Negate a command or set its defaults |
| default            | (Optional)              | Inherit values from a peer template  |
| send-community     | Send Community          | attribute to this neighbor           |
| extended           | Send Extended Community | attribute                            |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af  
 /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-vpnv4  
 /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-vpnv6  
 /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-l2vpn-evpn  
 /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv4-mvpn  
 /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv6-mvpn  
 /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-link-state  
 /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv4-label  
 /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv6-label



# send-lifetime month\_a month\_b month\_c month\_d month\_e month\_f month\_g month\_h month\_i month\_j month\_k month\_l duration infinite month\_a month\_b month\_c month\_d month\_e month\_f month\_g month\_h month\_i month\_j month\_k month\_l

```
{ { send-lifetime [ local ] <stime> { month_a | month_b | month_c | month_d | month_e | month_f | month_g | month_h | month_i | month_j | month_k | month_l } <sday> <syead> { duration <dsec> | infinite | <etime> { month_a | month_b | month_c | month_d | month_e | month_f | month_g | month_h | month_i | month_j | month_k | month_l } <eday> <eyear> } } | { no send-lifetime [ [ local ] <stime> { month_a | month_b | month_c | month_d | month_e | month_f | month_g | month_h | month_i | month_j | month_k | month_l } <sday> <syead> { duration <dsec> | infinite | <etime> { month_a | month_b | month_c | month_d | month_e | month_f | month_g | month_h | month_i | month_j | month_k | month_l } <eday> <eyear> } ] } }
```

## Syntax Description

### Syntax Description

|               |   |
|---------------|---|
| no            | Negate a command or set its defaults        |
| send-lifetime | Set send lifetime of key                    |
| local         | (Optional) Specify time in local timezone   |
| <i>stime</i>  | HH:MM:SS Time to start <0-23>:<0-59>:<0-59> |
| <i>etime</i>  | HH:MM:SS Time to end <0-23>:<0-59>:<0-59>   |
| month_a       |   |
| month_b       |   |
| month_c       |   |
| month_d       |   |
| month_e       |   |
| month_f       |   |
| month_g       |   |
| month_h       |   |
| month_i       |   |
| month_j       |   |
| month_k       |   |
| month_l       |   |
| <i>sday</i>   | Day of the month to start                   |

send-lifetime month\_a month\_b month\_c month\_d month\_e month\_f month\_g month\_h month\_i month\_j month\_k month\_l duration infinite month\_a month\_b month\_c month\_d month\_e month\_f month\_g month\_h month\_i month\_j month\_k month\_l

|                 |                           |
|-----------------|---------------------------|
| <i>eday</i>     | Day of the month to end   |
| <i>syear</i>    | Year to start             |
| <i>eyear</i>    | Year to end               |
| <i>duration</i> | Set key lifetime duration |
| <i>dsec</i>     | Duration in seconds       |
| <i>infinite</i> | Never Expires             |

### Command Mode

- /exec/configure/keychain-key

# send-lifetime month\_a month\_b month\_c month\_d month\_e month\_f month\_g month\_h month\_i month\_j month\_k month\_l duration infinite month\_a month\_b month\_c month\_d month\_e month\_f month\_g month\_h month\_i month\_j month\_k month\_l

```
{ { send-lifetime [ local ] <stime> { month_a | month_b | month_c | month_d | month_e | month_f | month_g | month_h | month_i | month_j | month_k | month_l } <sday> <syecar> { duration <dsec> | infinite | <etime> { month_a | month_b | month_c | month_d | month_e | month_f | month_g | month_h | month_i | month_j | month_k | month_l } <eday> <eyecar> } } | { no send-lifetime [ [ local ] <stime> { month_a | month_b | month_c | month_d | month_e | month_f | month_g | month_h | month_i | month_j | month_k | month_l } <sday> <syecar> { duration <dsec> | infinite | <etime> { month_a | month_b | month_c | month_d | month_e | month_f | month_g | month_h | month_i | month_j | month_k | month_l } <eday> <eyecar> } ] } }
```

## Syntax Description

### Syntax Description

|               |   |
|---------------|---|
| no            | Negate a command or set its defaults        |
| send-lifetime | Set send lifetime of macsec key             |
| local         | (Optional) Specify time in local timezone   |
| <i>stime</i>  | HH:MM:SS Time to start <0-23>:<0-59>:<0-59> |
| <i>etime</i>  | HH:MM:SS Time to end <0-23>:<0-59>:<0-59>   |
| month_a       |   |
| month_b       |   |
| month_c       |   |
| month_d       |   |
| month_e       |   |
| month_f       |   |
| month_g       |   |
| month_h       |   |
| month_i       |   |
| month_j       |   |
| month_k       |   |
| month_l       |   |
| <i>sday</i>   | Day of the month to start                   |

send-lifetime month\_a month\_b month\_c month\_d month\_e month\_f month\_g month\_h month\_i month\_j month\_k month\_l duration infinite month\_a month\_b month\_c month\_d month\_e month\_f month\_g month\_h month\_i month\_j month\_k month\_l

|                 |                           |
|-----------------|---------------------------|
| <i>eday</i>     | Day of the month to end   |
| <i>syear</i>    | Year to start             |
| <i>eyear</i>    | Year to end               |
| <i>duration</i> | Set key lifetime duration |
| <i>dsec</i>     | Duration in seconds       |
| <i>infinite</i> | Never Expires             |

### Command Mode

- /exec/configure/macseckeychain-key

# send

send <line>

## Syntax Description

---

### Syntax Description

---

*send* Send message to open sessions

---

*line* Send message (a line) to all open sessions

---

## Command Mode

- /exec

# send session

send session <s0> <line>

## Syntax Description

---

### Syntax Description

---

send Send message to open sessions

---

session Send message to specific session

---

s0 Specify pts/tty device type

---

line Enter a one line message

---

## Command Mode

- /exec

# sensor-group

[no] sensor-group <grp-id>

## Syntax Description

|                           |              |   |
|---------------------------|--------------|---|
| <b>Syntax Description</b> | no           | (Optional) Negate a command or set its defaults |
|                           | sensor-group | Create a sensor group                           |

## Command Mode

- /exec/configure/telemetry

# server

[no] server { <hostipname> }

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| server             | TACACS+ server name or IP address               |
| <i>hostipname</i>  | IPV4/IPV6 address or DNS name                   |

## Command Mode

- /exec/configure/tacacs+



# server

[no] server <host0>

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | no (Optional) Negate a command or set its defaults |
|                           | server LDAP server name                            |
|                           | <i>host0</i> LDAP server name                      |

## Command Mode

- /exec/configure/ldap

# server

[no] server <hostname>

## Syntax Description

|                           |                 |   |
|---------------------------|-----------------|---|
| <b>Syntax Description</b> | no              | (Optional) Negate a command or set its defaults |
|                           | server          | RADIUS server name or IP address                |
|                           | <i>hostname</i> | IPV4/IPV6 address or DNS name                   |

## Command Mode

- /exec/configure/radius

## server protocol ldap

```
[no] server protocol ldap { ipv6 <ipv6addr> | ip <ipaddr> | host <hostname> } [ port <portnum> ] [ vrf { <vrf-name> | <vrf-known-name> } ] [ enable-ssl ]
```

### Syntax Description

| Syntax Description    |            |                                      |
|-----------------------|------------|--------------------------------------|
| no                    | (Optional) | Negate a command or set its defaults |
| server                |            | Configure database server            |
| protocol              |            | Configure database protocol          |
| ldap                  |            | Use LDAP                             |
| ipv6                  |            | IPv6 address of server               |
| ip                    |            | IP address of server                 |
| <i>ipaddr</i>         |            | Enter IP address of server           |
| host                  |            | Hostname of server                   |
| <i>hostname</i>       |            | Enter hostname of server             |
| port                  | (Optional) | Port                                 |
| <i>portnum</i>        | (Optional) | Enter port number                    |
| vrf                   | (Optional) | vrf context                          |
| <i>vrf-name</i>       | (Optional) | VRF name                             |
| <i>vrf-known-name</i> | (Optional) | Known VRF name                       |
| enable-ssl            | (Optional) | LDAP server enable ssl               |

### Command Mode

- /exec/configure/fabric-db

# server protocol radius group

[no] server protocol radius group <groupname>

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| server             | Configure database server                       |  |
| protocol           | Configure database protocol                     |  |
| radius             | Use RADIUS                                      |  |
| group              | AAA group                                       |  |
| <i>groupname</i>   | Enter AAA group name of servers                 |  |

## Command Mode

- /exec/configure/fabric-db

## server protocol xmpp ip

```
[no] server protocol xmpp { ip <ipaddr> | host <hostname> } [ port <portnum> ] [ vrf { <vrf-name> | <vrf-known-name> } ]
```

### Syntax Description

| Syntax Description    |            |                                      |
|-----------------------|------------|--------------------------------------|
| no                    | (Optional) | Negate a command or set its defaults |
| server                |            | Configure database server            |
| protocol              |            | Configure database protocol          |
| xmpp                  |            | Use XMPP                             |
| ip                    |            | IP address of server                 |
| <i>ipaddr</i>         |            | Enter IP address of server           |
| host                  |            | Hostname of server                   |
| <i>hostname</i>       |            | Enter hostname of server             |
| port                  | (Optional) | Port                                 |
| <i>portnum</i>        | (Optional) | Enter port number                    |
| vrf                   | (Optional) | vrf context                          |
| <i>vrf-name</i>       | (Optional) | VRF name                             |
| <i>vrf-known-name</i> | (Optional) | Known VRF name                       |

### Command Mode

- /exec/configure/fabric-db

# service-policy

[no] service-policy [ type qos ] <inp-or-out> <pmap-name-qos> [ no-stats ]

## Syntax Description

| Syntax Description   |                         |  |
|----------------------|-------------------------|--|
| no                   | (Optional)              | Negate a command or set its defaults                   |
| service-policy       |                         | Configure service policy for an interface              |
| type                 | (Optional)              | Specify the type of this policy                        |
| qos                  | (Optional)              | Qos policy   |
| <i>inp-or-out</i>    |                         |  |
| <i>pmap-name-qos</i> | Policy-map name __nil__ | You must create a policy-map before using this command |
| no-stats             | (Optional)              | Disable statistics for this policy                     |

## Command Mode

- /exec/configure/if-set-qos /exec/configure/if-remote-ethernet /exec/configure/if-remote-ethernet-switch

# service-policy

[no] service-policy [ type qos ] <inp-or-out> <pmap-name-qos> [ no-stats ]

## Syntax Description

| Syntax Description   |  |
|----------------------|--|
| no                   | (Optional) Negate a command or set its defaults                                |
| service-policy       | Configure service policy for an interface                                      |
| type                 | (Optional) Specify the type of this policy                                     |
| qos                  | (Optional) Qos policy  |
| <i>inp-or-out</i>    |  |
| <i>pmap-name-qos</i> | Policy-map name __nil__ You must create a policy-map before using this command |
| no-stats             | (Optional) Disable statistics for this policy                                  |

## Command Mode

- /exec/configure/vlan

# service-policy

[no] service-policy [ type qos ] <pmap-name-qos>

## Syntax Description

| Syntax Description   |            |                                      |
|----------------------|------------|--------------------------------------|
| no                   | (Optional) | Negate a command or set its defaults |
| service-policy       |            | Configure hierarchial policy-map     |
| type                 | (Optional) | Specify the type of this policy      |
| qos                  | (Optional) | Qos policy                           |
| <i>pmap-name-qos</i> |            | Policy-map name                      |

## Command Mode

- /exec/configure/policy-map/class



# service-policy input

[no] service-policy input <policy\_name>

## Syntax Description

|                           |                    |   |
|---------------------------|--------------------|---|
| <b>Syntax Description</b> | no                 | (Optional) Negate a command or set its defaults |
|                           | service-policy     | Attach a policy to control-plane interface      |
|                           | input              | Input the policy name                           |
|                           | <i>policy_name</i> | Name of the policy                              |

## Command Mode

- /exec/configure/ctrl-plane

# service-policy type network-qos

[no] service-policy type network-qos <pmap-name-nq>

## Syntax Description

| Syntax Description  |   |
|---------------------|---|
| no                  | (Optional) Negate a command or set its defaults |
| service-policy      | Policy Map                                      |
| type                | Specify the type of this policy-map             |
| network-qos         | Network QoS policy                              |
| <i>pmap-name-nq</i> | Policy-map name                                 |

## Command Mode

- /exec/configure/system/qos

## service-policy type psp

```
[no] service-policy type psp <inp-or-out> { <pmap-name-plc> | { handle <ppf_id> } }
```

### Syntax Description

| Syntax Description   |  |
|----------------------|--|
| no                   | (Optional) Negate a command or set its defaults                                |
| service-policy       | Configure service policy for an interface                                      |
| type                 | Specify the type of this policy  |
| psp                  | PSP policy   |
| <i>inp-or-out</i>    |  |
| <i>pmap-name-plc</i> | Policy-map name __nil__ You must create a policy-map before using this command |
| handle               | Handle   |
| <i>ppf_id</i>        | PPF ID   |

### Command Mode

- /exec/configure/if-set-qos

# service-policy type qos

[no] service-policy type qos <inp-only> <pmap-name-qos>

## Syntax Description

| Syntax Description   |  |
|----------------------|--|
| no                   | (Optional) Negate a command or set its defaults                                |
| service-policy       | Policy Map   |
| type                 | Specify the type of this policy-map  |
| qos                  | System-level QoS policy  |
| <i>inp-only</i>      |  |
| <i>pmap-name-qos</i> | Policy-map name __nil__ You must create a policy-map before using this command |

## Command Mode

- /exec/configure/system/qos

## service-policy type queuing

[no] service-policy type queuing <inp-or-out> <pmap-name-que> [ no-stats ]

### Syntax Description

| Syntax Description   |   |
|----------------------|---|
| no                   | (Optional) Negate a command or set its defaults |
| service-policy       | Configure service policy for an interface       |
| type                 | Specify the type of this policy                 |
| queuing              | Queuing policy                                  |
| <i>inp-or-out</i>    |   |
| <i>pmap-name-que</i> | Policy-map name                                 |
| no-stats             | (Optional) Disable statistics for this policy   |

### Command Mode

- /exec/configure/if-set-que

# service-policy type queuing

[no] service-policy type queuing <pmap-name-que>

## Syntax Description

| Syntax Description   |                         |  |
|----------------------|-------------------------|--|
| no                   | (Optional)              | Negate a command or set its defaults                   |
| service-policy       |                         | Set the inner policy-map                               |
| type                 |                         | Specify the type of this policy                        |
| queuing              |                         | Queuing policy   |
| <i>pmap-name-que</i> | Policy-map name __nil__ | You must create a policy-map before using this command |

## Command Mode

- /exec/configure/policy-map/type/queuing/class

# service-policy type queuing

[no] service-policy type queuing <inp-or-out> <pmap-name-que>

## Syntax Description

|                           |                      |   |
|---------------------------|----------------------|---|
| <b>Syntax Description</b> | no                   | (Optional) Negate a command or set its defaults |
|                           | service-policy       | Policy Map                                      |
|                           | type                 | Specify the type of this policy-map             |
|                           | queuing              | DCE Queuing policy                              |
|                           | <i>inp-or-out</i>    |   |
|                           | <i>pmap-name-que</i> | Policy-map name                                 |

## Command Mode

- /exec/configure/system/qos

# service dhcp

[no] service dhcp

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| service            | Modify use of network based services            |
| dhcp               | Enable DHCP relay agent                         |

## Command Mode

- /exec/configure



# service set

[no] service set <onep-service-set>

## Syntax Description

| Syntax Description      |            |                                      |
|-------------------------|------------|--------------------------------------|
| no                      | (Optional) | Negate a command or set its defaults |
| service                 |            | ONEP service set                     |
| set                     |            | ONEP service set                     |
| <i>onep-service-set</i> |            | service name                         |

## Command Mode

- /exec/configure/onep

# service tag

{ service tag <tag-id> } | { no service tag }

## Syntax Description

|                           |               |                                      |
|---------------------------|---------------|--------------------------------------|
| <b>Syntax Description</b> | no            | Negate a command or set its defaults |
|                           | service       | Configure ngoam service              |
|                           | tag           | Configure ngoam service tag          |
|                           | <i>tag-id</i> | Configure ngoam service tag id       |

## Command Mode

- /exec/configure/configngoamprofile

# service unsupported-transceiver

[no] service unsupported-transceiver

## Syntax Description

| Syntax                  | Description   |
|-------------------------|---|
| no                      | (Optional) Negate a command or set its defaults           |
| service                 | Serviceability Commands                                   |
| unsupported-transceiver | Configure support for transceivers not supported by Cisco |

## Command Mode

- /exec/configure

# session-limit

[no] session-limit <i0>

## Syntax Description

|                           |               |   |
|---------------------------|---------------|---|
| <b>Syntax Description</b> | no            | (Optional) Negate a command or set its defaults |
|                           | session-limit | Set the max no of concurrent vsh sessions       |
|                           | i0            | Max concurrent vsh sessions                     |

## Command Mode

- /exec/configure/line

# session domain-lookup

session domain-lookup | no session domain-lookup

## Syntax Description

| Syntax Description |               |                                      |
|--------------------|---------------|--------------------------------------|
|                    | session       | Configure session preferences        |
|                    | no            | Negate a command or set its defaults |
|                    | domain-lookup | Session                              |

## Command Mode

- /exec

# session key-required

[no] session key-required

## Syntax Description

| Syntax Description |              |                                      |
|--------------------|--------------|--------------------------------------|
|                    | no           | Negate a command or set its defaults |
|                    | session      | One Platform session                 |
|                    | key-required | Disable session key                  |

## Command Mode

- /exec/configure/onep

# session max

session max <onep-maxsess>

## Syntax Description

| Syntax Description |                     |                            |
|--------------------|---------------------|----------------------------|
|                    | session             | One Platform session       |
|                    | max                 | Maximum number of sessions |
|                    | <i>onep-maxsess</i> | Number of sessions         |

## Command Mode

- /exec/configure/onep

# session max

[no] session max [ <onep-maxsess> ]

## Syntax Description

| Syntax Description  |            |                                      |
|---------------------|------------|--------------------------------------|
| no                  |            | Negate a command or set its defaults |
| session             |            | One Platform session                 |
| max                 |            | Maximum number of sessions           |
| <i>onep-maxsess</i> | (Optional) | Number of sessions                   |

## Command Mode

- /exec/configure/onep



## session protection

```
[no] session protection [ vrf { <vrf-name> | <vrf-known-name> } ] [ for <pfx-list> ] [ duration { <secs> | infinite } ]
```

### Syntax Description

| Syntax Description    |            |   |
|-----------------------|------------|---|
| no                    | (Optional) | Negate a command or set its defaults                              |
| session               |            | Configure session parameters                                      |
| protection            |            | Configure session protection parameters                           |
| vrf                   | (Optional) | VRF Routing/Forwarding instance information                       |
| <i>vrf-name</i>       | (Optional) | VPN Routing/Forwarding instance name                              |
| <i>vrf-known-name</i> | (Optional) | Known VRF name  |
| for                   | (Optional) | Prefix list to specify LDP peers                                  |
| <i>pfx-list</i>       | (Optional) | Prefix list for LDP peers   |
| duration              | (Optional) | Period to sustain session protection after loss of link discovery |
| <i>secs</i>           | (Optional) | Holdup time in seconds  |
| infinite              | (Optional) | Protect session forever after loss of link discovery              |

### Command Mode

- /exec/configure/ldp

# set-attached-bit

[no] set-attached-bit

## Syntax Description

---

### Syntax Description

no (Optional) Negate a command or set its defaults

---

set-attached-bit Configure L1|L2 router to set/unset attached bit in its L1 LSP

---

## Command Mode

- /exec/configure/router-isis/router-isis-vrf-common /exec/configure/router-isis/router-isis-af-ipv6

## set-overload-bit

```
[no] set-overload-bit | [ no ] set-overload-bit { always | on-startup { <secs> | [ <seconds> ] wait-for bgp <as>
} } [ suppress { [ interlevel ] [ external ] } ]
```

### Syntax Description

#### Syntax Description

|                  |  |
|------------------|--|
| no               | Negate a command or set its defaults                               |
| set-overload-bit | Signal other routers not to use us for transit                     |
| always           | Set the overload bit unconditionally                               |
| on-startup       | Set the overload bit on IS-IS startup                              |
| <i>secs</i>      | Clear the overload bit after an elapsed time in seconds            |
| wait-for         | Clear the overload bit when notified by a specific protocol        |
| bgp              | Border Gateway Protocol (BGP)                                      |
| <i>seconds</i>   | (Optional) Clear the overload bit after an elapsed time in seconds |
| <i>as</i>        | Autonomous system number   |
| suppress         | (Optional) Suppress route redistribution if overload bit set       |
| interlevel       | (Optional) Suppress interlevel route redistribution                |
| external         | (Optional) Suppress external route redistribution                  |

### Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

# set

set <paramname> <paramval>

## Syntax Description

---

### Syntax Description

---

|     |                         |
|-----|-------------------------|
| set | Set the parameter value |
|-----|-------------------------|

---

|                  |                                 |
|------------------|---------------------------------|
| <i>paramname</i> | Enter the name of the parameter |
|------------------|---------------------------------|

---

|                 |                           |
|-----------------|---------------------------|
| <i>paramval</i> | Enter the parameter value |
|-----------------|---------------------------|

---

## Command Mode

- /exec/configure/param-inst

# set

```
[no] set { { cos <cos-val> } | { eth-src-mac-addr <src-mac-addr> } | { eth-dest-mac-addr <dest-mac-addr> }
| { vlan <vlan-number> } | { ip-tos <ip-tos-value> <ip-tos-mask> } | { out-interface <iface-list> } | { dscp [
tunnel ] { <dscp-val> | <dscp-enum> } } | { precedence [ prec-tunnel ] { <prec-val> | <prec-enum> } } | {
discard-class <dis-class-val> } | { qos-group <qos-grp-val> } | { { { cos1 cos2 } | { dscp1 dscp2 } | { prec1
prec2 } | { dis-class1 dis-class2 } | { dscp3 mpls-exp-imposition } | { mpls-exp-topmost dscp4 } | {
mpls-exp-topmost1 mpls-exp-topmost2 } } } | { mpls experimental { { topmost <exp-value> } | { imposition
<exp-value-imp> } } } | action-strip-vlan | action-drop-pkt | divert-action | copy-action | action-decrement-ttl
| forward-normal | goto-pmap <pmap-table-handle> }
```

## Syntax Description

### Syntax Description

|                      |   |
|----------------------|---|
| no                   | (Optional) Negate a command or set its defaults |
| set                  | Set attribute                                   |
| cos                  | IEEE 802.1Q class of service                    |
| cos1                 | IEEE 802.1Q class of service                    |
| cos2                 | IEEE 802.1Q class of service                    |
| <i>cos-val</i>       | 802.1Q Class of Service value                   |
| eth-dest-mac-addr    | Action on Layer 2 destination MAC address       |
| eth-src-mac-addr     | Action on Layer 2 source MAC address            |
| <i>src-mac-addr</i>  | Layer 2 MAC Address                             |
| <i>dest-mac-addr</i> | Layer 2 MAC Address                             |
| vlan                 | Set the VLAN ID                                 |
| <i>vlan-number</i>   | VLAN NUMBER                                     |
| ip-tos               | Set the IPv4 TOS                                |
| <i>ip-tos-value</i>  | IPv4 TOS Value                                  |
| <i>ip-tos-mask</i>   | IPV4 TOS Mask                                   |
| out-interface        | Output to a Specified Interface                 |
| <i>iface-list</i>    | Physical Interface Name and Number or List      |
| action-strip-vlan    | Perform the action STRIP-VLAN-ID                |
| action-drop-pkt      | Perform the action Drop the Packet              |
| divert-action        | Divert the packets to Controller                |
| copy-action          | Copy the packets to Controller                  |

|                          |   |
|--------------------------|---|
| action-decrement-ttl     | Decrement TTL on the Packet                       |
| forward-normal           | Forward the packets normally                      |
| goto-pmap                | Goto pmap/table                                   |
| <i>pmap-table-handle</i> | Pmap-table handle                                 |
| dscp                     | DSCP in IP(v4) and IPv6 packets                   |
| dscp1                    | DSCP in IP(v4) and IPv6 packets                   |
| dscp2                    | DSCP in IP(v4) and IPv6 packets                   |
| tunnel                   | (Optional) Set DSCP in tunnel encapsulation       |
| <i>dscp-val</i>          | DSCP value  |
| <i>dscp-enum</i>         |   |
| precedence               | Precedence in IP(v4) and IPv6 packets             |
| prec1                    | Precedence in IP(v4) and IPv6 packets             |
| prec2                    | Precedence in IP(v4) and IPv6 packets             |
| prec-tunnel              | (Optional) Set Precedence in tunnel encapsulation |
| <i>prec-val</i>          | IP Precedence value                               |
| <i>prec-enum</i>         |   |
| discard-class            | Discard class                                     |
| dis-class1               | Discard class                                     |
| dis-class2               | Discard class                                     |
| <i>dis-class-val</i>     | Discard class value                               |
| qos-group                | Qos-group   |
| <i>qos-grp-val</i>       | Qos-group value                                   |
| mpls                     | Set MPLS label                                    |
| experimental             | Set MPLS experimental label                       |
| topmost                  | Set MPLS topmost label                            |
| imposition               | Push the label and set new one on top             |
| <i>exp-value</i>         | MPLS value  |
| <i>exp-value-imp</i>     | MPLS value  |
| dscp3                    | DSCP in IP(v4) and IPv6 packets                   |

---

mpls-exp-imposition mpls-exp-imposition

---

mpls-exp-topmost mpls-exp-topmost

---

dscp4 DSCP in IP(v4) and IPv6 packets

---

mpls-exp-topmost1 mpls-exp-topmost

---

mpls-exp-topmost2 mpls-exp-topmost

---

**Command Mode**

- /exec/configure/policy-map/type/plc/class

# set

```
[no] set { { cos [ inner ] <cos-val> } | { dscp [ tunnel ] { <dscp-val> | <opt_set_dscp> } } | { precedence [
tunnel1 ] { <prec-val> | <opt_set_prec> } } }
```

## Syntax Description

| Syntax Description  |  |  |
|---------------------|--|--|
| no                  | (Optional) Negate a command or set its defaults                  |  |
| set                 | Set attribute  |  |
| cos                 | IEEE 802.1Q class of service                                     |  |
| inner               | (Optional) Set inner 802.1Q class of service in QinQ environment |  |
| <i>cos-val</i>      | 802.1Q Class of Service value                                    |  |
| dscp                | DSCP in IP(v4) and IPv6 packets                                  |  |
| tunnel              | (Optional) Set DSCP in tunnel encapsulation                      |  |
| <i>dscp-val</i>     | DSCP value   |  |
| <i>opt_set_dscp</i> |  |  |
| precedence          | Precedence in IP(v4) and IPv6 packets                            |  |
| tunnel1             | (Optional) Set DSCP in tunnel encapsulation                      |  |
| <i>prec-val</i>     | IP Precedence value  |  |
| <i>opt_set_prec</i> |  |  |

## Command Mode

- /exec/configure/pmap/class



# set

```
[no] set { { dlb-disable } | { precedence [ prec-tunnel ] { <prec-val> | <prec-enum> } } | { dscp [ tunnel ] { <dscp-val> | <dscp-enum> } } | { cos <cos-val> } | { qos-group <qos-grp-val> } }
```

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults   |
| set                | Set attribute                                     |
| dlb-disable        | Disable Dynamic Load Balancing                    |
| precedence         | Precedence in IP(v4) and IPv6 packets             |
| prec-tunnel        | (Optional) Set Precedence in tunnel encapsulation |
| <i>prec-val</i>    | IP Precedence value                               |
| <i>prec-enum</i>   |   |
| dscp               | DSCP in IP(v4) and IPv6 packets                   |
| tunnel             | (Optional) Set DSCP in tunnel encapsulation       |
| <i>dscp-val</i>    | DSCP value  |
| <i>dscp-enum</i>   |   |
| cos                | IEEE 802.1Q Class of Service                      |
| <i>cos-val</i>     | 802.1Q Class of Service value                     |
| qos-group          | Qos-group   |
| <i>qos-grp-val</i> | Qos-group value                                   |

## Command Mode

- /exec/configure/policy-map/class

# set

```
[no] set { { discard-class <dis-class-val> } | { { { cos1 cos2 } | { dscp1 dscp2 } | { prec1 prec2 } | { dis-class1
dis-class2 } | { dscp3 mpls-exp-imposition } | { mpls-exp-topmost dscp4 } | { mpls-exp-topmost1
mpls-exp-topmost2 } } table <table-map-name> } | { mpls experimental { { topmost <exp-value> } | {
imposition <exp-value-imp> } } } }
```

## Syntax Description

### Syntax Description

|                       |   |
|-----------------------|---|
| no                    | (Optional) Negate a command or set its defaults |
| set                   | Set attribute                                   |
| cos1                  | IEEE 802.1Q class of service                    |
| cos2                  | IEEE 802.1Q class of service                    |
| dscp1                 | DSCP in IP(v4) and IPv6 packets                 |
| dscp2                 | DSCP in IP(v4) and IPv6 packets                 |
| prec1                 | Precedence in IP(v4) and IPv6 packets           |
| prec2                 | Precedence in IP(v4) and IPv6 packets           |
| discard-class         | Discard class                                   |
| dis-class1            | Discard class                                   |
| dis-class2            | Discard class                                   |
| <i>dis-class-val</i>  | Discard class value                             |
| table                 | Table defining mapping from input to output     |
| <i>table-map-name</i> | Table-map name                                  |
| mpls                  | Set MPLS label                                  |
| experimental          | Set MPLS experimental label                     |
| topmost               | Set MPLS topmost label                          |
| imposition            | Push the label and set new one on top           |
| <i>exp-value</i>      | MPLS value                                      |
| <i>exp-value-imp</i>  | MPLS value                                      |
| dscp3                 | DSCP in IP(v4) and IPv6 packets                 |
| mpls-exp-imposition   | mpls-exp-imposition                             |
| mpls-exp-topmost      | mpls-exp-topmost                                |

---

|       |                                 |
|-------|---------------------------------|
| dscp4 | DSCP in IP(v4) and IPv6 packets |
|-------|---------------------------------|

---

|                   |                  |
|-------------------|------------------|
| mpls-exp-topmost1 | mpls-exp-topmost |
|-------------------|------------------|

---

|                   |                  |
|-------------------|------------------|
| mpls-exp-topmost2 | mpls-exp-topmost |
|-------------------|------------------|

---

**Command Mode**

- /exec/configure/policy-map/class

# set

[no] set { load-sharing per-packet }

## Syntax Description

### Syntax Description

|              |  |
|--------------|--|
| set          | Set attribute                                    |
| load-sharing | Load sharing across ECMP by set out-of-order bit |
| per-packet   | per MiM packet                                   |
| no           | (Optional) Negate a command or set its defaults  |

## Command Mode

- /exec/configure/policy-map/class

## set as-path prepend last-as tag

```
{ set as-path { prepend { last-as <lastas> | <as> + } | tag } } | { no set as-path { prepend [ last-as [ <lastas> ] | <as> + ] | tag } }
```

### Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | Negate a command or set its defaults       |
| set                | Set values in destination routing protocol |
| as-path            | Prepend string for a BGP AS-path attribute |
| prepend            | Prepend to the AS-Path                     |
| last-as            | Prepend last AS to the as-path             |
| <i>lastas</i>      | number of last-AS prepends                 |
| <i>as</i>          | AS number                                  |
| tag                | Set the tag as an AS-path attribute        |
| <i>as</i>          | (Optional)                                 |

### Command Mode

- /exec/configure/route-map

# set comm-list delete

```
{ { set comm-list <name> delete } | { no set comm-list } }
```

## Syntax Description

| Syntax Description |                                       |  |
|--------------------|---------------------------------------|--|
| no                 |                                       | Negate a command or set its defaults       |
| set                |                                       | Set values in destination routing protocol |
| comm-list          | set BGP community list (for deletion) |  |
| <i>name</i>        |                                       | Community list name                        |
| delete             |                                       | Delete matching communities                |

## Command Mode

- /exec/configure/route-map

## set community none additive internet local-AS

```
{ set community { none | { additive | internet | local-AS | no-advertise | no-export | <hex_num> | <number>
| <community> } + } } | { no set community [ { none | { additive | internet | local-AS | no-advertise | no-export
| <hex_num> | <number> | <community> } + } ] }
```

### Syntax Description

#### Syntax Description

|                           |   |
|---------------------------|---|
| <code>no</code>           | Negate a command or set its defaults                |
| <code>set</code>          | Set values in destination routing protocol          |
| <code>community</code>    | Set BGP community attribute                         |
| <code>additive</code>     | Add to existing community                           |
| <code>internet</code>     | Internet (well-known community)                     |
| <code>local-AS</code>     | Do not send outside local AS (well-known community) |
| <code>no-advertise</code> | Do not advertise to any peer (well-known community) |
| <code>no-export</code>    | Do not export to next AS (well-known community)     |
| <code>none</code>         | No community attribute                              |
| <code>number</code>       | Community number                                    |
| <code>hex_num</code>      | Community number in hex                             |
| <code>community</code>    | Community number aa:nn format                       |
| <code>additive</code>     | (Optional) internet                                 |

### Command Mode

- /exec/configure/route-map

# set cos

[no] set cos <cos-val>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| set                | Set attribute                                   |
| cos                | IEEE 802.1Q Class of Service                    |
| <i>cos-val</i>     | 802.1Q Class of Service value                   |

## Command Mode

- /exec/configure/policy-map/type/queuing/class



# set cos

[no] set cos <cos-val>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| set                | Set attribute                                   |
| cos                | IEEE 802.1Q class of service                    |
| <i>cos-val</i>     | 802.1Q Class of Service value                   |

## Command Mode

- /exec/configure/policy-map/type/uf/class

# set dampening

```
{ set dampening <half-life> <reuse> <supress> <duration> } | { no set dampening [ <half-life> <reuse> <supress> <duration> ] }
```

## Syntax Description

| Syntax Description | no               | Description                                 |
|--------------------|------------------|---|
|                    | no               | Negate a command or set its defaults        |
|                    | set              | Set values in destination routing protocol  |
|                    | dampening        | Set BGP route flap dampening parameters     |
|                    | <i>half-life</i> | half-life time for the penalty              |
|                    | <i>reuse</i>     | penalty to start reusing a route            |
|                    | <i>supress</i>   | penalty to start suppressing a route        |
|                    | <i>duration</i>  | Maximum duration to suppress a stable route |

## Command Mode

- /exec/configure/route-map

# set distance

{ set distance <external-dist> [ <internal-dist> [ <local-dist> ] ] } | { no set distance }

## Syntax Description

| Syntax Description   |            |  |
|----------------------|------------|--|
| no                   |            | Negate a command or set its defaults           |
| set                  |            | Set values in destination routing protocol     |
| distance             |            | Set the Administrative distance of route       |
| <i>external-dist</i> |            | Administrative distance for IGP or EBGp routes |
| <i>internal-dist</i> | (Optional) | Administrative distance for internal routes    |
| <i>local-dist</i>    | (Optional) | Administrative distance for local routes       |

## Command Mode

- /exec/configure/route-map

# set extcomm-list delete

```
{ { set extcomm-list <name> delete } | { no set extcomm-list [ <name> delete ] } }
```

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults       |
| set                |  | Set values in destination routing protocol |
| extcomm-list       | set BGP extcommunity list (for deletion) |  |
| <i>name</i>        |  | Extended Community list name               |
| delete             |  | Delete matching extcommunities             |

## Command Mode

- /exec/configure/route-map

## set extcommunity 4byteas-generic transitive additive

```
{ set extcommunity 4byteas-generic { { transitive <ext-comm-gen-trans> | non-transitive
<ext-comm-gen-nontrans> } + [ additive ] | additive | none } } | { no set extcommunity 4byteas-generic [ {
transitive <ext-comm-gen-trans> | non-transitive <ext-comm-gen-nontrans> } + [ additive ] | additive | none
] }
```

### Syntax Description

#### Syntax Description

|                              |   |
|------------------------------|---|
| no                           | Negate a command or set its defaults            |
| set                          | Set values in destination routing protocol      |
| extcommunity                 | Set BGP extcommunity attribute                  |
| 4byteas-generic              | Generic extended community                      |
| additive                     | (Optional) Add to existing generic extcommunity |
| none                         | No extcommunity generic attribute               |
| transitive                   | Transitive extended community                   |
| non-transitive               | Non-Transitive extended community               |
| <i>ext-comm-gen-trans</i>    | Extcommunity number aa4:nn format               |
| <i>ext-comm-gen-nontrans</i> | Extcommunity number aa4:nn format               |
| <i>ext-comm-gen-trans</i>    | (Optional) <ext-comm-gen-nontrans>              |

### Command Mode

- /exec/configure/route-map

# set extcommunity additive

```
{ set extcommunity { additive | none } } | { no set extcommunity [ additive | none ] }
```

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults       |
| set                |  | Set values in destination routing protocol |
| extcommunity       |  | Set BGP extcommunity attribute             |
| additive           |  | Add to existing generic extcommunity       |
| none               |  | No extcommunity attribute                  |

## Command Mode

- /exec/configure/route-map

## set extcommunity cost

```
{ set extcommunity cost { [ igp | pre-bestpath ] <comm-id> <cost-value> } + } | { no set extcommunity cost
[ [ igp | pre-bestpath ] <comm-id> <cost-value> ] + }
```

### Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults                              |
| set                |  | Set values in destination routing protocol                        |
| extcommunity       |  | Set BGP extcommunity attribute                                    |
| cost               |  | Cost  |
| igp                |  | (Optional) Compare following IGP cost comparison                  |
| pre-bestpath       |  | (Optional) Compare before all other steps in bestpath calculation |
| <i>comm-id</i>     |  | Community ID  |
| <i>cost-value</i>  |  | Cost Community value  |
| <i>comm-id</i>     |  | (Optional) <cost-value>   |

### Command Mode

- /exec/configure/route-map

## set extcommunity rt additive

```
{ set extcommunity rt { { <ext-comm-rt-aa2nn4> | <ext-comm-rt-aa4nn2> } + [ additive ] | additive } } | {
no set extcommunity rt [ { <ext-comm-rt-aa2nn4> | <ext-comm-rt-aa4nn2> } + [ additive ] | additive ] }
```

### Syntax Description

| Syntax Description        |            |  |
|---------------------------|------------|--|
| no                        |            | Negate a command or set its defaults       |
| set                       |            | Set values in destination routing protocol |
| extcommunity              |            | Set BGP extcommunity attribute             |
| rt                        |            | Route-Target                               |
| additive                  |            | (Optional) Add to existing rt extcommunity |
| <i>ext-comm-rt-aa2nn4</i> |            | Extcommunity number                        |
| <i>ext-comm-rt-aa4nn2</i> |            | Extcommunity number                        |
| <i>ext-comm-rt-aa2nn4</i> | (Optional) | <ext-comm-rt-aa4nn2>                       |

### Command Mode

- /exec/configure/route-map



# set extension-key

[no] set extension-key <key>

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| set                |            | Set the extension key manually       |
| extension-key      |            | Set the extension key manually       |
| key                |            | Extension key                        |

## Command Mode

- /exec/configure/vmt-conn

# set forwarding-address

[no] set forwarding-address

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| set                | Set values in destination routing protocol      |
| forwarding-address | Set the forwarding address                      |

## Command Mode

- /exec/configure/route-map

## set inner ipv4

```
set { inner | outer } ipv4 [ { l3-type <l3_type> | pyld-len <pyld_len> | v6-vld <v6_vld> | version <ver> |
header-len <hlen> | dscp <dscp_val> | ecn <ecn_val> | packet-len <pkt_len> | more-frags <mf> | fragment-off
<fragoff> | ttl <ttl_val> | next-protocol <nproto> | checksum <csum> | src_ip <sip> | dst_ip <dip> } ] +
```

### Syntax Description

| Syntax Description | set             | Setup Trigger                         |
|--------------------|-----------------|---------------------------------------|
|                    | inner           | Mask and Match By Inner Packet Fields |
|                    | outer           | Mask and Match By Outer Packet Fields |
|                    | ipv4            | IPv4 Fields                           |
|                    | l3-type         | (Optional) L3 Packet Type             |
|                    | <i>l3_type</i>  | (Optional) L3 Packet Type             |
|                    | pyld-len        | (Optional) Payload Length             |
|                    | <i>pyld_len</i> | (Optional) Payload Length             |
|                    | v6-vld          | (Optional) IPv6 Valid Information     |
|                    | <i>v6_vld</i>   | (Optional) IPv6 Valid Information     |
|                    | version         | (Optional) Version                    |
|                    | <i>ver</i>      | (Optional) Version                    |
|                    | header-len      | (Optional) Header Length              |
|                    | <i>hlen</i>     | (Optional) Header Length              |
|                    | dscp            | (Optional) Diff. Serv. Code Point     |
|                    | <i>dscp_val</i> | (Optional) Diff. Serv. Code Point     |
|                    | ecn             | (Optional) Explicit Congestion Ntn    |
|                    | <i>ecn_val</i>  | (Optional) Explicit Congestion Ntn    |
|                    | packet-len      | (Optional) Packet Total Length        |
|                    | <i>pkt_len</i>  | (Optional) Packet Total Length        |
|                    | more-frags      | (Optional) More Fragments Available   |
|                    | <i>mf</i>       | (Optional) More Fragments Available   |
|                    | fragment-off    | (Optional) Fragments Offset           |
|                    | <i>fragoff</i>  | (Optional) Fragments Offset           |

|                      |                                   |
|----------------------|-----------------------------------|
| <i>ttl</i>           | (Optional) Time to Live           |
| <i>ttl_val</i>       | (Optional) Time to Live           |
| <i>next-protocol</i> | (Optional) Next(L4) Protocol      |
| <i>nproto</i>        | (Optional) Next(L4) Protocol      |
| <i>checksum</i>      | (Optional) Checksum               |
| <i>csum</i>          | (Optional) Checksum               |
| <i>src_ip</i>        | (Optional) Source IP Address      |
| <i>sip</i>           | (Optional) Source IP Address      |
| <i>dst_ip</i>        | (Optional) Destination IP Address |
| <i>dip</i>           | (Optional) Destination IP Address |

**Command Mode**

- /exec/elanms/sel6

## set inner ipv4

```
set inner ipv4 [ { l3-type <l3_type> | pyld-len <pyld_len> | v6-vld <v6_vld> | version <ver> | header-len <hlen> | dscp <dscp_val> | ecn <ecn_val> | packet-len <pkt_len> | more-frags <mf> | fragment-off <fragoff> | ttl <ttl_val> | next-protocol <nproto> | checksum <csum> | src_ip <sip> | dst_ip <dip> } ] +
```

### Syntax Description

| Syntax Description |                                       |  |
|--------------------|---------------------------------------|--|
| set                | Setup Trigger                         |  |
| inner              | Mask and Match By Inner Packet Fields |  |
| ipv4               | IPv4 Fields                           |  |
| l3-type            | (Optional) L3 Packet Type             |  |
| <i>l3_type</i>     | (Optional) L3 Packet Type             |  |
| pyld-len           | (Optional) Payload Length             |  |
| <i>pyld_len</i>    | (Optional) Payload Length             |  |
| v6-vld             | (Optional) IPv6 Valid Information     |  |
| <i>v6_vld</i>      | (Optional) IPv6 Valid Information     |  |
| version            | (Optional) Version                    |  |
| <i>ver</i>         | (Optional) Version                    |  |
| header-len         | (Optional) Header Length              |  |
| <i>hlen</i>        | (Optional) Header Length              |  |
| dscp               | (Optional) Diff. Serv. Code Point     |  |
| <i>dscp_val</i>    | (Optional) Diff. Serv. Code Point     |  |
| ecn                | (Optional) Explicit Congestion Ntn    |  |
| <i>ecn_val</i>     | (Optional) Explicit Congestion Ntn    |  |
| packet-len         | (Optional) Packet Total Length        |  |
| <i>pkt_len</i>     | (Optional) Packet Total Length        |  |
| more-frags         | (Optional) More Fragments Available   |  |
| <i>mf</i>          | (Optional) More Fragments Available   |  |
| fragment-off       | (Optional) Fragments Offset           |  |
| <i>fragoff</i>     | (Optional) Fragments Offset           |  |
| ttl                | (Optional) Time to Live               |  |

|                      |                                   |
|----------------------|-----------------------------------|
| <i>ttl_val</i>       | (Optional) Time to Live           |
| <i>next-protocol</i> | (Optional) Next(L4) Protocol      |
| <i>nproto</i>        | (Optional) Next(L4) Protocol      |
| <i>checksum</i>      | (Optional) Checksum               |
| <i>csum</i>          | (Optional) Checksum               |
| <i>src_ip</i>        | (Optional) Source IP Address      |
| <i>sip</i>           | (Optional) Source IP Address      |
| <i>dst_ip</i>        | (Optional) Destination IP Address |
| <i>dip</i>           | (Optional) Destination IP Address |

**Command Mode**

- /exec/elanms/sel4

## set inner l2

```
set { inner | outer } l2 [ { snap_vld <snap_vld> | cntag_vld <cntag_vld> | qtag_vld <qtag_vld> | vlan <vlan_id>
| cos <cos_val> | cfi <cfi_vld> | vntag_vld <vntag_vld> | vntag_svif <vntag_svif> | vntag_dvif <vntag_dvif>
| vntag_looped <vntag_loop> | vntag_pointer <vntag_p> | src_mac <smac> | dst_mac <dmac> } ] +
```

### Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| set                | Setup Trigger                                    |  |
| inner              | Mask and Match By Inner Packet Fields            |  |
| outer              | Mask and Match By Outer Packet Fields            |  |
| l2                 | All Layer 2 Fields                               |  |
| snap_vld           | (Optional) SNAP Header Information Valid         |  |
| <i>snap_vld</i>    | (Optional) SNAP Header Information Valid         |  |
| cntag_vld          | (Optional) CNTag Information Valid               |  |
| <i>cntag_vld</i>   | (Optional) CNTag Information Valid               |  |
| qtag_vld           | (Optional) VLAN Tag Information Valid            |  |
| <i>qtag_vld</i>    | (Optional) VLAN Tag Information Valid            |  |
| vlan               | (Optional) VLAN Id (Present only in case of FEX) |  |
| <i>vlan_id</i>     | (Optional) VLAN Id                               |  |
| cos                | (Optional) Class of Service                      |  |
| <i>cos_val</i>     | (Optional) Class of Service Type                 |  |
| cfi                | (Optional) CFI Setting                           |  |
| <i>cfi_vld</i>     | (Optional) CFI Setting Valid                     |  |
| vntag_vld          | (Optional) VNTAG Information Valid               |  |
| <i>vntag_vld</i>   | (Optional) VNTAG Information Valid               |  |
| vntag_svif         | (Optional) VNTAG Source vif                      |  |
| <i>vntag_svif</i>  | (Optional) VNTAG Source vif                      |  |
| vntag_dvif         | (Optional) VNTAG Destination vif                 |  |
| <i>vntag_dvif</i>  | (Optional) VNTAG Destination vif                 |  |
| vntag_looped       | (Optional) VNTAG Header Looped Valid             |  |
| <i>vntag_loop</i>  | (Optional) VNTAG Header Looped Valid             |  |

---

*vntag\_pointer* (Optional) VNTAG Header Pointer Valid

---

*vntag\_p* (Optional) VNTAG Header Pointer Valid

---

*src\_mac* (Optional) Source MAC Address

---

*smac* (Optional) Source MAC Address Value

---

*dst\_mac* (Optional) Destination MAC Address

---

*dmac* (Optional) Destination MAC Address Value

---

### Command Mode

- /exec/elanms/se15



## set inner l2

```
set inner l2 [ { snap_vld <snap_vld> | cntag_vld <cntag_vld> | qtag_vld <qtag_vld> | vlan <vlan_id> | cos
<cos_val> | cfi <cfi_vld> | vntag_vld <vntag_vld> | vntag_svif <vntag_svif> | vntag_dvif <vntag_dvif> |
vntag_looped <vntag_loop> | vntag_pointer <vntag_p> | src_mac <smac> | dst_mac <dmac> } ] +
```

### Syntax Description

| Syntax Description | set               | Setup Trigger                                    |
|--------------------|-------------------|--|
|                    | inner             | Mask and Match By Inner Packet Fields            |
|                    | l2                | All Layer 2 Fields                               |
|                    | snap_vld          | (Optional) SNAP Header Information Valid         |
|                    | <i>snap_vld</i>   | (Optional) SNAP Header Information Valid         |
|                    | cntag_vld         | (Optional) CNTag Information Valid               |
|                    | <i>cntag_vld</i>  | (Optional) CNTag Information Valid               |
|                    | qtag_vld          | (Optional) VLAN Tag Information Valid            |
|                    | <i>qtag_vld</i>   | (Optional) VLAN Tag Information Valid            |
|                    | vlan              | (Optional) VLAN Id (Present only in case of FEX) |
|                    | <i>vlan_id</i>    | (Optional) VLAN Id                               |
|                    | cos               | (Optional) Class of Service                      |
|                    | <i>cos_val</i>    | (Optional) Class of Service Type                 |
|                    | cfi               | (Optional) CFI Setting                           |
|                    | <i>cfi_vld</i>    | (Optional) CFI Setting Valid                     |
|                    | vntag_vld         | (Optional) VNTAG Information Valid               |
|                    | <i>vntag_vld</i>  | (Optional) VNTAG Information Valid               |
|                    | vntag_svif        | (Optional) VNTAG Source vif                      |
|                    | <i>vntag_svif</i> | (Optional) VNTAG Source vif                      |
|                    | vntag_dvif        | (Optional) VNTAG Destination vif                 |
|                    | <i>vntag_dvif</i> | (Optional) VNTAG Destination vif                 |
|                    | vntag_looped      | (Optional) VNTAG Header Looped Valid             |
|                    | <i>vntag_loop</i> | (Optional) VNTAG Header Looped Valid             |
|                    | vntag_pointer     | (Optional) VNTAG Header Pointer Valid            |

|                |  |
|----------------|--|
| <i>vntag_p</i> | (Optional) VNTAG Header Pointer Valid    |
| <i>src_mac</i> | (Optional) Source MAC Address            |
| <i>smac</i>    | (Optional) Source MAC Address Value      |
| <i>dst_mac</i> | (Optional) Destination MAC Address       |
| <i>dmac</i>    | (Optional) Destination MAC Address Value |

**Command Mode**

- /exec/elanms/sel4

## set inner l2 hg2

```
set { inner | outer } l2 hg2 [ { hg2_vid <hg2_vlan> | hg2_ppd_type <hg2_ppd_type> | hg2_mirror <hg2_mirror>
| hg2_opcode <hg2_opcode> | hg2_dstpid <hg2_dpid> | hg2_dstmod <hg2_dmod> | hg2_srcpid <hg2_spid>
| hg2_srcmod <hg2_smod> | hg2_l3vld <hg2_l3_vld> | hg2_tc <hg2_tc> | hg2_dp <hg2_dp> | hg2_mcast
<hg2_mcast_vld> | hg2-vld <hg2_vld> | hg2-cos <hg2_cos> } ] +
```

### Syntax Description

#### Syntax Description

|                     |   |
|---------------------|---|
| set                 | Setup Trigger                                     |
| inner               | Mask and Match By Inner Packet Fields             |
| outer               | Mask and Match By Outer Packet Fields             |
| l2                  | All Layer 2 Fields                                |
| hg2                 | High Gig2 Fields                                  |
| hg2_vid             | (Optional) High Gig2 VLAN Tag                     |
| <i>hg2_vlan</i>     | (Optional) High Gig2 VLAN Tag Information         |
| hg2_ppd_type        | (Optional) High Gig2 Packet Processing Descriptor |
| <i>hg2_ppd_type</i> | (Optional) High Gig2 Packet Processing Descriptor |
| hg2_mirror          | (Optional) High Gig2 Packet Mirror Information    |
| <i>hg2_mirror</i>   | (Optional) High Gig2 Packet Mirror Information    |
| hg2_opcode          | (Optional) High Gig2 Packet Type                  |
| <i>hg2_opcode</i>   | (Optional) High Gig2 Packet Type                  |
| hg2_dstpid          | (Optional) High Gig2 Destination Port ID          |
| <i>hg2_dpid</i>     | (Optional) High Gig2 Destination Port ID          |
| hg2_dstmod          | (Optional) High Gig2 Destination Module ID        |
| <i>hg2_dmod</i>     | (Optional) High Gig2 Destination Module ID        |
| hg2_srcpid          | (Optional) High Gig2 Source Port ID               |
| <i>hg2_spid</i>     | (Optional) High Gig2 Source Port ID               |
| hg2_srcmod          | (Optional) High Gig2 Souce Module ID              |
| <i>hg2_smod</i>     | (Optional) High Gig2 Souce Module ID              |
| hg2_l3vld           | (Optional) High Gig2 Packet L3 Switched           |
| <i>hg2_l3_vld</i>   | (Optional) High Gig2 Packet L3 Switched           |

|                      |   |
|----------------------|---|
| <i>hg2_tc</i>        | (Optional) High Gig2 Packet Traffic Class             |
| <i>hg2_tc</i>        | (Optional) High Gig2 Packet Traffic Class             |
| <i>hg2_dp</i>        | (Optional) High Gig2 Drop Precedence                  |
| <i>hg2_dp</i>        | (Optional) High Gig2 Drop Precedence                  |
| <i>hg2_mcast</i>     | (Optional) High Gig2 MultiCast Forwarding Information |
| <i>hg2_mcast_vld</i> | (Optional) High Gig2 Multicast Forwarding Information |
| <i>hg2-vld</i>       | (Optional) High Gig2 Valid Information                |
| <i>hg2_vld</i>       | (Optional) High Gig2 Valid Information                |
| <i>hg2-cos</i>       | (Optional) High Gig2 CoS Information                  |
| <i>hg2_cos</i>       | (Optional) High Gig2 CoS Information                  |

**Command Mode**

- /exec/elanms/se15

## set inner l2 hg2

```
set inner l2 hg2 [ { hg2_vid <hg2_vlan> | hg2_ppd_type <hg2_ppd_type> | hg2_mirror <hg2_mirror> |
hg2_opcode <hg2_opcode> | hg2_dstpid <hg2_dpid> | hg2_dstmod <hg2_dmod> | hg2_srcpid <hg2_spid>
| hg2_srcmod <hg2_smod> | hg2_l3vld <hg2_l3_vld> | hg2_tc <hg2_tc> | hg2_dp <hg2_dp> | hg2_mcast
<hg2_mcast_vld> | hg2-vld <hg2_vld> | hg2-cos <hg2_cos> } ] +
```

### Syntax Description

| Syntax Description | set                 | Setup Trigger                                     |
|--------------------|---------------------|---|
|                    | inner               | Mask and Match By Inner Packet Fields             |
|                    | l2                  | All Layer 2 Fields                                |
|                    | hg2                 | High Gig2 Fields                                  |
|                    | hg2_vid             | (Optional) High Gig2 VLAN Tag                     |
|                    | <i>hg2_vlan</i>     | (Optional) High Gig2 VLAN Tag Information         |
|                    | hg2_ppd_type        | (Optional) High Gig2 Packet Processing Descriptor |
|                    | <i>hg2_ppd_type</i> | (Optional) High Gig2 Packet Processing Descriptor |
|                    | hg2_mirror          | (Optional) High Gig2 Packet Mirror Information    |
|                    | <i>hg2_mirror</i>   | (Optional) High Gig2 Packet Mirror Information    |
|                    | hg2_opcode          | (Optional) High Gig2 Packet Type                  |
|                    | <i>hg2_opcode</i>   | (Optional) High Gig2 Packet Type                  |
|                    | hg2_dstpid          | (Optional) High Gig2 Destination Port ID          |
|                    | <i>hg2_dpid</i>     | (Optional) High Gig2 Destination Port ID          |
|                    | hg2_dstmod          | (Optional) High Gig2 Destination Module ID        |
|                    | <i>hg2_dmod</i>     | (Optional) High Gig2 Destination Module ID        |
|                    | hg2_srcpid          | (Optional) High Gig2 Source Port ID               |
|                    | <i>hg2_spid</i>     | (Optional) High Gig2 Source Port ID               |
|                    | hg2_srcmod          | (Optional) High Gig2 Souce Module ID              |
|                    | <i>hg2_smod</i>     | (Optional) High Gig2 Souce Module ID              |
|                    | hg2_l3vld           | (Optional) High Gig2 Packet L3 Switched           |
|                    | <i>hg2_l3_vld</i>   | (Optional) High Gig2 Packet L3 Switched           |
|                    | hg2_tc              | (Optional) High Gig2 Packet Traffic Class         |

|                      |   |
|----------------------|---|
| <i>hg2_tc</i>        | (Optional) High Gig2 Packet Traffic Class             |
| <i>hg2_dp</i>        | (Optional) High Gig2 Drop Precedence                  |
| <i>hg2_dp</i>        | (Optional) High Gig2 Drop Precedence                  |
| <i>hg2_mcast</i>     | (Optional) High Gig2 MultiCast Forwarding Information |
| <i>hg2_mcast_vld</i> | (Optional) High Gig2 Multicast Forwarding Information |
| <i>hg2-vld</i>       | (Optional) High Gig2 Valid Information                |
| <i>hg2_vld</i>       | (Optional) High Gig2 Valid Information                |
| <i>hg2-cos</i>       | (Optional) High Gig2 CoS Information                  |
| <i>hg2_cos</i>       | (Optional) High Gig2 CoS Information                  |

**Command Mode**

- /exec/elanms/sel4

# set inner l4

```
set inner l4 [ { src-port <sport> | dst-port <dport> | packet-len <pkt_len> | checksum <csum> | flags <flag_val>
} ] +
```

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| set                | Setup Trigger                           |  |
| inner              | Mask and Match By Inner Packet Fields   |  |
| l4                 | L4 Fields                               |  |
| src-port           | (Optional) Source Port Information      |  |
| <i>sport</i>       | (Optional) Source Port                  |  |
| dst-port           | (Optional) Destination Port Information |  |
| <i>dport</i>       | (Optional) Destination Port             |  |
| packet-len         | (Optional) Packet Length                |  |
| <i>pkt_len</i>     | (Optional) Packet Length                |  |
| checksum           | (Optional) Checksum                     |  |
| <i>csum</i>        | (Optional) Checksum                     |  |
| flags              | (Optional) L4 Flags                     |  |
| <i>flag_val</i>    | (Optional) L4 Flags                     |  |

## Command Mode

- /exec/elanms/set4

## set inner l4

```
set { inner | outer } l4 [ { src-port <sport> | dst-port <dport> | packet-len <pkt_len> | checksum <csum> | flags
<flag_val> } ] +
```

### Syntax Description

| Syntax Description |   |
|--------------------|---|
| set                | Setup Trigger                           |
| inner              | Mask and Match By Inner Packet Fields   |
| outer              | Mask and Match By Outer Packet Fields   |
| l4                 | L4 Fields                               |
| src-port           | (Optional) Source Port Information      |
| <i>sport</i>       | (Optional) Source Port                  |
| dst-port           | (Optional) Destination Port Information |
| <i>dport</i>       | (Optional) Destination Port             |
| packet-len         | (Optional) Packet Length                |
| <i>pkt_len</i>     | (Optional) Packet Length                |
| checksum           | (Optional) Checksum                     |
| <i>csum</i>        | (Optional) Checksum                     |
| flags              | (Optional) L4 Flags                     |
| <i>flag_val</i>    | (Optional) L4 Flags                     |

### Command Mode

- /exec/elanms/se17



# set interface

[no] set interface <i>iface</i>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| set                | Set values in destination routing protocol      |
| interface          | Output interface                                |
| <i>iface</i>       | Interface name                                  |

## Command Mode

- /exec/configure/route-map

# set interval find-new-host

[no] set interval find-new-host <val>

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 | (Optional) Negate a command or set its defaults          |  |
| set                | Set vmtracker options                                    |  |
| interval           | Set the polling interval                                 |  |
| find-new-host      | Set interval for the new host searching timer            |  |
| <i>val</i>         | The host search interval value in seconds (0 to disable) |  |

## Command Mode

- /exec/configure/vmt-conn

# set interval pending-task-polling

[no] set interval pending-task-polling <val>

## Syntax Description

| Syntax Description   |  |  |
|----------------------|--|--|
| no                   | (Optional) Negate a command or set its defaults    |  |
| set                  | Set vmtracker options                              |  |
| interval             | Set the polling interval                           |  |
| pending-task-polling | Define pending-task-polling interval               |  |
| val                  | The pending task polling interval value in seconds |  |

## Command Mode

- /exec/configure/vmt-conn

# set interval sync-full-info

[no] set interval sync-full-info <val>

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 | (Optional) Negate a command or set its defaults        |  |
| set                | Set vmtracker options                                  |  |
| interval           | Set the polling interval                               |  |
| sync-full-info     | Set interval for syncing complete info from host       |  |
| <i>val</i>         | The sync info interval value in seconds (0 to disable) |  |

## Command Mode

- /exec/configure/vmt-conn

# set ip address prefix-list

[no] set ip address prefix-list <name>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| set                | Set values in destination routing protocol      |
| ip                 | Configure IP features                           |
| address            | Specify IP address                              |
| prefix-list        | IP prefix-list                                  |
| <i>name</i>        | Name of prefix list                             |

## Command Mode

- /exec/configure/route-map

## set ip default next-hop

[no] set ip default next-hop [ recursive ] { load-share | <addr1> + [ load-share ] }

### Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| set                | Set values in destination routing protocol      |  |
| ip                 | Configure IP features                           |  |
| recursive          | (Optional) Use recursive lookup                 |  |
| default            | Set default next-hop                            |  |
| next-hop           | Next hop address                                |  |
| <i>addr1</i>       | IP address of next hop                          |  |
| load-share         | Enables load sharing                            |  |

### Command Mode

- /exec/configure/route-map

## set ip default next-hop verify-availability

[no] set ip default next-hop verify-availability { <addr> [ track <object\_id> ] } [ load-share ]

### Syntax Description

| Syntax Description  |  |  |
|---------------------|--|--|
| no                  | (Optional) Negate a command or set its defaults                  |  |
| set                 | Set values in destination routing protocol                       |  |
| ip                  | Configure IP features  |  |
| default             | Set default next-hop   |  |
| next-hop            | Next hop address   |  |
| verify-availability | Verify the reachability of the tracked object                    |  |
| <i>addr</i>         | IP address of next hop   |  |
| track               | (Optional) The tracking method is track                          |  |
| <i>object_id</i>    | (Optional) Object number that the tracking subsystem is tracking |  |
| load-share          | (Optional) Enables load sharing                                  |  |

### Command Mode

- /exec/configure/route-map

# set ip next-hop

```
[no] set ip next-hop [ recursive ] { load-share | <addr1> + [ load-share ] }
```

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults       |
| set                |            | Set values in destination routing protocol |
| ip                 |            | Configure IP features                      |
| recursive          | (Optional) | Use recursive lookup                       |
| next-hop           |            | Next hop address                           |
| <i>addr1</i>       |            | IP address of next hop                     |
| load-share         |            | Enables load sharing                       |

## Command Mode

- /exec/configure/route-map



# set ip next-hop peer-address

[no] set ip next-hop peer-address

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| set                | Set values in destination routing protocol      |
| ip                 | Configure IP features                           |
| next-hop           | Next hop address                                |
| peer-address       | Use peer address (for BGP only)                 |

## Command Mode

- /exec/configure/route-map

# set ip next-hop redist-unchanged

[no] set ip next-hop redist-unchanged

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 | (Optional) Negate a command or set its defaults                    |  |
| set                | Set values in destination routing protocol                         |  |
| ip                 | Configure IP features  |  |
| next-hop           | Next hop address   |  |
| redist-unchanged   | Use unchanged address during redistribution (for BGP session only) |  |

## Command Mode

- /exec/configure/route-map

# set ip next-hop unchanged

[no] set ip next-hop unchanged

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| set                | Set values in destination routing protocol      |
| ip                 | Configure IP features                           |
| next-hop           | Next hop address                                |
| unchanged          | Use unchanged address (for eBGP session only)   |

## Command Mode

- /exec/configure/route-map

## set ip next-hop verify-availability

```
[no] set ip next-hop verify-availability { <addr> [ track <object_id> ] } [ load-share ]
```

### Syntax Description

| Syntax Description  |            |   |
|---------------------|------------|---|
| no                  | (Optional) | Negate a command or set its defaults                  |
| set                 |            | Set values in destination routing protocol            |
| ip                  |            | Configure IP features                                 |
| next-hop            |            | Next hop address                                      |
| verify-availability |            | Verify the reachability of the tracked object         |
| <i>addr</i>         |            | IP address of next hop                                |
| track               | (Optional) | The tracking method is track                          |
| <i>object_id</i>    | (Optional) | Object number that the tracking subsystem is tracking |
| load-share          | (Optional) | Enables load sharing                                  |

### Command Mode

- /exec/configure/route-map

# set ip precedence

{ set ip precedence { <value> | <name> } } | { no set ip precedence [ <value> | <name> ] }

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults       |
| set                |  | Set values in destination routing protocol |
| ip                 |  | Configure IP features                      |
| precedence         |  | Set precedence field                       |
| <i>value</i>       |  | Precedence value                           |
| <i>name</i>        |  | Precedence value                           |

## Command Mode

- /exec/configure/route-map

# set ipv6 address prefix-list

[no] set ipv6 address prefix-list <name>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| set                | Set values in destination routing protocol      |
| ipv6               | Configure IPv6 features                         |
| address            | Specify IP address                              |
| prefix-list        | IPv6 prefix-list                                |
| <i>name</i>        | Name of prefix list                             |

## Command Mode

- /exec/configure/route-map

## set ipv6 default next-hop

[no] set ipv6 default next-hop [ recursive ] { load-share | <addr1> + [ load-share ] }

### Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| set                | Set values in destination routing protocol      |
| ipv6               | Configure IPv6 features                         |
| recursive          | (Optional) Use recursive lookup                 |
| default            | Set default next-hop                            |
| next-hop           | Next hop address                                |
| load-share         | Enables load sharing                            |
| <i>addr1</i>       |   |

### Command Mode

- /exec/configure/route-map

## set ipv6 default next-hop verify-availability

[no] set ipv6 default next-hop verify-availability { <addr> [ track <object\_id> ] } [ load-share ]

### Syntax Description

| Syntax Description  |            |   |
|---------------------|------------|---|
| no                  | (Optional) | Negate a command or set its defaults                  |
| set                 |            | Set values in destination routing protocol            |
| ipv6                |            | Configure IPv6 features                               |
| next-hop            |            | Next hop address                                      |
| default             |            | Set default next-hop                                  |
| verify-availability |            | Verify the reachability of the tracked object         |
| track               | (Optional) | The tracking method is track                          |
| <i>object_id</i>    | (Optional) | Object number that the tracking subsystem is tracking |
| load-share          | (Optional) | Enables load sharing                                  |

### Command Mode

- /exec/configure/route-map



# set ipv6 next-hop

[no] set ipv6 next-hop { load-share | <addr> + [ load-share ] }

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| set                | Set values in destination routing protocol      |
| ipv6               | Configure IPv6 features                         |
| next-hop           | Next hop ipv6 address                           |
| load-share         | Enables load sharing                            |
| <i>addr</i>        |   |

## Command Mode

- /exec/configure/route-map

# set ipv6 next-hop peer-address

[no] set ipv6 next-hop peer-address

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| set                | Set values in destination routing protocol      |  |
| ipv6               | Configure IPv6 features                         |  |
| next-hop           | Next hop address                                |  |
| peer-address       | Use peer address (for BGP only)                 |  |

## Command Mode

- /exec/configure/route-map

# set ipv6 next-hop redist-unchanged

[no] set ipv6 next-hop redist-unchanged

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 | (Optional) Negate a command or set its defaults                    |  |
| set                | Set values in destination routing protocol                         |  |
| ipv6               | Configure IPv6 features  |  |
| next-hop           | Next hop address   |  |
| redist-unchanged   | Use unchanged address during redistribution (for BGP session only) |  |

## Command Mode

- /exec/configure/route-map

# set ipv6 next-hop unchanged

[no] set ipv6 next-hop unchanged

## Syntax Description

| Syntax Description |            |   |
|--------------------|------------|---|
| no                 | (Optional) | Negate a command or set its defaults          |
| set                |            | Set values in destination routing protocol    |
| ipv6               |            | Configure IPv6 features                       |
| next-hop           |            | Next hop address                              |
| unchanged          |            | Use unchanged address (for eBGP session only) |

## Command Mode

- /exec/configure/route-map

## set ipv6 next-hop verify-availability

[no] set ipv6 next-hop verify-availability { <addr> [ track <object\_id> ] } [ load-share ]

### Syntax Description

| Syntax Description  |  |
|---------------------|--|
| no                  | (Optional) Negate a command or set its defaults                  |
| set                 | Set values in destination routing protocol                       |
| ipv6                | Configure IPv6 features  |
| next-hop            | Next hop address   |
| verify-availability | Verify the reachability of the tracked object                    |
| track               | (Optional) The tracking method is track                          |
| <i>object_id</i>    | (Optional) Object number that the tracking subsystem is tracking |
| load-share          | (Optional) Enables load sharing                                  |

### Command Mode

- /exec/configure/route-map

# set ipv6 precedence

```
{ set ipv6 precedence { <value> | <name> } } | { no set ipv6 precedence [ <value> | <name> ] }
```

## Syntax Description

| Syntax Description | no           | Negate a command or set its defaults       |
|--------------------|--------------|--|
|                    | set          | Set values in destination routing protocol |
|                    | ipv6         | Configure IPv6 features                    |
|                    | precedence   | Set precedence field                       |
|                    | <i>value</i> | Precedence value                           |
|                    | <i>name</i>  | Precedence value                           |

## Command Mode

- /exec/configure/route-map

# set label-index

```
{ { set label-index <value> } | { no set label-index [ <value> ] } }
```

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults          |
| set                |  | Set values in destination routing protocol    |
| label-index        |  | Set Segment Routing (SR) label index of route |
| <i>value</i>       |  | Segment Routing (SR) label index              |

## Command Mode

- /exec/configure/route-map

## set level level-1 level-1-2 level-2

{ set level { level-1 | level-1-2 | level-2 } } | { no set level [ level-1 | level-1-2 | level-2 ] }

### Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults       |
| set                |  | Set values in destination routing protocol |
| level              |  | Where to import route                      |
| level-1            |  | Import into a level-1 area                 |
| level-1-2          |  | Import into level-1 and level-2            |
| level-2            |  | Import into level-2 sub-domain             |

### Command Mode

- /exec/configure/route-map



# set local-preference

{ set local-preference <pref> | no set local-preference [ <pref> ] }

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults       |
| set                |  | Set values in destination routing protocol |
| local-preference   |  | BGP local preference path attribute        |
| <i>pref</i>        |  | Preference value                           |

## Command Mode

- /exec/configure/route-map

## set metric-type external internal type-1 type-2

{ set metric-type { external | internal | type-1 | type-2 } } | { no set metric-type [ external | internal | type-1 | type-2 ] }

### Syntax Description

| Syntax Description | no          | Negate a command or set its defaults            |
|--------------------|-------------|---|
|                    | set         | Set values in destination routing protocol      |
|                    | metric-type | Type of metric for destination routing protocol |
|                    | external    | IS-IS external metric                           |
|                    | internal    | Use IGP metric as the MED for BGP               |
|                    | type-1      | OSPF external type 1 metric                     |
|                    | type-2      | OSPF external type 2 metric                     |

### Command Mode

- /exec/configure/route-map

# set metric

```
{ set metric <metric0> [ <metric1> <metric2> <metric3> <metric4> ] } | { no set metric [ <metric0> [ <metric1> <metric2> <metric3> <metric4> ] ] }
```

## Syntax Description

| Syntax Description | Description  |
|--------------------|--|
| no                 | Negate a command or set its defaults                             |
| set                | Set values in destination routing protocol                       |
| metric             | Set metric for destination routing protocol                      |
| <i>metric0</i>     | [+/-] Metric value or Bandwidth in Kbits per second              |
| <i>metric1</i>     | (Optional) IGRP delay metric                                     |
| <i>metric2</i>     | (Optional) IGRP reliability metric where 255 is 100% reliable    |
| <i>metric3</i>     | (Optional) IGRP Effective bandwidth metric (Loading) 255 is 100% |
| <i>metric4</i>     | (Optional) IGRP MTU of the path                                  |

## Command Mode

- /exec/configure/route-map

# set mpls-exp-topmost cos table exp-cos-map

[no] set mpls-exp-topmost cos table exp-cos-map

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| set                |            | Set attribute                        |
| mpls-exp-topmost   |            | MPLS experimental topmost            |
| cos                |            | IEEE 802.1Q Class of Service         |
| table              |            | Table map                            |
| exp-cos-map        |            | Exp to cos table map name (reserved) |

## Command Mode

- /exec/configure/policy-map/type/queuing/class

# set nssa-only

[no] set nssa-only

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| set                | Set values in destination routing protocol      |
| nssa-only          | OSPF NSSA Areas                                 |

## Command Mode

- /exec/configure/route-map

# set origin egp

{ set origin egp <as> } | { no set origin egp <as> }

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | Negate a command or set its defaults       |
| set                | Set values in destination routing protocol |
| origin             | BGP origin code                            |
| egp                | remote EGP                                 |
| as                 | AS number                                  |

## Command Mode

- /exec/configure/route-map

# set origin egp igp incomplete

{ set origin { egp | igp | incomplete } } | { no set origin [ { egp | igp | incomplete } ] }

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults       |
| set                |  | Set values in destination routing protocol |
| origin             |  | BGP origin code                            |
| egp                |  | remote EGP                                 |
| igp                |  | local IGP                                  |
| incomplete         |  | unknown heritage                           |

## Command Mode

- /exec/configure/route-map

## set outer ipv4

```
set outer ipv4 [ { l3-type <l3_type> | pyld-len <pyld_len> | v6-vld <v6_vld> | version <ver> | header-len
<hlen> | dscp <dscp_val> | ecn <ecn_val> | packet-len <pkt_len> | more-frags <mf> | fragment-off <fragoff>
| ttl <ttl_val> | next-protocol <nproto> | checksum <csum> | src_ip <sip> | dst_ip <dip> } ] +
```

### Syntax Description

#### Syntax Description

|                 |                                       |
|-----------------|---------------------------------------|
| set             | Setup Trigger                         |
| outer           | Mask and Match By Outer Packet Fields |
| ipv4            | IPv4 Fields                           |
| l3-type         | (Optional) L3 Packet Type             |
| <i>l3_type</i>  | (Optional) L3 Packet Type             |
| pyld-len        | (Optional) Payload Length             |
| <i>pyld_len</i> | (Optional) Payload Length             |
| v6-vld          | (Optional) IPv6 Valid Information     |
| <i>v6_vld</i>   | (Optional) IPv6 Valid Information     |
| version         | (Optional) Version                    |
| <i>ver</i>      | (Optional) Version                    |
| header-len      | (Optional) Header Length              |
| <i>hlen</i>     | (Optional) Header Length              |
| dscp            | (Optional) Diff. Serv. Code Point     |
| <i>dscp_val</i> | (Optional) Diff. Serv. Code Point     |
| ecn             | (Optional) Explicit Congestion Ntn    |
| <i>ecn_val</i>  | (Optional) Explicit Congestion Ntn    |
| packet-len      | (Optional) Packet Total Length        |
| <i>pkt_len</i>  | (Optional) Packet Total Length        |
| more-frags      | (Optional) More Fragments Available   |
| <i>mf</i>       | (Optional) More Fragments Available   |
| fragment-off    | (Optional) Fragments Offset           |
| <i>fragoff</i>  | (Optional) Fragments Offset           |
| ttl             | (Optional) Time to Live               |



|                      |                                   |
|----------------------|-----------------------------------|
| <i>ttl_val</i>       | (Optional) Time to Live           |
| <i>next-protocol</i> | (Optional) Next(L4) Protocol      |
| <i>nproto</i>        | (Optional) Next(L4) Protocol      |
| <i>checksum</i>      | (Optional) Checksum               |
| <i>csum</i>          | (Optional) Checksum               |
| <i>src_ip</i>        | (Optional) Source IP Address      |
| <i>sip</i>           | (Optional) Source IP Address      |
| <i>dst_ip</i>        | (Optional) Destination IP Address |
| <i>dip</i>           | (Optional) Destination IP Address |

**Command Mode**

- /exec/elanms/sel3

## set outer l2

```
set outer l2 [ { snap_vld <snap_vld> | cntag_vld <cntag_vld> | qtag_vld <qtag_vld> | vlan <vlan_id> | cos
<cos_val> | cfi <cfi_vld> | vntag_vld <vntag_vld> | vntag_svif <vntag_svif> | vntag_dvif <vntag_dvif> |
vntag_looped <vntag_loop> | vntag_pointer <vntag_p> | src_mac <smac> | dst_mac <dmac> } ] +
```

### Syntax Description

#### Syntax Description

|                   |  |
|-------------------|--|
| set               | Setup Trigger                                    |
| outer             | Mask and Match By Outer Packet Fields            |
| l2                | All Layer 2 Fields                               |
| snap_vld          | (Optional) SNAP Header Information Valid         |
| <i>snap_vld</i>   | (Optional) SNAP Header Information Valid         |
| cntag_vld         | (Optional) CNTag Information Valid               |
| <i>cntag_vld</i>  | (Optional) CNTag Information Valid               |
| qtag_vld          | (Optional) VLAN Tag Information Valid            |
| <i>qtag_vld</i>   | (Optional) VLAN Tag Information Valid            |
| vlan              | (Optional) VLAN Id (Present only in case of FEX) |
| <i>vlan_id</i>    | (Optional) VLAN Id                               |
| cos               | (Optional) Class of Service                      |
| <i>cos_val</i>    | (Optional) Class of Service Type                 |
| cfi               | (Optional) CFI Setting                           |
| <i>cfi_vld</i>    | (Optional) CFI Setting Valid                     |
| vntag_vld         | (Optional) VNTAG Information Valid               |
| <i>vntag_vld</i>  | (Optional) VNTAG Information Valid               |
| vntag_svif        | (Optional) VNTAG Source vif                      |
| <i>vntag_svif</i> | (Optional) VNTAG Source vif                      |
| vntag_dvif        | (Optional) VNTAG Destination vif                 |
| <i>vntag_dvif</i> | (Optional) VNTAG Destination vif                 |
| vntag_looped      | (Optional) VNTAG Header Looped Valid             |
| <i>vntag_loop</i> | (Optional) VNTAG Header Looped Valid             |
| vntag_pointer     | (Optional) VNTAG Header Pointer Valid            |

|                |  |
|----------------|--|
| <i>vntag_p</i> | (Optional) VNTAG Header Pointer Valid    |
| <i>src_mac</i> | (Optional) Source MAC Address            |
| <i>smac</i>    | (Optional) Source MAC Address Value      |
| <i>dst_mac</i> | (Optional) Destination MAC Address       |
| <i>dmac</i>    | (Optional) Destination MAC Address Value |

**Command Mode**

- /exec/elamns/sel3

## set outer l2 hg2

```
set outer l2 hg2 [ { hg2_vid <hg2_vlan> | hg2_ppd_type <hg2_ppd_type> | hg2_mirror <hg2_mirror> |
hg2_opcode <hg2_opcode> | hg2_dstpid <hg2_dpid> | hg2_dstmod <hg2_dmod> | hg2_srcpid <hg2_spid>
| hg2_srcmod <hg2_smod> | hg2_l3vld <hg2_l3_vld> | hg2_tc <hg2_tc> | hg2_dp <hg2_dp> | hg2_mcast
<hg2_mcast_vld> | hg2-vld <hg2_vld> | hg2-cos <hg2_cos> } ] +
```

### Syntax Description

#### Syntax Description

|                     |   |
|---------------------|---|
| set                 | Setup Trigger                                     |
| outer               | Mask and Match By Outer Packet Fields             |
| l2                  | All Layer 2 Fields                                |
| hg2                 | High Gig2 Fields                                  |
| hg2_vid             | (Optional) High Gig2 VLAN Tag                     |
| <i>hg2_vlan</i>     | (Optional) High Gig2 VLAN Tag Information         |
| hg2_ppd_type        | (Optional) High Gig2 Packet Processing Descriptor |
| <i>hg2_ppd_type</i> | (Optional) High Gig2 Packet Processing Descriptor |
| hg2_mirror          | (Optional) High Gig2 Packet Mirror Information    |
| <i>hg2_mirror</i>   | (Optional) High Gig2 Packet Mirror Information    |
| hg2_opcode          | (Optional) High Gig2 Packet Type                  |
| <i>hg2_opcode</i>   | (Optional) High Gig2 Packet Type                  |
| hg2_dstpid          | (Optional) High Gig2 Destination Port ID          |
| <i>hg2_dpid</i>     | (Optional) High Gig2 Destination Port ID          |
| hg2_dstmod          | (Optional) High Gig2 Destination Module ID        |
| <i>hg2_dmod</i>     | (Optional) High Gig2 Destination Module ID        |
| hg2_srcpid          | (Optional) High Gig2 Source Port ID               |
| <i>hg2_spid</i>     | (Optional) High Gig2 Source Port ID               |
| hg2_srcmod          | (Optional) High Gig2 Souce Module ID              |
| <i>hg2_smod</i>     | (Optional) High Gig2 Souce Module ID              |
| hg2_l3vld           | (Optional) High Gig2 Packet L3 Switched           |
| <i>hg2_l3_vld</i>   | (Optional) High Gig2 Packet L3 Switched           |
| hg2_tc              | (Optional) High Gig2 Packet Traffic Class         |

|                      |   |
|----------------------|---|
| <i>hg2_tc</i>        | (Optional) High Gig2 Packet Traffic Class             |
| <i>hg2_dp</i>        | (Optional) High Gig2 Drop Precedence                  |
| <i>hg2_dp</i>        | (Optional) High Gig2 Drop Precedence                  |
| <i>hg2_mcast</i>     | (Optional) High Gig2 MultiCast Forwarding Information |
| <i>hg2_mcast_vld</i> | (Optional) High Gig2 Multicast Forwarding Information |
| <i>hg2-vld</i>       | (Optional) High Gig2 Valid Information                |
| <i>hg2_vld</i>       | (Optional) High Gig2 Valid Information                |
| <i>hg2-cos</i>       | (Optional) High Gig2 CoS Information                  |
| <i>hg2_cos</i>       | (Optional) High Gig2 CoS Information                  |

**Command Mode**

- /exec/elamns/sel3

## set outer l4

```
set outer l4 [ { src-port <sport> | dst-port <dport> | packet-len <pkt_len> | checksum <csum> | flags <flag_val>
} ] +
```

### Syntax Description

#### Syntax Description

|                 |   |
|-----------------|---|
| set             | Setup Trigger                           |
| outer           | Mask and Match By Outer Packet Fields   |
| l4              | L4 Fields                               |
| src-port        | (Optional) Source Port Information      |
| <i>sport</i>    | (Optional) Source Port                  |
| dst-port        | (Optional) Destination Port Information |
| <i>dport</i>    | (Optional) Destination Port             |
| packet-len      | (Optional) Packet Length                |
| <i>pkt_len</i>  | (Optional) Packet Length                |
| checksum        | (Optional) Checksum                     |
| <i>csum</i>     | (Optional) Checksum                     |
| flags           | (Optional) L4 Flags                     |
| <i>flag_val</i> | (Optional) L4 Flags                     |

### Command Mode

- /exec/elanms/sel3

# set path-selection all advertise

[no] set path-selection all advertise

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 | (Optional) Negate a command or set its defaults                |  |
| set                | Set values in destination routing protocol                     |  |
| path-selection     | Path selection criteria for BGP                                |  |
| all                | Specifies all BGP Paths  |  |
| advertise          | Advertise add paths to its peers if receive capability enabled |  |

## Command Mode

- /exec/configure/route-map

# set pktmgr pds yield-threshold

set pktmgr pds yield-threshold [ <thr> ]

## Syntax Description

| Syntax Description |  |                                    |
|--------------------|--|------------------------------------|
| set                |  | Set values                         |
| pktmgr             |  | Set values in pktmgr               |
| pds                |  | Set value for pktmgr pds operation |
| yield-threshold    |  | Set Value of yield-threshold       |
| <i>thr</i>         |  | (Optional) threshold               |

## Command Mode

- /exec



# set pktrw

```
set pktrw { mcast <mcast> | sup_redir <sured> | bcm_proxy <bcm_proxy> | excep_case <excep> | transit
<trans> | vpc_df <vpc_df> | src_tep_idx <src_tep> | lat_update <lat_update> | lat_idx <lat_idx> | src_class
<sclass> | ol_fb_met <ol_fb_met> | ol_fb_vpath <ol_fb_vpath> | ol_dre <ol_dre> | ol_vpath <ol_vpath> |
ol_dp <ol_dp> | ol_sp <ol_sp> | ol_e <ol_e> | ol_dl <ol_dl> | ol_lb <ol_lb> | ol_mark <ol_mark> | ol_udp_sp
<ol_udp_sp> | ol_ftag <ol_ftag> | ol_segid <ol_segid> | ol_ttl <ol_ttl> | ol_ecn <ol_ecn> | ol_dscp <ol_dscp>
| ol_de <ol_de> | ol_cos <ol_cos> | ol_mac <ol_mac> | ol_encap_idx <ol_encap> | ol_vpc <ol_vpc> | ol_idx
<ol_idx> | ttl <ttl> | dscp <dscp> | vlan1 <vlan1> | ecn_coi <ecn_coi> | ecn_cio <ecn_cio> | ttl_coi <ttl_coi>
| ttl_cio <ttl_cio> | adj_idx <adj_idx> | vntag_svif <vntag_svif> | de <de> | cos <cos> | vlan0 <vlan0> | adj_vld
<adj_vld> | uc_routed <uc_routed> | loopback <lpb> | ecn <ecn> | hg2_vid <hg2_vlan> | hg2_ppd <hg2_ppd>
| hg2_tc_sup_copy <hg2_tcscopy> | hg2_tc <hg2_tc> | hg2_lbid <hg2_lbid> | hg2_opc <hg2_opc> | hg2_dstpid
<hg2_dpidd> | hg2_srcpid <hg2_spidd> | hg2_dstmod <hg2_dmod> | hg2_srcmod <hg2_smod> | op_inner
<op_inner> | op_qtag <op_qtag> | op_vntag <op_vntag> | op_outer <op_outer> | pkt_type <pkt_type> | drop
<drp> | pkt_tstmp <pkt_tstmp> | tstmp <tstmp> | cap_tstmp <cap_tstmp> | len_info <len_info> | len_type
<len_type> | pktid <pktid> | srcid <srcid> | pktfmt1 <pktfmt1> | pktfmt0 <pktfmt0> | hg2_cos <hg2_cos> }
+
```

## Syntax Description

### Syntax Description

|                  |                            |
|------------------|----------------------------|
| set              | Setup Trigger              |
| pktrw            | All packet re-write fields |
| mcast            | mcast                      |
| <i>mcast</i>     | Mcast                      |
| sup_redir        | Sup Redirect               |
| <i>sured</i>     | Sup Redirect               |
| bcm_proxy        | Broadcom Proxy             |
| <i>bcm_proxy</i> | Broadcom Proxy             |
| excep_case       | Excep_case                 |
| <i>excep</i>     | Excep_case                 |
| transit          | Transit                    |
| <i>trans</i>     | Transit                    |
| vpc_df           | VPC_df                     |
| <i>vpc_df</i>    | VPC_df                     |
| src_tep_idx      | Src TEP Index              |
| <i>src_tep</i>   | Src TEP Index              |
| lat_update       | Lat Update                 |

|                    |                    |
|--------------------|--------------------|
| <i>lat_update</i>  | Lat Update         |
| <i>lat_idx</i>     | Lat Index          |
| <i>lat_idx</i>     | Lat Index          |
| <i>src_class</i>   | Source Class       |
| <i>sclass</i>      | Source Class       |
| <i>ol_fb_met</i>   | Ol_fb_metric       |
| <i>ol_fb_met</i>   | Ol_fb_metric       |
| <i>ol_fb_vpath</i> | Ol_fb_vpath        |
| <i>ol_fb_vpath</i> | Ol_fb_vpath        |
| <i>ol_dre</i>      | Ol_dre             |
| <i>ol_dre</i>      | Ol_dre             |
| <i>ol_vpath</i>    | Ol_vpath           |
| <i>ol_vpath</i>    | Ol_vpath           |
| <i>ol_dp</i>       | Ol_dp              |
| <i>ol_dp</i>       | Ol_dp              |
| <i>ol_sp</i>       | Ol_sp              |
| <i>ol_sp</i>       | Ol_sp              |
| <i>ol_e</i>        | Ol_e               |
| <i>ol_e</i>        | Ol_e               |
| <i>ol_dl</i>       | Ol_dl              |
| <i>ol_dl</i>       | Ol_dl              |
| <i>ol_lb</i>       | Ol_lb              |
| <i>ol_lb</i>       | Ol_lb              |
| <i>ol_mark</i>     | Ol_mark            |
| <i>ol_mark</i>     | Ol_mark            |
| <i>ol_udp_sp</i>   | Ol_UDP_sp          |
| <i>ol_udp_sp</i>   | Ol UDP Source Port |
| <i>ol_ftag</i>     | Ol_ftag            |
| <i>ol_ftag</i>     | Ol_ftag            |

|                 |              |
|-----------------|--------------|
| ol_segid        | Ol_segid     |
| <i>ol_segid</i> | Ol_segid     |
| ol_ttl          | Ol_TTL       |
| <i>ol_ttl</i>   | Ol_TTL       |
| ol_ecn          | Ol_ecn       |
| <i>ol_ecn</i>   | Ol_ecn       |
| ol_dscp         | Ol_dscp      |
| <i>ol_dscp</i>  | Ol_dscp      |
| ol_de           | Ol_de        |
| <i>ol_de</i>    | Ol_de        |
| ol_cos          | Ol_cos       |
| <i>ol_cos</i>   | Ol_cos       |
| ol_mac          | Ol_mac       |
| <i>ol_mac</i>   | Ol_mac       |
| ol_encap_idx    | Ol_encap_idx |
| <i>ol_encap</i> | Ol_encap_idx |
| ol_vpc          | Ol_VPC       |
| <i>ol_vpc</i>   | Ol_VPC       |
| ol_idx          | Ol_idx       |
| <i>ol_idx</i>   | Ol_idx       |
| ttl             | TTL          |
| <i>ttl</i>      | TTL          |
| dscp            | DSCP         |
| <i>dscp</i>     | DSCP         |
| vlan1           | Vlan1        |
| <i>vlan1</i>    | Vlan1        |
| ecn_coi         | ecn_coi      |
| <i>ecn_coi</i>  | ecn_coi      |
| ecn_cio         | ecn_cio      |

|                   |  |
|-------------------|--|
| <i>ecn_cio</i>    | ecn_cio                                |
| ttl_coi           | ttl_coi                                |
| <i>ttl_coi</i>    | ttl_coi                                |
| ttl_cio           | ttl_cio                                |
| <i>ttl_cio</i>    | ttl_cio                                |
| adj_idx           | adj_idx                                |
| <i>adj_idx</i>    | adj_idx                                |
| vntag_svif        | vntag_svif                             |
| <i>vntag_svif</i> | vntag_svif                             |
| de                | de                                     |
| <i>de</i>         | de                                     |
| cos               | cos                                    |
| <i>cos</i>        | cos                                    |
| vlan0             | vlan0                                  |
| <i>vlan0</i>      | vlan0                                  |
| adj_vld           | adj_vld                                |
| <i>adj_vld</i>    | adj_vld                                |
| uc_routed         | uc_routed                              |
| <i>uc_routed</i>  | uc_routed                              |
| loopback          | loopback                               |
| <i>lpb</i>        | loopback                               |
| ecn               | ecn                                    |
| <i>ecn</i>        | ecn                                    |
| hg2_vid           | High Gig2 VLAN Tag                     |
| <i>hg2_vlan</i>   | High Gig2 VLAN Tag Information         |
| hg2_cos           | High Gig2 CoS Information              |
| <i>hg2_cos</i>    | High Gig2 CoS Information              |
| hg2_ppd           | High Gig2 Packet Processing Descriptor |
| <i>hg2_ppd</i>    | High Gig2 Packet Processing Descriptor |

|                              |                                  |
|------------------------------|----------------------------------|
| <code>hg2_tc_sup_copy</code> | High Gig2 Traffic Class SUP Copy |
| <code>hg2_tcscopy</code>     | High Gig2 Traffic Class SUP Copy |
| <code>hg2_tc</code>          | High Gig2 Packet Traffic Class   |
| <code>hg2_tc</code>          | High Gig2 Packet Traffic Class   |
| <code>hg2_lbid</code>        | High Gig2 Packet Ibid            |
| <code>hg2_lbid</code>        | High Gig2 Packet Ibid            |
| <code>hg2_opc</code>         | High Gig2 Packet Type            |
| <code>hg2_opc</code>         | High Gig2 Packet Type            |
| <code>hg2_dstpid</code>      | High Gig2 Destination Port ID    |
| <code>hg2_dpid</code>        | High Gig2 Destination Port ID    |
| <code>hg2_dstmod</code>      | High Gig2 Destination Module ID  |
| <code>hg2_dmod</code>        | High Gig2 Destination Module ID  |
| <code>hg2_srcpid</code>      | High Gig2 Source Port ID         |
| <code>hg2_spid</code>        | High Gig2 Source Port ID         |
| <code>hg2_srcmod</code>      | High Gig2 Souce Module ID        |
| <code>hg2_smod</code>        | High Gig2 Souce Module ID        |
| <code>op_inner</code>        | Op_inner                         |
| <code>op_inner</code>        | Op_inner                         |
| <code>op_outer</code>        | Op_outer                         |
| <code>op_outer</code>        | Op_outer                         |
| <code>op_qtag</code>         | Op_qtag                          |
| <code>op_qtag</code>         | Op_qtag                          |
| <code>op_vntag</code>        | Op_vntag                         |
| <code>op_vntag</code>        | Op_vntag                         |
| <code>pkt_type</code>        | Pkt_type                         |
| <code>pkt_type</code>        | Pkt_type                         |
| <code>drop</code>            | Drop                             |
| <code>drp</code>             | Drop                             |
| <code>pkt_tstamp</code>      | Packet timestamp                 |

|                   |                   |
|-------------------|-------------------|
| <i>pkt_tstamp</i> | Packet timestamp  |
| <i>tstamp</i>     | Timestamp         |
| <i>tstamp</i>     | Timestamp         |
| <i>cap_tstamp</i> | Capture Timestamp |
| <i>cap_tstamp</i> | Capture Timestamp |
| <i>len_info</i>   | Len_info          |
| <i>len_info</i>   | Len_info          |
| <i>len_type</i>   | Len_type          |
| <i>len_type</i>   | Len_type          |
| <i>pktid</i>      | Pkt_id            |
| <i>pktid</i>      | Pkt_id            |
| <i>srcid</i>      | Src_id            |
| <i>srcid</i>      | Src_id            |
| <i>pktfmt1</i>    | Pktfmt1           |
| <i>pktfmt1</i>    | Pktfmt1           |
| <i>pktfmt0</i>    | Pktfmt0           |
| <i>pktfmt0</i>    | Pktfmt0           |

### Command Mode

- /exec/elanms/outsel0

# set sideband

```
set sideband { span_vec <span_vec> | bounce <bnc> | mclast <mclast> | mcastcurptr <mccurptr> | mcastcurptr_v
<mccurptr_v> | srcport <sport> | vlan <vlan> | segwgt <segwgt> | segid <segid> | seglocal <segloc> | gbw_color
<gbw_color> | gbw_tag <gbw_tagg> | fwddrp <fwddrp> | l2fld <l2fld> | nodrp <nodrp> | ovrlyidx <ovrlyidx>
| ecncap <ecncap> | cpu <cpu> | store_fwd <stfwd> | mcast <mcast> | oclass <ocls> | iclass <icls> | odest_v
<odest_v> | odest <odest> | ovec <ovec> | span_trans <span_trans> | lbtype <lbtype> | lbena <lbena> | tdmid
<tdmid> | pktid <pktid> | srcid <srcid> | eoferror <eoferr> | eofbytes <eofby> | eof <eof> | sof <sof> } +
```

## Syntax Description

### Syntax Description

|                   |                     |
|-------------------|---------------------|
| set               | Setup Trigger       |
| sideband          | All sideband fields |
| span_vec          | SPAN vector         |
| <i>span_vec</i>   | SPAN vector         |
| bounce            | Bounce              |
| <i>bnc</i>        | Bounce              |
| mclast            | Mclast              |
| <i>mclast</i>     | Mclast              |
| mcastcurptr       | Mcast cur ptr       |
| <i>mccurptr</i>   | Mcast cur ptr       |
| mcastcurptr_v     | Mcast cur ptr v     |
| <i>mccurptr_v</i> | Mcast cur ptr v     |
| srcport           | Source Port         |
| <i>sport</i>      | Source Port         |
| vlan              | Vlan                |
| <i>vlan</i>       | Vlan                |
| segwgt            | Segwgt              |
| <i>segwgt</i>     | Segwgt              |
| segid             | Segid               |
| <i>segid</i>      | Segid               |
| seglocal          | Seglocal            |

|                  |               |
|------------------|---------------|
| <i>seglcl</i>    | Seglocal      |
| <i>gbw_color</i> | GBW color     |
| <i>gbw_color</i> | GBW color     |
| <i>gbw_tag</i>   | GBW tagged    |
| <i>gbw_tagg</i>  | GBW tagged    |
| <i>fwddrp</i>    | Forward drop  |
| <i>fwddrp</i>    | Forward drop  |
| <i>l2fld</i>     | L2 Flood      |
| <i>l2fld</i>     | L2 Flood      |
| <i>nodrp</i>     | No drop       |
| <i>nodrp</i>     | No drop       |
| <i>ovrlyidx</i>  | Overlay index |
| <i>ovrlyidx</i>  | Overlay index |
| <i>ecncap</i>    | ECN Capable   |
| <i>ecncap</i>    | ECN Capable   |
| <i>cpu</i>       | CPU           |
| <i>cpu</i>       | CPU           |
| <i>store_fwd</i> | Store_fwd     |
| <i>stfwd</i>     | Store_fwd     |
| <i>mcast</i>     | Multicast     |
| <i>mcast</i>     | Multicast     |
| <i>oclass</i>    | Output class  |
| <i>ocls</i>      | Output class  |
| <i>iclass</i>    | Input class   |
| <i>icls</i>      | Input class   |
| <i>odest_v</i>   | Odest_v       |
| <i>odest_v</i>   | Odest_v       |
| <i>odest</i>     | Odest         |
| <i>odest</i>     | Odest         |



|                   |              |
|-------------------|--------------|
| <i>ovec</i>       | Ovector      |
| <i>ovec</i>       | Ovector      |
| <i>span_trans</i> | SPAN transit |
| <i>span_trans</i> | SPAN transit |
| <i>lbtype</i>     | Lbtype       |
| <i>lbtype</i>     | Lbtype       |
| <i>lbena</i>      | Lbenable     |
| <i>lbena</i>      | Lbenable     |
| <i>tdmid</i>      | Tdmid        |
| <i>tdmid</i>      | Tdmid        |
| <i>pktid</i>      | Pkt_id       |
| <i>pktid</i>      | Pkt_id       |
| <i>srcid</i>      | Src_id       |
| <i>srcid</i>      | Src_id       |
| <i>eoferror</i>   | EOF error    |
| <i>eoferr</i>     | EOF erro     |
| <i>eofbytes</i>   | EOF bytes    |
| <i>eofby</i>      | EOF bytes    |
| <i>eof</i>        | EOF          |
| <i>eof</i>        | EOF          |
| <i>sof</i>        | SOF          |
| <i>sof</i>        | SOF          |

### Command Mode

- /exec/elanms/outsel5

# set tag

```
{ { set tag <value> } | { no set tag [ <value> ] } }
```

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | Negate a command or set its defaults       |
| set                | Set values in destination routing protocol |
| tag                | Tag value for destination routing protocol |
| <i>value</i>       | Tag value                                  |

## Command Mode

- /exec/configure/route-map

# set weight

```
{ set weight <count> | no set weight [ <count> ] }
```

## Syntax Description

|                           |               |  |
|---------------------------|---------------|--|
| <b>Syntax Description</b> | <i>no</i>     | Negate a command or set its defaults       |
|                           | <i>set</i>    | Set values in destination routing protocol |
|                           | <i>weight</i> | BGP weight for routing table               |
|                           | <i>count</i>  | Weight value                               |

## Command Mode

- /exec/configure/route-map

# setup

setup

## Syntax Description

---

### Syntax Description

---

**setup** Run the basic SETUP command facility

---

## Command Mode

- /exec

# sflow

```
sflow { [ sampling-rate <rate> ] | [ max-sampled-size <pkt-size> ] | [ counter-poll-interval <interval> ] | [ max-datagram-size <dgram-size> ] | [ collector-ip <dst-ip> vrf { <vrf-name> | <vrf-known-name> } ] [ source <src-ip> ] | [ collector-port <dst-port> ] | [ agent-ip <agent-ip> ] }
```

## Syntax Description

### Syntax Description

|                       |   |
|-----------------------|---|
| sflow                 | change sFlow global settings                            |
| sampling-rate         | (Optional) sFlow Sampling Rate                          |
| <i>rate</i>           | (Optional) sFlow Sampling rate                          |
| max-sampled-size      | (Optional) sFlow Sampled Size                           |
| <i>pkt-size</i>       | (Optional) sFlow Sampled Size                           |
| counter-poll-interval | (Optional) sFlow Counter Poll Interval                  |
| <i>interval</i>       | (Optional) sFlow Counter Poll Interval                  |
| max-datagram-size     | (Optional) sFlow Datagram Size                          |
| <i>dgram-size</i>     | (Optional) sFlow Datagram Size                          |
| collector-ip          | (Optional) sFlow Collector IP address                   |
| <i>dst-ip</i>         | (Optional) sFlow Collector IP address                   |
| vrf                   | (Optional) Display per-VRF information                  |
| <i>vrf-name</i>       | (Optional) VRF name                                     |
| <i>vrf-known-name</i> | (Optional) Known VRF name                               |
| source                | (Optional) Source IP address to send to sFlow Collector |
| <i>src-ip</i>         | (Optional) Source IP address to send to sFlow Collector |
| collector-port        | (Optional) sFlow Collector UDP port                     |
| <i>dst-port</i>       | (Optional) sFlow Collector UDP port                     |
| agent-ip              | (Optional) sFlow Agent IP address                       |
| <i>agent-ip</i>       | (Optional) sFlow Agent IP address                       |

## Command Mode

- /exec/configure

# sflow

[no] sflow { sampling-rate | max-sampled-size | counter-poll-interval | max-datagram-size | collector-ip | collector-port | agent-ip }

## Syntax Description

| Syntax Description    |  |                                      |
|-----------------------|--|--------------------------------------|
| no                    |  | Negate a command or set its defaults |
| sflow                 |  | change sFlow global settings         |
| sampling-rate         |  | sFlow Sampling Rate                  |
| max-sampled-size      |  | sFlow Sampled Size                   |
| counter-poll-interval |  | sFlow Counter Poll Interval          |
| max-datagram-size     |  | sFlow Datagram Size                  |
| collector-ip          |  | sFlow Collector IP address           |
| collector-port        |  | sFlow Collector UDP port             |
| agent-ip              |  | sFlow Agent IP address               |

## Command Mode

- /exec/configure

# sflow cpu-usage limit

sflow cpu-usage limit <percent>

## Syntax Description

| Syntax Description |                                  |
|--------------------|----------------------------------|
| sflow              | change sFlow global settings     |
| cpu-usage          | sFlow cpu usage setting          |
| limit              | sFlow cpu usage limit            |
| percent            | sFlow cpu usage limit percentage |

## Command Mode

- /exec/configure

# sflow data-source interface

```
sflow data-source interface { <ifnum> | <pcifnum> }
```

## Syntax Description

| Syntax Description |                              |  |
|--------------------|------------------------------|--|
| sflow              | change sFlow global settings |  |
| data-source        | sFlow Data Source            |  |
| interface          | sFlow Data Source Interface  |  |
| <i>ifnum</i>       | sFlow Data Source Interface  |  |
| <i>pcifnum</i>     | sFlow Data Source Interface  |  |

## Command Mode

- /exec/configure



# sflow data-source interface

[no] sflow data-source interface { <ifnum> | <pcifnum> }

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| sflow              |  | change sFlow global settings         |
| data-source        |  | sFlow Data Source                    |
| interface          |  | sFlow Data Source Interface          |
| <i>ifnum</i>       |  | sFlow Data Source Interface          |
| <i>pcifnum</i>     |  | sFlow Data Source Interface          |

## Command Mode

- /exec/configure

# sflow extended switch

[no] sflow extended switch

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| sflow              | change sFlow global settings                    |
| extended           | sFlow extended flow records                     |
| switch             | sFlow extended switch flow                      |

## Command Mode

- /exec/configure

# shape

```
[no] shape { { { [ average ] { <avg-rate> [ bps | kbps | mbps | gbps ] | percent <percentage> } } | { min { <min-rate> [ bps2 | kbps2 | mbps2 | gbps2 | pps2 ] | percent2 <percentage2> } max { <max-rate> [ bps3 | kbps3 | mbps3 | gbps3 | pps3 ] | percent3 <percentage3> } } } | { { kbps4 | pps4 } { <max-rate4> [ min2 <min-rate4> ] } } }
```

## Syntax Description

### Syntax Description

|                   |   |
|-------------------|---|
| no                | (Optional) Negate a command or set its defaults   |
| shape             | shape   |
| average           | (Optional) Configure average shape rate           |
| min               | Configure minimum shape rate                      |
| max               | Configure maximum shape rate                      |
| bps               | (Optional) Bits per second                        |
| kbps              | (Optional) Kilo bits per second                   |
| mbps              | (Optional) Mega bits per second                   |
| gbps              | (Optional) Giga bits per second                   |
| bps2              | (Optional) Bits per second                        |
| kbps2             | (Optional) Kilo Bits per second                   |
| mbps2             | (Optional) Mega Bits per second                   |
| gbps2             | (Optional) Giga Bits per second                   |
| pps2              | (Optional) Packets per second                     |
| bps3              | (Optional) Bits per second                        |
| kbps3             | (Optional) Kilo Bits per second                   |
| mbps3             | (Optional) Mega Bits per second                   |
| gbps3             | (Optional) Giga Bits per second                   |
| pps3              | (Optional) Packets per second                     |
| percent           | Specify rate as percentage of interface data-rate |
| percent2          | Specify rate as percentage of interface data-rate |
| percent3          | Specify rate as percentage of interface data-rate |
| <i>percentage</i> | Percentage  |

---

*percentage2* Percentage

---

*percentage3* Percentage

---

*kbps4* Kilo Bits per second

---

*pps4* Packets per second

---

*min2* (Optional) Min guaranteed bandwidth

---

**Command Mode**

- /exec/configure/policy-map/type/queuing/class

# shared-secret

```
[no] shared-secret { 10 <clear> | 7 <encrypted> | <secret> } [ user <user> password { 0 <clear> | 7 <encrypted> | <password> } ]
```

## Syntax Description

| Syntax Description         | Description  |
|----------------------------|--|
| <code>no</code>            | (Optional) Negate a command or set its defaults              |
| <code>shared-secret</code> | Shared-secret  |
| <code>secret</code>        | Enter shared-secret in clear text                            |
| <code>10</code>            | password in clear text                                       |
| <code>clear</code>         | Password in clear text                                       |
| <code>7</code>             | Password that follows should be in encrypted text            |
| <code>encrypted</code>     | Encrypted password   |
| <code>user</code>          | (Optional) User Name   |
| <code>user</code>          | (Optional) Enter user name                                   |
| <code>password</code>      | (Optional) Password  |
| <code>password</code>      | (Optional) Enter password in clear text                      |
| <code>0</code>             | (Optional) Password that follows should be in clear text     |
| <code>clear</code>         | (Optional) Password in clear text                            |
| <code>7</code>             | (Optional) Password that follows should be in encrypted text |
| <code>encrypted</code>     | (Optional) Encrypted password                                |

## Command Mode

- /exec/configure/fabric-db/server-radius

# shutdown

[no] shutdown

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| shutdown           | Shutdown this instance of RIP                   |

## Command Mode

- /exec/configure/router-rip /exec/configure/router-rip/router-rip-vrf

# shutdown

[no] shutdown

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| shutdown           | Administratively shutdown BGP protocol          |

## Command Mode

- /exec/configure/router-bgp

# shutdown

[no] shutdown

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| shutdown           | Administratively shutdown this BMP server       |

## Command Mode

- /exec/configure/router-bgp/router-bgp-bmp-server



# shutdown

[ no | default ] shutdown

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| default            | (Optional) Inherit values from a peer template  |
| shutdown           | Administratively shutdown this neighbor         |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor-sess

# shutdown

[no] shutdown

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| shutdown           | Change the admin status of the bundle           |

## Command Mode

- /exec/configure/anycast

# shutdown

[no] shutdown

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| shutdown           |   |

## Command Mode

- /exec/configure/catena /exec/configure/catena

# shutdown

shutdown | no shutdown

## Syntax Description

|                           |          |                                      |
|---------------------------|----------|--------------------------------------|
| <b>Syntax Description</b> | no       | Negate a command or set its defaults |
|                           | shutdown | suspend vPC locally                  |

## Command Mode

- /exec/configure/vpc-domain

# shutdown

[no] shutdown

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| shutdown           | Enable/disable an interface                     |

## Command Mode

- /exec/configure/if-mgmt-ether

# shutdown

[no] shutdown [ force ]

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| shutdown           | Enable/disable an interface                     |
| force              | (Optional) Enable/disable an interface          |

## Command Mode

- /exec/configure/if-ethernet /exec/configure/if-ethernet-switch /exec/configure/if-ethernet-all /exec/configure/if-eth-base /exec/configure/if-port-channel /exec/configure/if-eth-port-channel /exec/configure/if-ethernet-all /exec/configure/if-ethernet-p2p /exec/configure/if-remote-ethernet-sub /exec/configure/if-ether-sub /exec/configure/if-ether-sub-p2p /exec/configure/if-port-channel-sub

# shutdown

[no] shutdown [ force ]

## Syntax Description

|                           |          |   |
|---------------------------|----------|---|
| <b>Syntax Description</b> | no       | (Optional) Negate a command or set its defaults |
|                           | shutdown | Enable/disable an interface                     |
|                           | force    | (Optional) Enable/disable an interface          |

## Command Mode

- /exec/configure/if-ethernet /exec/configure/if-ethernet-switch /exec/configure/if-ethernet-all /exec/configure/if-eth-base /exec/configure/if-port-channel /exec/configure/if-eth-port-channel /exec/configure/if-ethernet-all /exec/configure/if-ethernet-p2p /exec/configure/if-remote-ethernet-sub /exec/configure/if-ether-sub /exec/configure/if-ether-sub-p2p /exec/configure/if-port-channel-sub

# shutdown

[no] shutdown [ force ]

## Syntax Description

|                           |          |   |
|---------------------------|----------|---|
| <b>Syntax Description</b> | no       | (Optional) Negate a command or set its defaults |
|                           | shutdown | Enable/disable an interface                     |
|                           | force    | (Optional) Enable/disable an interface          |

## Command Mode

- /exec/configure/if-nve



# shutdown

[no] shutdown [ force ]

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| shutdown           | Enable/disable an interface                     |
| force              | (Optional) Enable/disable an interface          |

## Command Mode

- /exec/configure/if-loopback

# shutdown

[no] shutdown [ force ]

## Syntax Description

|                           |          |   |
|---------------------------|----------|---|
| <b>Syntax Description</b> | no       | (Optional) Negate a command or set its defaults |
|                           | shutdown | Enable/disable an interface                     |
|                           | force    | (Optional) Enable/disable an interface          |

## Command Mode

- /exec/configure/if-cpp /exec/configure/if-fv /exec/configure/if-fa /exec/configure/if-svc  
/exec/configure/if-fc-tunnel /exec/configure/if-sme /exec/configure/if-ioa /exec/configure/if-overlay  
/exec/configure/if-te

# shutdown

[no] shutdown

## Syntax Description

|                           |          |   |
|---------------------------|----------|---|
| <b>Syntax Description</b> | no       | (Optional) Negate a command or set its defaults |
|                           | shutdown | Enable/disable an interface                     |

## Command Mode

- /exec/configure/if-gig-ether /exec/configure/if-fc /exec/configure/if-bay /exec/configure/if-ext /exec/configure/if-vsan /exec/configure/if-iscsi /exec/configure/if-fcip /exec/configure/if-sme /exec/configure/if-ioa /exec/configure/if-vfc /exec/configure/if-vfc-port-channel

# shutdown

[no] shutdown

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| shutdown           | Shutdown the OSPF protocol instance             |

## Command Mode

- /exec/configure/router-ospf /exec/configure/router-ospf/vrf

# shutdown

[no] shutdown

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| shutdown           | Shutdown tunnel interface(s)                    |

## Command Mode

- /exec/configure/if-any-tunnel

# shutdown

[no] shutdown

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| shutdown           | Disable MPLS forwarding for IP                  |

## Command Mode

- /exec/configure/ldp

# shutdown

[no] shutdown

## Syntax Description

---

### Syntax Description

---

no        (Optional) Negate a command or set its defaults

---

shutdown

---

## Command Mode

- /exec/configure/itd /exec/configure/itd-inout

# shutdown

[no] shutdown

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| shutdown           |   |

## Command Mode

- /exec/configure/itd /exec/configure/itd-inout



# shutdown

[no] shutdown

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| shutdown           | Shut down VRRPv3                                |

## Command Mode

- /exec/configure/vrrpv3

# shutdown

[no] shutdown

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| shutdown           | Shut down the group                             |

## Command Mode

- /exec/configure/if-eth-any/vrrpv3

# shutdown

[no] shutdown

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| shutdown           | Shut down the pathway                           |

## Command Mode

- /exec/configure/if-eth-any/vrrs

# shutdown

[no] shutdown

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| shutdown           | Enable or disable a VR                          |

## Command Mode

- /exec/configure/if-eth-any/vrrp

# shutdown

[no] shutdown

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| shutdown           | Shutdown this IS-IS process                     |

## Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

# shutdown

[no] shutdown

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| shutdown           | shutdown the OSPF protocol instance             |

## Command Mode

- /exec/configure/router-ospf3 /exec/configure/router-ospf3/vrf

# shutdown

[no] shutdown

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| shutdown           | Shutdown current VRF                            |

## Command Mode

- /exec/configure/vrf

# shutdown

[no] shutdown

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| shutdown           | Shutdown MPLS Traffic Engineering               |

## Command Mode

- /exec/configure/te



# shutdown

[no] shutdown

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| shutdown           | Disable current explicit-path                   |

## Command Mode

- /exec/configure/te/expl-path

# shutdown

[no] shutdown

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| shutdown           | Shutdown the CBTS member LSP                    |

## Command Mode

- /exec/configure/tunnel-te/cbts-member

# shutdown

[no] shutdown

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| shutdown           |   |

## Command Mode

- /exec/configure/plb /exec/configure/plb-inout

# shutdown

[no] shutdown

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

shutdown Shutdown this instance of EIGRP

---

## Command Mode

- /exec/configure/router-eigrp/router-eigrp-vrf-common /exec/configure/router-eigrp/router-eigrp-af-common

# shutdown

[no] shutdown

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| shutdown           |   |

## Command Mode

- /exec/configure/smarte /exec/configure/smartc

# shutdown

[no] shutdown

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| shutdown           | Enable/disable an interface                     |

## Command Mode

- /exec/configure/if-vlan-common

# shutdown

[no] shutdown

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| shutdown           | OpenFlow switch shutdown                        |

## Command Mode

- /exec/configure/openflow/switch

# shutdown

[no] shutdown

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| shutdown           | OpenFlow switch shutdown                        |

## Command Mode

- /exec/configure/openflow/switch/sub-switch



# shutdown force

[no] shutdown force

## Syntax Description

| Syntax   | Description                                     |
|----------|---|
| no       | (Optional) Negate a command or set its defaults |
| shutdown | Enable/disable an interface                     |
| force    | Enable/disable an interface                     |

## Command Mode

- /exec/configure/if-mgmt-ether

# shutdown lan

shutdown lan

## Syntax Description

---

### Syntax Description

---

shutdown Enable/disable an interface

---

lan Shut all LAN VLANs on interface

---

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-eth-non-member /exec/configure/if-port-channel

# shutdown lan

[no] shutdown lan

## Syntax Description

| Syntax Description |                                      |
|--------------------|--------------------------------------|
| no                 | Negate a command or set its defaults |
| shutdown           | Enable/disable an interface          |
| lan                | Shut all LAN VLANs on interface      |

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-eth-non-member /exec/configure/if-port-channel

# signalling advertise explicit-null

[no] signalling advertise explicit-null | signalling advertise explicit-null [ <acl> ]

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults                 |
| signalling         |  | Traffic Engineering Signalling Parameters            |
| advertise          |  | Signalling advertisement parameters                  |
| explicit-null      |  | Advertise explicit-null label in signalling messages |
| <i>acl</i>         |  | (Optional) Access list                               |

## Command Mode

- /exec/configure/te

# signalling client batch-time

[no] signalling client batch-time <msec>

## Syntax Description

|                           |             |   |
|---------------------------|-------------|---|
| <b>Syntax Description</b> | signalling  | Configure RSVP Signalling information                                   |
|                           | client      | Client information  |
|                           | batch-time  | Time interval between batched messages to client                        |
|                           | <i>msec</i> | Batch-time msec [use 0 to disable, else minimum timer value is 20 msec] |

## Command Mode

- /exec/configure/ip-rsvp

# signalling hello graceful-restart

[no] signalling hello graceful-restart

## Syntax Description

| Syntax Description |  |                                       |
|--------------------|--|---------------------------------------|
| signalling         |  | Configure RSVP Signalling information |
| hello              |  | RSVP Hello configuration commands     |
| graceful-restart   |  | RSVP Graceful restart commands        |

## Command Mode

- /exec/configure/ip-rsvp

# signalling hello graceful-restart refresh interval

[no] signalling hello graceful-restart refresh interval <value>

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| signalling         |  | Configure RSVP Signalling information                      |
| hello              |  | RSVP Hello configuration commands                          |
| graceful-restart   |  | RSVP Graceful restart commands                             |
| refresh            |  | Configure RSVP Hello refresh behavior for Graceful Restart |
| interval           |  | Time between sending Hello Requests for Graceful Restart   |
| <i>value</i>       |  | Hello interval in msec                                     |

## Command Mode

- /exec/configure/ip-rsvp

# signalling hello graceful-restart refresh misses

[no] signalling hello graceful-restart refresh misses <value>

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| signalling         | Configure RSVP Signalling information                      |  |
| hello              | RSVP Hello configuration commands                          |  |
| graceful-restart   | RSVP Graceful restart commands                             |  |
| refresh            | Configure RSVP Hello refresh behavior for Graceful Restart |  |
| misses             | Number of Hello misses for Graceful Restart                |  |
| <i>value</i>       | Number of missed Hello Acks which triggers neighbor down   |  |

## Command Mode

- /exec/configure/ip-rsvp



# signalling hello graceful-restart send recovery-time

[no] signalling hello graceful-restart send recovery-time <value>

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| signalling         |  | Configure RSVP Signalling information                 |
| hello              |  | RSVP Hello configuration commands                     |
| graceful-restart   |  | RSVP Graceful restart commands                        |
| send               |  | Configure the restart-time in outgoing Hello msgs     |
| recovery-time      |  | Configure the recovery-time in outgoing GR Hello msgs |
| <i>value</i>       |  | recovery-time in msec                                 |

## Command Mode

- /exec/configure/ip-rsvp

# signalling hello graceful-restart send restart-time

[no] signalling hello graceful-restart send restart-time <value>

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| signalling         | Configure RSVP Signalling information                |  |
| hello              | RSVP Hello configuration commands                    |  |
| graceful-restart   | RSVP Graceful restart commands                       |  |
| send               | Configure the restart-time in outgoing Hello msgs    |  |
| restart-time       | Configure the restart-time in outgoing GR Hello msgs |  |
| <i>value</i>       | restart-time in msec                                 |  |

## Command Mode

- /exec/configure/ip-rsvp

# signalling hello reroute

[no] signalling hello reroute

## Syntax Description

| Syntax Description |                                       |
|--------------------|---------------------------------------|
| signalling         | Configure RSVP Signalling information |
| hello              | RSVP Hello configuration commands     |
| reroute            | RSVP Reroute commands                 |

## Command Mode

- /exec/configure/ip-rsvp

# signalling initial-retransmit-delay

[no] signalling initial-retransmit-delay <msec>

## Syntax Description

| Syntax Description       |  |                                       |
|--------------------------|--|---------------------------------------|
| signalling               |  | Configure RSVP Signalling information |
| initial-retransmit-delay |  | RSVP Initial retransmit delay         |
| <i>msec</i>              |  | Initial retransmit delay in millisec  |

## Command Mode

- /exec/configure/ip-rsvp

# signalling patherr state-removal

[no] signalling patherr state-removal

## Syntax Description

| Syntax Description |                                       |
|--------------------|---------------------------------------|
| signalling         | Configure RSVP Signalling information |
| patherr            | Configure Path-Error processing       |
| state-removal      | Setup automatic removal of path-state |

## Command Mode

- /exec/configure/ip-rsvp

# signalling rate-limit

```
[no] signalling rate-limit { [ interval <msec> ] [ limit <messages> ] } | { [ limit <messages> ] [ interval <msec> ] }
```

## Syntax Description

### Syntax Description

---

*signalling* Configure RSVP Signalling information

---

*rate-limit* Configure rate-limiting

---

*interval* (Optional) Configure scheduling interval

---

*msec* (Optional) Interval in millisecc

---

*limit* (Optional) Configure message limit per scheduling interval

---

*messages* (Optional) Message limit value

---

## Command Mode

- /exec/configure/ip-rsvp

# signalling refresh interval

[no] signalling refresh interval <seconds>

## Syntax Description

---

### Syntax Description

---

signalling Configure RSVP Signalling information

---

refresh Configure RSVP signaling refresh parameters

---

interval Set signaling refresh interval

---

seconds Signaling refresh interval in seconds

---

## Command Mode

- /exec/configure/ip-rsvp

# signalling refresh misses

[no] signalling refresh misses <value>

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| signalling         | Configure RSVP Signalling information                |
| refresh            | Configure RSVP signaling refresh parameters          |
| misses             | Set refresh misses tolerated before expiring a state |
| <i>value</i>       | Refresh miss value                                   |

## Command Mode

- /exec/configure/ip-rsvp



# signalling refresh pace

[no] signalling refresh pace

## Syntax Description

---

### Syntax Description

---

signalling Configure RSVP Signalling information

---

refresh Configure RSVP signaling refresh parameters

---

pace Pace sending of refresh messages

---

## Command Mode

- /exec/configure/ip-rsvp

# signalling refresh reduction

[no] signalling refresh reduction

## Syntax Description

---

### Syntax Description

---

signalling Configure RSVP Signalling information

---

refresh Configure RSVP signaling refresh parameters

---

reduction Enable, disable or set refresh reduction parameters

---

## Command Mode

- /exec/configure/ip-rsvp

# signalling refresh reduction ack-delay

[no] signalling refresh reduction ack-delay <msec>

## Syntax Description

|                           |             |   |
|---------------------------|-------------|---|
| <b>Syntax Description</b> | signalling  | Configure RSVP Signalling information               |
|                           | refresh     | Configure RSVP signaling refresh parameters         |
|                           | reduction   | Enable, disable or set refresh reduction parameters |
|                           | ack-delay   | Set delay for sending ACK messages                  |
|                           | <i>msec</i> | ACK delay value in millisec                         |

## Command Mode

- /exec/configure/ip-rsvp

# signalling refresh reduction bundle-max-size

[no] signalling refresh reduction bundle-max-size <value>

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| signalling         | Configure RSVP Signalling information               |  |
| refresh            | Configure RSVP signaling refresh parameters         |  |
| reduction          | Enable, disable or set refresh reduction parameters |  |
| bundle-max-size    | Set bundle-maximum-size                             |  |
| <i>value</i>       | Bundle size in bytes, use zero to disable bundling  |  |

## Command Mode

- /exec/configure/ip-rsvp

# signalling refresh reduction bundle-transmit-time

[no] signalling refresh reduction bundle-transmit-time <msec>

## Syntax Description

| Syntax Description   |  |   |
|----------------------|--|---|
| signalling           |  | Configure RSVP Signalling information               |
| refresh              |  | Configure RSVP signaling refresh parameters         |
| reduction            |  | Enable, disable or set refresh reduction parameters |
| bundle-transmit-time |  | Set bundle-transmit-time                            |
| <i>msec</i>          |  | Bundle transmit time value in msec                  |

## Command Mode

- /exec/configure/ip-rsvp

# signalling refresh reduction rapid-retransmit

[no] signalling refresh reduction rapid-retransmit

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| signalling         | Configure RSVP Signalling information               |  |
| refresh            | Configure RSVP signaling refresh parameters         |  |
| reduction          | Enable, disable or set refresh reduction parameters |  |
| rapid-retransmit   | Rapid-retransmit of RSVP messages                   |  |

## Command Mode

- /exec/configure/ip-rsvp

# signing level

{ [ no ] signing level { none | cisco | unsigned } | no signing level }

## Syntax Description

|                           |          |  |
|---------------------------|----------|--|
| <b>Syntax Description</b> | no       | (Optional) Negate a command or set its defaults                |
|                           | signing  | Virtual service package signing settings                       |
|                           | level    | Package signing level allowed for virtual service installation |
|                           | none     | Most restrictive, don't allow package installation             |
|                           | cisco    | Allow only Cisco signed packages                               |
|                           | unsigned | Least restrictive, allow unsigned and all signing methods      |

## Command Mode

- /exec/configure/virt-serv-global

# site-id

{ site-id <s0> | no site-id }

## Syntax Description

---

### Syntax Description

---

**no** Negate a command or set its defaults

---

**site-id** site id of the network where switch is deployed

---

**s0** Provide site id

---

## Command Mode

- /exec/configure/callhome



# site-of-origin

```
{ site-of-origin { <ext-comm-soo-aa2nn4> | <ext-comm-soo-aa4nn2> } } | { no site-of-origin [ { <ext-comm-soo-aa2nn4> | <ext-comm-soo-aa4nn2> } ] }
```

## Syntax Description

| Syntax Description         |  |                                      |
|----------------------------|--|--------------------------------------|
| no                         |  | Negate a command or set its defaults |
| site-of-origin             |  | Site of Origin                       |
| <i>ext-comm-soo-aa2nn4</i> |  | Extcommunity number                  |
| <i>ext-comm-soo-aa4nn2</i> |  | Extcommunity number                  |

## Command Mode

- /exec/configure/if-igp /exec/configure/if-mgmt-ether

# slave ipv4

[no] slave ipv4 <ip>

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <code>no</code> (Optional) Negate a command or set its defaults |
|                           | <code>slave slave</code>  |
|                           | <code>ipv4 ipv4</code>  |
|                           | <code>ip</code> IPv4 address (A.B.C.D) of slave                 |

## Command Mode

- /exec/configure/ptp-ucast-master

# sleep

sleep <i0>

## Syntax Description

---

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | <b>sleep</b> Sleep for the specified number of seconds |
|---------------------------|--|

---

|           |                                      |
|-----------|--------------------------------------|
| <i>i0</i> | Enter the number of seconds to sleep |
|-----------|--------------------------------------|

---

## Command Mode

- /exec

# sleep instance

[no] sleep instance <inst> [ <i0> ] | sleep instance <inst> <i0>

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | Negate a command or set its defaults            |  |
| sleep              | Sleep for the specified number of seconds       |  |
| instance           | Label with an instance number                   |  |
| <i>inst</i>        | Instance number                                 |  |
| <i>i0</i>          | (Optional) Enter the number of seconds to sleep |  |

## Command Mode

- /exec/configure

# slot

slot <module> { quoted <quoted-cmd> | <cmd> }

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| slot               | run commands on specific linecard (or set slot for commands that take optional slot number) |  |
| <i>module</i>      | the slot number (aka module number)   |  |
| quoted             | enter the command with quotes -> pipe redirection and semi-colon are local                  |  |
| <i>quoted-cmd</i>  | the command(s) to run on lc separated by <space> <semi-colon> <space>                       |  |
| <i>cmd</i>         | the command(s) to run on lc separated by <space> <semi-colon> <space>                       |  |

## Command Mode

- /exec

# smart-channel

{ smart-channel <service-name> } | { no smart-channel <service-name> }

## Syntax Description

|                           |                     |                                      |
|---------------------------|---------------------|--------------------------------------|
| <b>Syntax Description</b> | no                  | Negate a command or set its defaults |
|                           | smart-channel       | L2 service                           |
|                           | <i>service-name</i> | L2 service-name                      |

## Command Mode

- /exec/configure

# smart-channel internal debug param

[no] smart-channel internal debug param <param-no>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| smart-channel      | service card manager                            |
| internal           | service card manager                            |
| debug              | debug parameter for testing purpose only        |
| param              | set internal param                              |
| <i>param-no</i>    | 1 - disable failaction                          |

## Command Mode

- /exec

# smart-channel port-group

{ smart-channel port-group <svc-name> } | { no smart-channel port-group <svc-name> }

## Syntax Description

|                           |                 |                                      |
|---------------------------|-----------------|--------------------------------------|
| <b>Syntax Description</b> | no              | Negate a command or set its defaults |
|                           | smart-channel   | service                              |
|                           | port-group      | port group                           |
|                           | <i>svc-name</i> | service-name                         |

## Command Mode

- /exec/configure



## smtp-host smtp-port reply-to from

```
{ smtp-host { <ipv4> | <ipv6> | <host> } [ smtp-port <port> ] | smtp-port <port> | reply-to <reply> | from <from> |
```

### Syntax Description

#### Syntax Description

|                  |                                 |
|------------------|---------------------------------|
| <i>}</i>         |                                 |
| <i>smtp-host</i> | SMTP server host                |
| <i>ipv4</i>      | IPV4 address                    |
| <i>host</i>      | DNS name                        |
| <i>smtp-port</i> | (Optional) SMTP server port     |
| <i>port</i>      | (Optional) Port for SMTP server |
| <i>reply-to</i>  | Reply to email address          |
| <i>reply</i>     | Provide reply-to email address  |
| <i>from</i>      | From email address              |
| <i>from</i>      | Provide from email address      |

### Command Mode

- /exec/configure/email

# snapshot create

snapshot create <snapshot-name> <snapshot-description>

## Syntax Description

---

### Syntax Description

|                             |   |
|-----------------------------|---|
| snapshot                    | Create/Delete a snapshot                                |
| create                      | Create a snapshot of running state of selected features |
| <i>snapshot-name</i>        | Name of a snapshot                                      |
| <i>snapshot-description</i> | Description of a snapshot                               |

---

## Command Mode

- /exec

# snapshot delete

snapshot delete <snapshot-name>

## Syntax Description

| Syntax Description   |  |   |
|----------------------|--|---|
| snapshot             |  | Create/Delete a snapshot                  |
| delete               |  | Delete a single snapshot or all snapshots |
| <i>snapshot-name</i> |  | Name of a snapshot                        |

## Command Mode

- /exec

# snapshot delete ALL

snapshot delete ALL

## Syntax Description

---

### Syntax Description

---

snapshot Create/Delete a snapshot

---

delete Delete a single snapshot or all snapshots

---

ALL Delete all snapshots present on the switch

---

## Command Mode

- /exec

# snapshot section add

snapshot section add <name> <command> <row-id> <key1> [ <key2> ]

## Syntax Description

### Syntax Description

|                |   |
|----------------|---|
| snapshot       | Create/Delete a snapshot                                    |
| section        | Add/Delete a snapshot section                               |
| add            | Add a snapshot section                                      |
| <i>name</i>    | Name of a section   |
| <i>command</i> | 'show' command to generate XML output                       |
| <i>row-id</i>  | tag of each row entry of the 'show' XML output              |
| <i>key1</i>    | first key to distinguish among row entries with             |
| <i>key2</i>    | (Optional) second key to distinguish among row entries with |

## Command Mode

- /exec

# snapshot section delete

snapshot section delete <name>

## Syntax Description

---

### Syntax Description

---

snapshot Create/Delete a snapshot

---

section Add/Delete a snapshot  
section

---

delete Delete a snapshot section

---

*name* Name of a section

---

## Command Mode

- /exec

# snmp-server aaa-user cache-timeout

[no] snmp-server aaa-user cache-timeout <timeout>

## Syntax Description

|                           |               |  |
|---------------------------|---------------|--|
| <b>Syntax Description</b> | no            | (Optional) Negate a command or set its defaults    |
|                           | snmp-server   | Configure snmp server                              |
|                           | aaa-user      | set duration for which aaa-cached snmp user exists |
|                           | cache-timeout | timeout for AAA cache                              |
|                           | timeout       | timeout for which aaa-cached user exists(in secs)  |

## Command Mode

- /exec/configure

## snmp-server community

[no] snmp-server community <s0> [ { group <s1> | ro | rw } ]

### Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults         |
| snmp-server        | Configure snmp server                                   |
| community          | set community string and access privs                   |
| s0                 | SNMP community string                                   |
| group              | (Optional) Group to which the community belongs         |
| s1                 | (Optional) Group to which the community belongs         |
| ro                 | (Optional) Read-only access with this community string  |
| rw                 | (Optional) Read-write access with this community string |

### Command Mode

- /exec/configure



## snmp-server community

```
{ no snmp-server community <community_name> { use-ipv4acl [ <ipv4_acl_name> ] use-ipv6acl [
<ipv6_acl_name> ] | use-ipv4acl [ <ipv4_acl_name> ] | use-ipv6acl [ <ipv6_acl_name> ] } | snmp-server
community <community_name> { use-ipv4acl <ipv4_acl_name> use-ipv6acl <ipv6_acl_name> | use-ipv4acl
<ipv4_acl_name> | use-ipv6acl <ipv6_acl_name> } }
```

### Syntax Description

| Syntax Description    |  |  |
|-----------------------|--|--|
| no                    |  | Negate a command or set its defaults                             |
| snmp-server           |  | Configure snmp server  |
| community             |  | set community string and access privs                            |
| <i>community_name</i> |  | SNMP community string  |
| use-ipv4acl           |  | Specify IPv4 ACL, the ACL name specified after must be IPv4 ACL. |
| <i>ipv4_acl_name</i>  |  | (Optional) IPv4 ACL name to filter snmp requests                 |
| use-ipv6acl           |  | Specify IPv6 ACL, the ACL name specified after must be IPv6 ACL. |
| <i>ipv6_acl_name</i>  |  | (Optional) IPv6 ACL name to filter snmp requests                 |

### Command Mode

- /exec/configure

## snmp-server community use-acl

[no] snmp-server community <community\_name> use-acl <acl\_name>

### Syntax Description

| Syntax Description    |            |                                       |
|-----------------------|------------|---------------------------------------|
| no                    | (Optional) | Negate a command or set its defaults  |
| snmp-server           |            | Configure snmp server                 |
| community             |            | set community string and access privs |
| <i>community_name</i> |            | SNMP community string                 |
| use-acl               |            | acl name to filter snmp requests      |
| <i>acl_name</i>       |            | acl name to filter snmp requests      |

### Command Mode

- /exec/configure

# snmp-server contact

[no] snmp-server contact [ <line> ]

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| snmp-server        | Configure snmp server                           |
| contact            | modify sysContact                               |
| <i>line</i>        | (Optional) modify sysContact                    |

## Command Mode

- /exec/configure

## snmp-server context

```
[no] snmp-server context <context_name> [ instance <instance-name> ] [ vrf { <vrf-name> | <vrf-known-name>
} ] [ topology <topology-name> ]
```

### Syntax Description

| Syntax Description    |            |  |
|-----------------------|------------|--|
| no                    | (Optional) | Negate a command or set its defaults               |
| snmp-server           |            | Configure snmp server                              |
| context               |            | SNMP context to be mapped                          |
| <i>context_name</i>   |            | name of the SNMP context                           |
| instance              | (Optional) | Protocol instance associated with the SNMP context |
| <i>instance-name</i>  | (Optional) | Name of the protocol instance                      |
| vrf                   | (Optional) | VRF associated with the SNMP context               |
| <i>vrf-name</i>       | (Optional) | VRF name   |
| <i>vrf-known-name</i> | (Optional) | Known VRF name                                     |
| topology              | (Optional) | Topology associated with the SNMP context          |
| <i>topology-name</i>  | (Optional) | name of the Topology                               |

### Command Mode

- /exec/configure

## snmp-server context type len val

[no] snmp-server context <context\_name> type { vrf | topology | instance | vlan | mst } len <i2> val <i3>

### Syntax Description

| Syntax Description  |  |
|---------------------|--|
| no                  | (Optional) Negate a command or set its defaults    |
| snmp-server         | Configure snmp server                              |
| context             | SNMP context to be mapped                          |
| <i>context_name</i> | name of the SNMP context                           |
| type                | type of association to context                     |
| instance            | Protocol instance associated with the SNMP context |
| vrf                 | VRF associated with the SNMP context               |
| topology            | Topology associated with the SNMP context          |
| vlan                | Vlan id associated with the SNMP context           |
| mst                 | Mst id associated with the SNMP context            |
| len                 | Length of value                                    |
| <i>i2</i>           | Length of value                                    |
| val                 | Value  |
| <i>i3</i>           | Value of variable associated with the SNMP context |

### Command Mode

- /exec/configure

# snmp-server counter cache-enable

[no] snmp-server counter cache-enable

## Syntax Description

|                           |              |   |
|---------------------------|--------------|---|
| <b>Syntax Description</b> | no           | (Optional) Negate a command or set its defaults |
|                           | snmp-server  | Configure snmp server                           |
|                           | counter      | Configure port counter configuration            |
|                           | cache-enable | Enable port stats cache                         |

## Command Mode

- /exec/configure

# snmp-server counter cache enable

[no] snmp-server counter cache enable

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| snmp-server        | Configure snmp server                           |
| counter            | Configure port counter configuration            |
| cache              | port stats cache                                |
| enable             | enable port stats cache                         |

## Command Mode

- /exec/configure

## snmp-server counter cache timeout

[no] snmp-server counter cache timeout <timeout>

### Syntax Description

| Syntax Description |            |   |
|--------------------|------------|---|
| no                 | (Optional) | Negate a command or set its defaults                |
| snmp-server        |            | Configure snmp server                               |
| counter            |            | Configure port counter configuration                |
| cache              |            | Port stats cache                                    |
| timeout            |            | Timeout for port stats cache                        |
| <i>timeout</i>     |            | Timeout for which cached port stats exists(in secs) |

### Command Mode

- /exec/configure



## snmp-server enable traps

[no] snmp-server enable traps [ <trap\_arg> [ <trap\_sub\_category> + ] ]

### Syntax Description

| Syntax Description       |            |                                      |
|--------------------------|------------|--------------------------------------|
| no                       | (Optional) | Negate a command or set its defaults |
| snmp-server              |            | Configure snmp server                |
| enable                   |            | Enable SNMP Traps                    |
| traps                    |            | Enable SNMP traps                    |
| <i>trap_arg</i>          | (Optional) | Enable __left__ traps                |
| <i>trap_sub_category</i> | (Optional) | Enter the trap                       |

### Command Mode

- /exec/configure

## snmp-server enable traps bgp

[no] snmp-server enable traps bgp [ { state-changes [ <subsystem> + ] } ]

### Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| snmp-server        |            | Configure snmp server                |
| enable             |            | Enable SNMP Traps                    |
| traps              |            | Enable SNMP traps                    |
| bgp                |            | Enable SNMP BGP traps                |
| state-changes      | (Optional) | Traps for FSM state changes          |
| <i>subsystem</i>   | (Optional) | subsystem within BGP for SNMP traps  |

### Command Mode

- /exec/configure

## snmp-server enable traps bgp cbgp2

[no] snmp-server enable traps bgp cbgp2 [ { state-changes [ <subsystem> + ] } ]

### Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| snmp-server        | Configure snmp server                           |
| enable             | Enable SNMP Traps                               |
| traps              | Enable SNMP traps                               |
| bgp                | Enable SNMP BGP traps                           |
| cbgp2              | Enable SNMP CISCO-BGP-MIBv2 traps               |
| state-changes      | (Optional) Traps for FSM state changes          |
| <i>subsystem</i>   | (Optional) subsystem within BGP for SNMP traps  |

### Command Mode

- /exec/configure

## snmp-server enable traps bgp cbgp2 threshold prefix

[no] snmp-server enable traps bgp cbgp2 threshold prefix

### Syntax Description

| Syntax Description |            |   |
|--------------------|------------|---|
| no                 | (Optional) | Negate a command or set its defaults            |
| snmp-server        |            | Configure snmp server                           |
| enable             |            | Enable SNMP Traps                               |
| traps              |            | Enable SNMP traps                               |
| bgp                |            | Enable SNMP BGP traps                           |
| cbgp2              |            | Enable SNMP CISCO-BGP-MIBv2 traps               |
| threshold          |            | Traps for threshold events                      |
| prefix             |            | CISCO specific trap for prefix threshold events |

### Command Mode

- /exec/configure

# snmp-server enable traps bgp threshold prefix

[no] snmp-server enable traps bgp threshold prefix

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| snmp-server        | Configure snmp server                           |
| enable             | Enable SNMP Traps                               |
| traps              | Enable SNMP traps                               |
| bgp                | Enable SNMP BGP traps                           |
| threshold          | Traps for threshold events                      |
| prefix             | CISCO specific trap for prefix threshold events |

## Command Mode

- /exec/configure

## snmp-server enable traps eigrp

[no] snmp-server enable traps eigrp [ <eigrp-ptag> ]

### Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| snmp-server        |            | Configure snmp server                |
| enable             |            | Enable SNMP Traps                    |
| traps              |            | Enable SNMP traps                    |
| eigrp              |            | Enable SNMP EIGRP traps              |
| <i>eigrp-ptag</i>  | (Optional) | Process tag                          |

### Command Mode

- /exec/configure

# snmp-server enable traps ospf

[no] snmp-server enable traps ospf [ <tag> ]

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| snmp-server        | Configure snmp server                           |
| enable             | Enable SNMP Traps                               |
| traps              | Enable SNMP traps                               |
| ospf               | Enable SNMP OSPF traps                          |
| tag                | (Optional) Process tag                          |

## Command Mode

- /exec/configure

## snmp-server enable traps ospf lsa

[no] snmp-server enable traps ospf [ <tag> ] lsa

### Syntax Description

| Syntax Description | Description                                     |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| snmp-server        | Configure snmp server                           |
| enable             | Enable SNMP Traps                               |
| traps              | Enable SNMP traps                               |
| ospf               | Enable SNMP OSPF traps                          |
| <i>tag</i>         | (Optional) Process tag                          |
| lsa                | Allow sending LSA traps                         |

### Command Mode

- /exec/configure



## snmp-server enable traps ospf rate-limit

```
{ { no snmp-server enable traps ospf [ <tag> ] rate-limit [ <window> <rate> ] } | { snmp-server enable traps ospf [ <tag> ] rate-limit <window> <rate> } }
```

### Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults               |
| snmp-server        |  | Configure snmp server                              |
| enable             |  | Enable SNMP Traps                                  |
| traps              |  | Enable SNMP traps                                  |
| ospf               |  | Enable SNMP OSPF traps                             |
| tag                |  | (Optional) Process tag                             |
| rate-limit         |  | Trap rate limit values                             |
| window             |  | (Optional) Rate limit window size in seconds       |
| rate               |  | (Optional) Max number of traps sent in window time |
| tag                |  | (Optional)   |

### Command Mode

- /exec/configure

## snmp-server enable traps ospfv3

[no] snmp-server enable traps ospfv3 [ <tag> ]

### Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| snmp-server        |            | Configure snmp server                |
| enable             |            | Enable SNMP Traps                    |
| traps              |            | Enable SNMP traps                    |
| ospfv3             |            | Enable SNMP OSPFv3 traps             |
| <i>tag</i>         | (Optional) | Process tag                          |

### Command Mode

- /exec/configure

## snmp-server enable traps ospfv3 lsa

[no] snmp-server enable traps ospfv3 [ <tag> ] lsa

### Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| snmp-server        | Configure snmp server                           |
| enable             | Enable SNMP Traps                               |
| traps              | Enable SNMP traps                               |
| ospfv3             | Enable SNMP OSPFv3 traps                        |
| tag                | (Optional) Process tag                          |
| lsa                | Enable SNMP OSPFv3 LSA traps                    |

### Command Mode

- /exec/configure

## snmp-server enable traps ospfv3 rate-limit

```
{ { no snmp-server enable traps ospfv3 [ <tag> ] rate-limit } | { snmp-server enable traps ospfv3 [ <tag> ]
rate-limit <swindow> <rate> } }
```

### Syntax Description

| Syntax Description | no                                      | Negate a command or set its defaults |
|--------------------|---|--------------------------------------|
| snmp-server        | Configure snmp server                   |                                      |
| enable             | Enable SNMP Traps                       |                                      |
| traps              | Enable SNMP traps                       |                                      |
| ospfv3             | Enable SNMP OSPFv3 traps                |                                      |
| <i>tag</i>         | (Optional) Process tag                  |                                      |
| rate-limit         | Trap rate limit values                  |                                      |
| <i>swindow</i>     | Rate limit window size in seconds       |                                      |
| <i>rate</i>        | Max number of traps sent in window time |                                      |
| <i>tag</i>         | (Optional)                              |                                      |

### Command Mode

- /exec/configure

## snmp-server enable traps storm-control trap-rate

[no] snmp-server enable traps storm-control trap-rate <rate-per-minute>

### Syntax Description

| Syntax Description     |            |                                      |
|------------------------|------------|--------------------------------------|
| no                     | (Optional) | Negate a command or set its defaults |
| snmp-server            |            | Configure snmp server                |
| enable                 |            | Enable SNMP Traps                    |
| traps                  |            | Enable SNMP traps                    |
| storm-control          |            | Enable storm-control traps           |
| trap-rate              |            | Number of traps per minute           |
| <i>rate-per-minute</i> | per Minute | (0 means no upper rate)              |

### Command Mode

- /exec/configure

## snmp-server engineID local

snmp-server engineID local <engineID> | no snmp-server engineID local [ <engineID> ]

### Syntax Description

#### Syntax Description

|                 |   |
|-----------------|---|
| no              | Negate a command or set its defaults  |
| snmp-server     | Configure snmp server   |
| engineID        | Configure a local SNMPv3 engineID   |
| local           | engineID of the local agent   |
| <i>engineID</i> | engine ID should be an even number of hexadecimal characters, which ranges from 10 to 64 where every two hexadecimal characters should be separated by colon. Including colons- |

### Command Mode

- /exec/configure

# snmp-server force-unload-feature

snmp-server force-unload-feature <feature\_name>

## Syntax Description

| Syntax Description   |  |   |
|----------------------|--|---|
| snmp-server          |  | Configure snmp server                         |
| force-unload-feature |  | unload mibs of conditional feature forcefully |
| <i>feature_name</i>  |  | conditional feature name                      |

## Command Mode

- /exec/configure

# snmp-server globalEnforcePriv

[no] snmp-server globalEnforcePriv

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| snmp-server        | Configure snmp server                           |
| globalEnforcePriv  | globally enforce privacy for all the users      |

## Command Mode

- /exec/configure



## snmp-server host

```
[no] snmp-server host <host0> { <s6> | [ informs | traps ] } { { version { 1 <s0> | 2c <s1> | 3 { auth <s2> | noauth <s3> | priv <s4> } } } | <s5> } } [ udp-port <i1> ]
```

### Syntax Description

#### Syntax Description

|              |  |
|--------------|--|
| no           | (Optional) Negate a command or set its defaults            |
| snmp-server  | Configure snmp server                                      |
| host         | Specify hosts to receive SNMP notifications                |
| <i>host0</i> | IPv4 or IPv6 address or DNS Name of SNMP notification host |
| informs      | (Optional) Send Inform messages to this host               |
| traps        | (Optional) Send Traps messages to this host                |
| version      | SNMP version to use for notification messages              |
| 1            | Use SNMPv1   |
| <i>s0</i>    | SNMP community string or SNMPv3 user name                  |
| udp-port     | (Optional) The notification host's UDP port number         |
| <i>i1</i>    | (Optional) The notification host's UDP port number         |
| 2c           | Use SNMPv2c  |
| <i>s1</i>    | SNMP community string or SNMPv3 user name                  |
| 3            | Use SNMPv3   |
| auth         | Use the SNMPv3 authNoPriv Security Level                   |
| <i>s2</i>    | SNMP community string or SNMPv3 user name                  |
| noauth       | Use the SNMPv3 noAuthNoPriv Security Level                 |
| <i>s3</i>    | SNMP community string or SNMPv3 user name                  |
| priv         | Use the SNMPv3 authPriv Security Level                     |
| <i>s4</i>    | SNMP community string or SNMPv3 user name                  |
| <i>s5</i>    | SNMP community string or SNMPv3 user name                  |
| <i>s6</i>    | SNMP community string or SNMPv3 user name                  |

### Command Mode

- /exec/configure

## snmp-server host filter-vrf

[no] snmp-server host <host0> filter-vrf { <vrf-name> | <vrf-known-name> } [ udp-port <i1> ]

### Syntax Description

| Syntax Description    |            |   |
|-----------------------|------------|---|
| no                    | (Optional) | Negate a command or set its defaults  |
| snmp-server           |            | Configure snmp server   |
| host                  |            | Specify hosts to receive SNMP notifications   |
| <i>host0</i>          |            | IPv4 or IPv6 address or DNS Name of SNMP notification host                          |
| filter-vrf            |            | Filters notifications to the notification host receiver based on the configured VRF |
| <i>vrf-name</i>       |            | VRF name  |
| <i>vrf-known-name</i> |            | Known VRF name  |
| udp-port              | (Optional) | The notification host's UDP port number   |
| <i>i1</i>             | (Optional) | The notification host's UDP port number   |

### Command Mode

- /exec/configure

## snmp-server host source

[no] snmp-server host <host0> { source-interface <ifName> } [ udp-port <i1> ]

### Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults                             |
| snmp-server        | Configure snmp server   |
| host               | Specify hosts to send SNMP notifications                                    |
| <i>host0</i>       | IPv4 or IPv6 address or DNS Name of SNMP notification host                  |
| source-interface   | Source interface to be used for sending out SNMP notifications to this host |
| <i>ifName</i>      | Source interface name   |
| udp-port           | (Optional) The notification host's UDP port number                          |
| <i>i1</i>          | (Optional) The notification host's UDP port number                          |

### Command Mode

- /exec/configure

## snmp-server host use-vrf

```
[no] snmp-server host <host0> use-vrf { <vrf-name> | <vrf-known-name> } [ udp-port <i1> ]
```

### Syntax Description

| Syntax Description    |            |   |
|-----------------------|------------|---|
| no                    | (Optional) | Negate a command or set its defaults  |
| snmp-server           |            | Configure snmp server   |
| host                  |            | Specify hosts to receive SNMP notifications                                   |
| <i>host0</i>          |            | IPv4 or IPv6 address or DNS Name of SNMP notification host                    |
| use-vrf               |            | Configures SNMP to use the selected VRF to communicate with the host receiver |
| <i>vrf-name</i>       |            | VRF name  |
| <i>vrf-known-name</i> |            | Known VRF name  |
| udp-port              | (Optional) | The notification host's UDP port number                                       |
| <i>i1</i>             | (Optional) | The notification host's UDP port number                                       |

### Command Mode

- /exec/configure

## snmp-server host use\_vrf

[no] snmp-server host <host0> { use\_vrf <s0> | filter\_vrf <s1> } [ udp-port <i1> ]

### Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults                                     |
| snmp-server        | Configure snmp server   |
| host               | Specify hosts to receive SNMP notifications   |
| host0              | IPv4 or IPv6 address or DNS Name of SNMP notification host                          |
| use_vrf            | Configures SNMP to use the selected VRF to communicate with the host receiver       |
| s0                 | VRF name  |
| filter_vrf         | Filters notifications to the notification host receiver based on the configured VRF |
| s1                 | VRF name  |
| udp-port           | (Optional) The notification host's UDP port number                                  |
| i1                 | (Optional) The notification host's UDP port number                                  |

### Command Mode

- /exec/configure

# snmp-server load-cond-feature

[no] snmp-server load-cond-feature <feature\_name>

## Syntax Description

|                           |                     |   |
|---------------------------|---------------------|---|
| <b>Syntax Description</b> | no                  | (Optional) Negate a command or set its defaults |
|                           | snmp-server         | Configure snmp server                           |
|                           | load-cond-feature   | load or unload mibs of conditional feature      |
|                           | <i>feature_name</i> | conditional feature name                        |

## Command Mode

- /exec/configure

# snmp-server load-mib

[no] snmp-server load-mib <mib\_name>

## Syntax Description

|                           |                 |   |
|---------------------------|-----------------|---|
| <b>Syntax Description</b> | no              | (Optional) Negate a command or set its defaults |
|                           | snmp-server     | Configure snmp server                           |
|                           | load-mib        | load a given mib                                |
|                           | <i>mib_name</i> | mib module name                                 |

## Command Mode

- /exec/configure

# snmp-server location

[no] snmp-server location [ <line> ]

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| snmp-server        | Configure snmp server                           |
| location           | modify sysLocation                              |
| line               | (Optional) modify sysLocation                   |

## Command Mode

- /exec/configure



## snmp-server mib community-map context

[no] snmp-server mib community-map <community\_name> context <context\_name>

### Syntax Description

| Syntax Description    |   |
|-----------------------|---|
| no                    | (Optional) Negate a command or set its defaults |
| snmp-server           | Configure snmp server                           |
| mib                   | mib access parameters                           |
| community-map         | SNMP community                                  |
| <i>community_name</i> | SNMP community string                           |
| context               | SNMP context to be mapped                       |
| <i>context_name</i>   | name of the SNMP context                        |

### Command Mode

- /exec/configure

# snmp-server mib mpls vpn max-threshold

[no] snmp-server mib mpls vpn max-threshold <time>

## Syntax Description

| Syntax Description |            |   |
|--------------------|------------|---|
| no                 | (Optional) | Negate a command or set its defaults                    |
| snmp-server        |            | Modify non engine SNMP parameters                       |
| mib                |            | MIB commands  |
| mpls               |            | Configurations for MPLS mibs                            |
| vpn                |            | Config special SNMP MPLS VPN objects                    |
| max-threshold      |            | Config to control MPLS-VPN max threshold exceeded traps |
| <i>time</i>        |            | Seconds before re-issuing maximum threshold trap        |

## Command Mode

- /exec/configure

# snmp-server protocol enable

[no] snmp-server protocol enable

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| snmp-server        | Configure snmp server                           |
| protocol           | snmp protocol operations                        |
| enable             | Enable/Disable snmp protocol operations         |

## Command Mode

- /exec/configure

## snmp-server source-interface informs

[no] snmp-server source-interface { informs } <ifName>

### Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults                            |
| snmp-server        | Configure snmp server  |
| source-interface   | Source interface to be used for sending out SNMP notifications             |
| <i>ifName</i>      | Source interface name  |
| informs            | SNMP Inform notifications for which this source interface needs to be used |

### Command Mode

- /exec/configure

## snmp-server source-interface traps

[no] snmp-server source-interface { traps } <ifName>

### Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults                          |
| snmp-server        | Configure snmp server  |
| source-interface   | Source interface to be used for sending out SNMP notifications           |
| <i>ifName</i>      | Source interface name  |
| traps              | SNMP Trap notifications for which this source interface needs to be used |

### Command Mode

- /exec/configure

# snmp-server system-shutdown

[no] snmp-server system-shutdown

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| snmp-server        | Configure snmp server                           |
| system-shutdown    | Configure snmp-server for reload(2)             |

## Command Mode

- /exec/configure

# snmp-server tcp-session

[no] snmp-server tcp-session [ auth ]

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults                      |
| snmp-server        | Configure snmp server  |
| tcp-session        | Enable one time authentication for snmp over tcp session.            |
| auth               | (Optional) Enable one time authentication for snmp over tcp session. |

## Command Mode

- /exec/configure

## snmp-server user

```
{ no snmp-server user <user_name> { use-ipv4acl [ <ipv4_acl_name> ] use-ipv6acl [ <ipv6_acl_name> ] |
use-ipv4acl [ <ipv4_acl_name> ] | use-ipv6acl [ <ipv6_acl_name> ] } | snmp-server user <user_name> {
use-ipv4acl <ipv4_acl_name> use-ipv6acl <ipv6_acl_name> | use-ipv4acl <ipv4_acl_name> | use-ipv6acl
<ipv6_acl_name> } }
```

### Syntax Description

| Syntax Description   |            |  |
|----------------------|------------|--|
| no                   |            | Negate a command or set its defaults                             |
| snmp-server          |            | Configure snmp server  |
| user                 |            | Define a user who can access the SNMP engine                     |
| <i>user_name</i>     |            | Name of the user   |
| use-ipv4acl          |            | Specify IPv4 ACL, the ACL name specified after must be IPv4 ACL. |
| <i>ipv4_acl_name</i> | (Optional) | IPv4 ACL name to filter snmp requests                            |
| use-ipv6acl          |            | Specify IPv6 ACL, the ACL name specified after must be IPv6 ACL. |
| <i>ipv6_acl_name</i> | (Optional) | IPv6 ACL name to filter snmp requests                            |

### Command Mode

- /exec/configure



## snmp-server user

```
[no] snmp-server user <s0> { enforcePriv | { [ <s1> ] { [ auth { md5 | sha } <s2> { { priv [ aes-128 ] { <s3>
[ localizedkey ] [ { auto | engineID <s4> } ] } } | { [ localizedkey1 ] [ { auto1 | engineID1 <s5> } ] } } } }
}
```

### Syntax Description

#### Syntax Description

|               |  |
|---------------|--|
| no            | (Optional) Negate a command or set its defaults  |
| snmp-server   | Configure snmp server  |
| user          | Define a user who can access the SNMP engine   |
| <i>s0</i>     | Name of the user   |
| enforcePriv   | Enforce privacy for the user   |
| <i>s1</i>     | (Optional) Group name (ignored for notif target user)  |
| auth          | (Optional) authentication parameters for the user  |
| md5           | (Optional) Use HMAC MD5 algorithm for authentication   |
| sha           | (Optional) Use HMAC SHA algorithm for authentication   |
| <i>s2</i>     | (Optional) authentication password for user  |
| priv          | (Optional) encryption parameters for the user  |
| aes-128       | (Optional) Use 128-bit AES algorithm for privacy   |
| <i>s3</i>     | (Optional) privacy password for user   |
| localizedkey  | (Optional) specifies whether the passwords are in localized key format   |
| auto          | (Optional) specifies whether the user is auto created (volatile)   |
| engineID      | (Optional) engineID for configuring notif target user (for V3 informs)   |
| <i>s4</i>     | (Optional) Specifies notification target's SNMP engineID. Should be an octet of either Decimal (range: 0 to 255) or Hexadecimal (range: 0 to FF) value, each octet being separated by colon. Hexadecimal value should have prefix of 0x or 0X. Including colons- |
| localizedkey1 | (Optional) specifies whether the passwords are in localized key format   |
| auto1         | (Optional) specifies whether the user is auto created (volatile)   |
| engineID1     | (Optional) engineID for configuring notif target user (for V3 informs)   |
| <i>s5</i>     | (Optional) Specifies notification target's SNMP engineID. Should be an octet of either Decimal (range: 0 to 255) or Hexadecimal (range: 0 to FF) value, each octet being separated by colon. Hexadecimal value should have prefix of 0x or 0X. Including colons- |

**Command Mode**

- /exec/configure

## snmp-trap event-type policy-name

```
snmp-trap [ intdata1 <integer-data1> ] [ intdata2 <integer-data2> ] [ strdata <string-data> ] event-type <ev_type>
policy-name <name>
```

### Syntax Description

| Syntax Description   |                       |
|----------------------|-----------------------|
| snmp-trap            | Send                  |
| intdata1             | (Optional) Enter      |
| <i>integer-data1</i> | (Optional)<br>Integer |
| intdata2             | (Optional) Enter      |
| <i>integer-data2</i> | (Optional)<br>Integer |
| strdata              | (Optional) Enter      |
| <i>string-data</i>   | (Optional) String     |
| event-type           | Event type            |
| <i>ev_type</i>       | Event type            |
| policy-name          | Policy Name           |
| <i>name</i>          | Policy Name           |

### Command Mode

- /exec

# snmp ifmib ifalias long

[no] snmp ifmib ifalias long

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults                  |
| snmp               | Configure snmp   |
| ifmib              | Configure snmp interface mib feature                             |
| ifalias            | Configure snmp interface alias attribute for interface mib       |
| long               | Enable long description up to 256 characters for interface alias |

## Command Mode

- /exec/configure

# snmp trap link-status

snmp trap link-status | no snmp trap link-status

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| snmp               |  | Modify SNMP interface parameters     |
| trap               |  | Allow a specific SNMP trap           |
| link-status        |  | Allow SNMP LINKUP and LINKDOWN traps |

## Command Mode

- /exec/configure/if-ether-sub /exec/configure/if-port-channel-sub /exec/configure/if-gig-ether-sub /exec/configure/if-remote-ethernet-sub /exec/configure/if-ether-sub-p2p

# snmp trap link-status

snmp trap link-status

## Syntax Description

---

### Syntax Description

---

|             |                                      |
|-------------|--------------------------------------|
| snmp        | Modify SNMP interface parameters     |
| trap        | Allow a specific SNMP trap           |
| link-status | Allow SNMP LINKUP and LINKDOWN traps |

---

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-eth-base /exec/configure/if-port-channel /exec/configure/if-port-channel-range

# snmp trap link-status

[no] snmp trap link-status

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| snmp               |  | Modify SNMP interface parameters     |
| trap               |  | Allow a specific SNMP trap           |
| link-status        |  | Allow SNMP LINKUP and LINKDOWN traps |

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-eth-base /exec/configure/if-port-channel /exec/configure/if-port-channel-range

# snmp trap link-status

snmp trap link-status | no snmp trap link-status

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| snmp               |  | Modify SNMP interface parameters     |
| trap               |  | Allow a specific SNMP trap           |
| link-status        |  | Allow SNMP LINKUP and LINKDOWN traps |

## Command Mode

- /exec/configure/if-mgmt-ether



# snmp trap link-status

snmp trap link-status | no snmp trap link-status

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command                     |
| snmp               |  | Modify SNMP interface parameters     |
| trap               |  | Allow a specific SNMP trap           |
| link-status        |  | Allow SNMP LINKUP and LINKDOWN traps |

## Command Mode

- /exec/configure/if-any-tunnel

# snmp trap link-status

snmp trap link-status | no snmp trap link-status

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| snmp               |  | Modify SNMP interface parameters     |
| trap               |  | Allow a specific SNMP trap           |
| link-status        |  | Allow SNMP LINKUP and LINKDOWN traps |

## Command Mode

- /exec/configure/if-vlan-common

# snsr-grp sample-interval

snsr-grp <sn-grp-id> sample-interval <cadence> | no snsr-grp <sn-grp-id>

## Syntax Description

| Syntax Description |         |                                      |
|--------------------|---------|--------------------------------------|
| no                 |         | Negate a command or set its defaults |
| snsr-grp           |         | Associated sensor group              |
| sample-interval    | Cadence | Time in milliseconds(0 for events)   |

## Command Mode

- /exec/configure/telemetry/subscription

## sockets internal event-history size

[no] sockets internal event-history { errors | setup | ha | event | proto | log } size { <size\_in\_text> | <size\_in\_Kbytes> }

### Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| sockets               | Display sockets status and configuration        |  |
| internal              | Commands for internal use                       |  |
| event-history         | various event logs of sockets                   |  |
| errors                | error logs of sockets                           |  |
| setup                 | setup debug message of sockets                  |  |
| ha                    | ha debug message of sockets                     |  |
| event                 | events/pcb debug message of sockets             |  |
| proto                 | tcp/udp/raw ip debug message of sockets         |  |
| log                   | syslog message of sockets                       |  |
| size                  | Configure the size of the event-hist buffer     |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_Kbytes</i> | Size of the file in kbytes                      |  |

### Command Mode

- /exec

# sockets local-port-range

{ { no sockets local-port-range } | { sockets local-port-range <start-port> <end-port> } }

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults  |
| sockets            |  | Negate a command or set its defaults  |
| local-port-range   |  | Define local port range for Kstack. Note: This CLI requires switch to be reloaded |
| <i>start-port</i>  |  | Start port of local port range  |
| <i>end-port</i>    |  | End port of local port range  |

## Command Mode

- /exec/configure /exec/configure/config-mgmt

# soft-reconfiguration inbound

{ soft-reconfiguration inbound [ always ] } | { no soft-reconfiguration inbound } | { default soft-reconfiguration inbound }

## Syntax Description

| Syntax Description   |  |  |
|----------------------|--|--|
| no                   |  | Negate a command or set its defaults                   |
| default              |  | Inherit values from a peer template                    |
| soft-reconfiguration |  | Soft reconfiguration                                   |
| inbound              |  | Allow inbound soft reconfiguration                     |
| always               |  | (Optional) Always perform inbound soft reconfiguration |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af  
/exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-l2vpn-evpn  
/exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv4-label  
/exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv6-label

# soft-reconfiguration inbound

{ soft-reconfiguration inbound [ always ] } | { no soft-reconfiguration inbound } | { default soft-reconfiguration inbound }

## Syntax Description

| Syntax Description   |            |   |
|----------------------|------------|---|
| no                   |            | Negate a command or set its defaults        |
| default              |            | Inherit values from a peer template         |
| soft-reconfiguration |            | Soft reconfiguration                        |
| inbound              |            | Allow inbound soft reconfiguration          |
| always               | (Optional) | Always perform inbound soft reconfiguration |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv4-mdt

## soo auto

```
{ [ no ] soo { auto | <ext-comm-soo-aa2nn4> | <ext-comm-soo-aa4nn2> } } | { default soo }
```

### Syntax Description

| Syntax Description | no                         | (Optional) Negate a command or set its defaults |
|--------------------|----------------------------|---|
|                    | default                    | Inherit values from a peer template             |
|                    | soo                        | Specify Site-of-origin extcommunity             |
|                    | auto                       | Generate SOO automatically                      |
|                    | <i>ext-comm-soo-aa4nn2</i> | VPN extcommunity in aa4:nn or ip:nn format      |
|                    | <i>ext-comm-soo-aa2nn4</i> | VPN extcommunity in aa:nn format                |

### Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af
- /exec/configure/router-bgp/router-bgp-vrf-neighbor/router-bgp-vrf-neighbor-af-ipv4
- /exec/configure/router-bgp/router-bgp-vrf-neighbor/router-bgp-vrf-neighbor-af-ipv6



# sort

| sort [ -b | -d | -f | -g | -i | -M | -n | -r | -k <key> | -t <delim> | -u ] +

## Syntax Description

### Syntax Description

|       |   |
|-------|---|
|       | Pipe command output to filter   |
| sort  | Stream Sorter   |
| -b    | (Optional) ignore leading blanks  |
| -d    | (Optional) consider only blanks and alphanumeric characters                         |
| -f    | (Optional) fold lower case to upper case characters                                 |
| -g    | (Optional) compare according to general numerical value                             |
| -i    | (Optional) consider only printable characters                                       |
| -M    | (Optional) month sort   |
| -n    | (Optional) compare according to string numerical value                              |
| -r    | (Optional) reverse the result of comparisons  |
| -k    | (Optional) provide a key  |
| -t    | (Optional) use different separator instead of non-blank to blank transition         |
| -u    | (Optional) remove duplicate lines   |
| key   | (Optional) key in format POS1[,POS2] with POS = <field-nb>[.<char-pos>][<ordering>] |
| delim | (Optional) field delimiter char   |

## Command Mode

- /output

# source-group

[no] source-group <source> <group>

## Syntax Description

|                           |               |   |
|---------------------------|---------------|---|
| <b>Syntax Description</b> | no            | (Optional) Negate a command or set its defaults |
|                           | source-group  | Source Group                                    |
|                           | <i>source</i> | Configure source address                        |
|                           | <i>group</i>  | Configure group address                         |

## Command Mode

- /exec/configure/if-nve

# source-interface

[no] source-interface | source-interface <interface>

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | Negate a command or set its defaults               |
| source-interface   | Source interface to be used to reach tacacs server |
| interface          | Interface (default is mgmt)                        |

## Command Mode

- /exec/configure/tacacs+

# source-interface

source-interface <interface> | no source-interface

## Syntax Description

---

|                           |    |                                      |
|---------------------------|----|--------------------------------------|
| <b>Syntax Description</b> | no | Negate a command or set its defaults |
|---------------------------|----|--------------------------------------|

---

|                  |                      |
|------------------|----------------------|
| source-interface | NVE Source-Interface |
|------------------|----------------------|

---

*interface*

---

## Command Mode

- /exec/configure/if-nve

# source-interface

[no] source-interface | source-interface <interface>

## Syntax Description

| Syntax Description            |  |
|-------------------------------|--|
| <code>no</code>               | Negate a command or set its defaults               |
| <code>source-interface</code> | Source interface to be used to reach radius server |
| <code>interface</code>        | Interface (default is mgmt)                        |

## Command Mode

- /exec/configure/radius

# source-interface hold-down-time

[no] source-interface hold-down-time <sec>

## Syntax Description

|                           |                  |   |
|---------------------------|------------------|---|
| <b>Syntax Description</b> | no               | (Optional) Negate a command or set its defaults |
|                           | source-interface | NVE Source-Interface                            |
|                           | hold-down-time   | Hold source loopback down time                  |
|                           | sec              | time in seconds                                 |

## Command Mode

- /exec/configure/if-nve

# source

{ [ no ] source <intf> | no source }

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <i>source</i> Source Interface for this destination |
|                           | <i>intf</i> Interface                               |

## Command Mode

- /exec/configure/nfm-exporter

# source

source [ background ] <file> [ <args> ] +

## Syntax Description

---

### Syntax Description

---

source      run a script (python, tcl,...) from bootflash:scripts

---

background    (Optional) run the script in the background, see also 'show background' and 'kill background'

---

*file*          the script file to run

---

*args*          (Optional) argument to be passed to script

---

## Command Mode

- /exec



# source

| source <file> [ <args> ] +

## Syntax Description

---

### Syntax Description

---

| Pipe command output to filter

---

**source** run a script (python, tcl,...) from bootflash:scripts

---

*file* the script file to run

---

*args* (Optional) argument to be passed to script

---

## Command Mode

- /output

## source

source { <ipaddr> } | no source

### Syntax Description

|                           |               |                                      |
|---------------------------|---------------|--------------------------------------|
| <b>Syntax Description</b> | no            | Negate a command or set its defaults |
|                           | source        | source of tunnel packets             |
|                           | <i>ipaddr</i> | ip address (A.B.C.D)                 |

### Command Mode

- /exec/configure/if-te

# source

source <srcip> | no source

## Syntax Description

---

### Syntax Description

---

no Negate a command or set its defaults

---

source Source address for connection to controllers

---

*srcip* IP address of source

---

## Command Mode

- /exec/configure/openflow/switch

## source copy-sys

source copy-sys

### Syntax Description

---

#### Syntax Description

source run a script (python, tcl,...) from bootflash:scripts

copy-sys copy the system provided example scripts of /sys to bootflash:scripts

---

### Command Mode

- /exec

## source filter ip

```
[no] source filter ip { <ip-addr> <ip-mask> } [ ip | { { udp | tcp } { <port_num> | any } } ] [ { arp | advertise } { enable | disable } ]
```

### Syntax Description

| Syntax Description | Description                                     |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| source             | source ip configuration                         |
| filter             | source filters                                  |
| ip                 | source ip                                       |
| <i>ip-addr</i>     | IP address in format i.i.i.i                    |
| <i>ip-mask</i>     | IP network mask in format m.m.m.m               |
| ip                 | (Optional) IP Protocol                          |
| udp                | (Optional) UDP Protocol                         |
| tcp                | (Optional) TCP Protocol                         |
| <i>port_num</i>    | (Optional) Port Number                          |
| any                | (Optional) Any Port Number                      |
| arp                | (Optional) ARP                                  |
| advertise          | (Optional) advertise                            |
| enable             | (Optional) Enable                               |
| disable            | (Optional) Disable                              |

### Command Mode

- /exec/configure/smarte

# source filter ip any any

[no] source filter ip any any

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| source             | source ip configuration                         |
| filter             | source filters                                  |
| ip                 | source ip                                       |
| any                | Any IP  |

## Command Mode

- /exec/configure/smartc

# spanning-tree bpdudfilter

spanning-tree bpdudfilter <port-bpdudfilter> | no spanning-tree bpdudfilter [ <port-bpdudfilter> ]

## Syntax Description

| Syntax Description      |   |
|-------------------------|---|
| no                      | Negate a command or set its defaults          |
| spanning-tree           | Spanning Tree Subsystem                       |
| bpdudfilter             | Don't send or receive BPDUs on this interface |
| <i>port-bpdudfilter</i> | Don't send or receive BPDUs on this interface |

## Command Mode

- /exec/configure/if-switching /exec/configure/if-ethernet-switch-m

# spanning-tree bpduguard

spanning-tree bpduguard <port-bpduguard> | no spanning-tree bpduguard [ <port-bpduguard> ]

## Syntax Description

| Syntax Description    |  |                                      |
|-----------------------|--|--------------------------------------|
| no                    |  | Negate a command or set its defaults |
| spanning-tree         |  | Spanning Tree Subsystem              |
| bpduguard             |  | Don't accept BPDUs on this interface |
| <i>port-bpduguard</i> |  | Don't accept BPDUs on this interface |

## Command Mode

- /exec/configure/if-switching /exec/configure/if-ethernet-switch-m



# spanning-tree bridge-domain

[no] spanning-tree bridge-domain <bd-id>

## Syntax Description

|                           |               |   |
|---------------------------|---------------|---|
| <b>Syntax Description</b> | no            | (Optional) Negate a command or set its defaults |
|                           | spanning-tree | Spanning Tree Subsystem                         |
|                           | bridge-domain | Bridge-Domain Switch Spanning Trees             |
|                           | <i>bd-id</i>  | Bridge-Domain range, Example: 2,4-5,7,9-11      |

## Command Mode

- /exec/configure

# spanning-tree bridge assurance

[no] spanning-tree bridge assurance

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| spanning-tree      | Spanning Tree Subsystem                         |
| bridge             | Spanning tree bridge options                    |
| assurance          | Enable Bridge Assurance on all network ports    |

## Command Mode

- /exec/configure

## spanning-tree cost

spanning-tree [ vlan <vlan-id> | bridge-domain <bd-id> ] cost <port-cost> | no spanning-tree [ vlan <vlan-id> | bridge-domain <bd-id> ] cost [ <port-cost> ]

### Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | Negate a command or set its defaults                  |
| spanning-tree      | Spanning Tree Subsystem                               |
| vlan               | (Optional) VLAN Switch Spanning Trees                 |
| bridge-domain      | (Optional) Bridge-Domain Switch Spanning Trees        |
| vlan-id            | (Optional) vlan range, Example: 1,3-5,7,9-11          |
| vlan-id            | (Optional) vlan range, Example: 1,3-5,7,9-11          |
| bd-id              | (Optional) Bridge-Domain range, Example: 2,4-5,7,9-11 |
| cost               | Change an interface's spanning tree port path cost    |
| port-cost          | port path cost  |

### Command Mode

- /exec/configure/if-switching /exec/configure/if-ethernet-switch-m

## spanning-tree cost auto

[no] spanning-tree [ vlan <vlan-id> | bridge-domain <bd-id> ] cost auto

### Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults       |
| spanning-tree      | Spanning Tree Subsystem                               |
| vlan               | (Optional) VLAN Switch Spanning Trees                 |
| bridge-domain      | (Optional) Bridge-Domain Switch Spanning Trees        |
| <i>vlan-id</i>     | (Optional) vlan range, Example: 1,3-5,7,9-11          |
| <i>bd-id</i>       | (Optional) Bridge-Domain range, Example: 2,4-5,7,9-11 |
| cost               | Change an interface's spanning tree port path cost    |
| auto               | Determine cost based on media speed of this interface |

### Command Mode

- /exec/configure/if-switching /exec/configure/if-ethernet-switch-m

# spanning-tree domain

spanning-tree domain { enable | disable | <domain-id> } | no spanning-tree domain [ enable ]

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| spanning-tree      |  | Spanning Tree Subsystem              |
| domain             |  | Spanning Tree Domain                 |
| enable             |  | Enable Spanning Tree Domain          |
| disable            |  | Disable Spanning Tree Domain         |
| <i>domain-id</i>   |  | Domain Identifier                    |

## Command Mode

- /exec/configure

# spanning-tree domain clear statistics

spanning-tree domain clear statistics

## Syntax Description

---

### Syntax Description

---

|               |                         |
|---------------|-------------------------|
| spanning-tree | Spanning Tree Subsystem |
|---------------|-------------------------|

---

|        |                      |
|--------|----------------------|
| domain | Spanning Tree Domain |
|--------|----------------------|

---

|       |       |
|-------|-------|
| clear | Clear |
|-------|-------|

---

|            |                  |
|------------|------------------|
| statistics | Clear Statistics |
|------------|------------------|

---

## Command Mode

- /exec/configure

# spanning-tree fcoe

[no] spanning-tree fcoe

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| spanning-tree      | Spanning Tree Subsystem                         |
| fcoe               | Enable STP for FCoE VLANs                       |

## Command Mode

- /exec/configure

# spanning-tree guard

spanning-tree guard <guard-type> | no spanning-tree guard [ <guard-type> ]

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults           |
| spanning-tree      |  | Spanning Tree Subsystem                        |
| guard              |  | Change an interface's spanning tree guard mode |
| <i>guard-type</i>  |  | Change an interface's spanning tree guard mode |

## Command Mode

- /exec/configure/if-switching /exec/configure/if-ethernet-switch-m



# spanning-tree lc-issu

spanning-tree lc-issu <issu-type> | no spanning-tree lc-issu [ <issu-type> ]

## Syntax Description

|                           |                  |                                      |
|---------------------------|------------------|--------------------------------------|
| <b>Syntax Description</b> | no               | Negate a command or set its defaults |
|                           | spanning-tree    | Spanning Tree Subsystem              |
|                           | lc-issu          | Configure Linecard ISSU type         |
|                           | <i>issu-type</i> | ISSU Type                            |

## Command Mode

- /exec/configure

# spanning-tree lc-issu

spanning-tree lc-issu <port-issu-type> | no spanning-tree lc-issu [ <port-issu-type> ]

## Syntax Description

| Syntax Description    |  |                                      |
|-----------------------|--|--------------------------------------|
| no                    |  | Negate a command or set its defaults |
| spanning-tree         |  | Spanning Tree Subsystem              |
| lc-issu               |  | Configure Linecard ISSU type         |
| <i>port-issu-type</i> |  | ISSU Type                            |

## Command Mode

- /exec/configure/if-switching /exec/configure/if-ethernet-switch-m

# spanning-tree link-type

spanning-tree link-type <link-type-val> | no spanning-tree link-type [ <link-type-val> ]

## Syntax Description

|                           |                      |  |
|---------------------------|----------------------|--|
| <b>Syntax Description</b> | no                   | Negate a command or set its defaults               |
|                           | spanning-tree        | Spanning Tree Subsystem                            |
|                           | link-type            | Specify a link type for spanning tree protocol use |
|                           | <i>link-type-val</i> | Specify a link type for spanning tree protocol use |

## Command Mode

- /exec/configure/if-switching /exec/configure/if-ethernet-switch-m

# spanning-tree loopguard default

[no] spanning-tree loopguard default

## Syntax Description

|                           |               |   |
|---------------------------|---------------|---|
| <b>Syntax Description</b> | no            | (Optional) Negate a command or set its defaults |
|                           | spanning-tree | Spanning Tree Subsystem                         |
|                           | loopguard     | Spanning tree loopguard options                 |
|                           | default       | Enable loopguard by default on all ports        |

## Command Mode

- /exec/configure

# spanning-tree mode

spanning-tree mode <stp-mode> | no spanning-tree mode [ <stp-mode> ]

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| spanning-tree      |  | Spanning Tree Subsystem              |
| mode               |  | Spanning Tree operating mode         |
| <i>stp-mode</i>    |  | Spanning Tree operating mode         |

## Command Mode

- /exec/configure

# spanning-tree mst configuration

spanning-tree mst configuration

## Syntax Description

---

### Syntax Description

---

spanning-tree Spanning Tree Subsystem

---

mst Multiple spanning tree configuration

---

configuration Enter MST configuration submode

---

## Command Mode

- /exec/configure

# spanning-tree mst configuration

[no] spanning-tree mst configuration

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| spanning-tree      |  | Spanning Tree Subsystem              |
| mst                |  | Multiple spanning tree configuration |
| configuration      |  | Enter MST configuration submode      |

## Command Mode

- /exec/configure

## spanning-tree mst cost

spanning-tree mst <mst-id> cost <port-cost> | no spanning-tree mst <mst-id> cost [ <port-cost> ]

### Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults               |
| spanning-tree      |  | Spanning Tree Subsystem                            |
| mst                |  | Multiple spanning tree                             |
| <i>mst-id</i>      |  | MST instance list, example 0,2-4,6,8-12            |
| cost               |  | Change an interface's spanning tree port path cost |
| <i>port-cost</i>   |  | port path cost                                     |

### Command Mode

- /exec/configure/if-switching /exec/configure/if-ethernet-switch-m



# spanning-tree mst cost auto

[no] spanning-tree mst <mst-id> cost auto

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults       |
| spanning-tree      | Spanning Tree Subsystem                               |
| mst                | Multiple spanning tree                                |
| <i>mst-id</i>      | MST instance list, example 0,2-4,6,8-12               |
| cost               | Change an interface's spanning tree port path cost    |
| auto               | Determine cost based on media speed of this interface |

## Command Mode

- /exec/configure/if-switching /exec/configure/if-ethernet-switch-m

# spanning-tree mst forward-time

spanning-tree mst forward-time <fwd-time> | no spanning-tree mst forward-time [ <fwd-time> ]

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults          |
| spanning-tree      |  | Spanning Tree Subsystem                       |
| mst                |  | Multiple spanning tree configuration          |
| forward-time       |  | Set the forward delay for the spanning tree   |
| <i>fwd-time</i>    |  | number of seconds for the forward delay timer |

## Command Mode

- /exec/configure

# spanning-tree mst hello-time

spanning-tree mst hello-time <hello-time-val> | no spanning-tree mst hello-time [ <hello-time-val> ]

## Syntax Description

|                           |                       |   |
|---------------------------|-----------------------|---|
| <b>Syntax Description</b> | no                    | Negate a command or set its defaults                |
|                           | spanning-tree         | Spanning Tree Subsystem                             |
|                           | mst                   | Multiple spanning tree configuration                |
|                           | hello-time            | Set the hello interval for the spanning tree        |
|                           | <i>hello-time-val</i> | number of seconds between generation of config bpdu |

## Command Mode

- /exec/configure

# spanning-tree mst max-age

spanning-tree mst max-age <max-age-val> | no spanning-tree mst max-age [ <max-age-val> ]

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults                         |
| spanning-tree      |  | Spanning Tree Subsystem                                      |
| mst                |  | Multiple spanning tree configuration                         |
| max-age            |  | Set the max age interval for the spanning tree               |
| <i>max-age-val</i> |  | maximum number of seconds the information in a bpdu is valid |

## Command Mode

- /exec/configure

# spanning-tree mst max-hops

spanning-tree mst max-hops <max-hops-val> | no spanning-tree mst max-hops [ <max-hops-val> ]

## Syntax Description

|                           |                     |  |
|---------------------------|---------------------|--|
| <b>Syntax Description</b> | no                  | Negate a command or set its defaults         |
|                           | spanning-tree       | Spanning Tree Subsystem                      |
|                           | mst                 | Multiple spanning tree configuration         |
|                           | max-hops            | Set the max hops value for the spanning tree |
|                           | <i>max-hops-val</i> | maximum number of hops a BPDU is valid       |

## Command Mode

- /exec/configure

# spanning-tree mst port-priority

spanning-tree mst <mst-id> port-priority <port-prio> | no spanning-tree mst <mst-id> port-priority [ <port-prio> ]

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults              |
| spanning-tree      |  | Spanning Tree Subsystem                           |
| mst                |  | Multiple spanning tree                            |
| <i>mst-id</i>      |  | MST instance list, example 0,2-4,6,8-12           |
| port-priority      |  | Change an interface's spanning tree port priority |
| <i>port-prio</i>   |  | Spanning-tree port priority                       |

## Command Mode

- /exec/configure/if-switching /exec/configure/if-ethernet-switch-m

# spanning-tree mst pre-standard

[no] spanning-tree mst pre-standard

## Syntax Description

|                           |               |  |
|---------------------------|---------------|--|
| <b>Syntax Description</b> | no            | (Optional) Negate a command or set its defaults  |
|                           | spanning-tree | Spanning Tree Subsystem                          |
|                           | mst           | Multiple spanning tree                           |
|                           | pre-standard  | Force pre-standard MST BPDU transmission on port |

## Command Mode

- /exec/configure/if-switching /exec/configure/if-ethernet-switch-m

# spanning-tree mst priority

spanning-tree mst <mst-id> priority <prio> | no spanning-tree mst <mst-id> priority [ <prio> ]

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults          |
| spanning-tree      |  | Spanning Tree Subsystem                       |
| mst                |  | Multiple spanning tree configuration          |
| <i>mst-id</i>      |  | MST instance range, example: 0-3,5,7-9        |
| priority           |  | Set the bridge priority for the spanning tree |
| <i>prio</i>        |  | bridge priority in increments of 4096         |

## Command Mode

- /exec/configure



## spanning-tree mst root

```
spanning-tree mst <mst-id> root <root-type> [ diameter <diameter-val> [ hello-time <hello-time-val> ] ] | no
spanning-tree mst <mst-id> root [ <root-type> [ diameter <diameter-val> [ hello-time <hello-time-val> ] ] ]
```

### Syntax Description

| Syntax Description    |  |
|-----------------------|--|
| no                    | Negate a command or set its defaults                           |
| spanning-tree         | Spanning Tree Subsystem  |
| mst                   | Multiple spanning tree configuration                           |
| <i>mst-id</i>         | MST instance range, example: 0-3,5,7-9                         |
| diameter              | (Optional) Network diameter of this spanning tree              |
| <i>diameter-val</i>   | (Optional) Maximum number of bridges between any two end nodes |
| root                  | configure switch as root                                       |
| <i>root-type</i>      | configure switch as root                                       |
| hello-time            | (Optional) Set the hello interval for the spanning tree        |
| <i>hello-time-val</i> | (Optional) number of seconds between generation of config bpdu |

### Command Mode

- /exec/configure

# spanning-tree mst simulate pvst

[no] spanning-tree mst simulate pvst [ <simpvst-disable> ]

## Syntax Description

| Syntax Description     |            |   |
|------------------------|------------|---|
| no                     | (Optional) | Negate a command or set its defaults      |
| spanning-tree          |            | Spanning Tree Subsystem                   |
| mst                    |            | Multiple spanning tree                    |
| simulate               |            | Enable spanning tree simulation           |
| pvst                   |            | Enable PVST simulation                    |
| <i>simpvst-disable</i> | (Optional) | Disable PVST simulation on this interface |

## Command Mode

- /exec/configure/if-switching /exec/configure/if-ethernet-switch-m

# spanning-tree mst simulate pvst global

[no] spanning-tree mst simulate pvst global

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| spanning-tree      | Spanning Tree Subsystem                         |
| mst                | Multiple spanning tree configuration            |
| simulate           | Enable spanning tree simulation                 |
| pvst               | Enable PVST simulation                          |
| global             | Enable PVST Simulation by default on all ports  |

## Command Mode

- /exec/configure

# spanning-tree pathcost method

spanning-tree pathcost method <method-val> | no spanning-tree pathcost method [ <method-val> ]

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults       |
| spanning-tree      |  | Spanning Tree Subsystem                    |
| pathcost           |  | Spanning tree pathcost options             |
| method             |  | Method to calculate default port path cost |
| <i>method-val</i>  |  | Method to calculate default port path cost |

## Command Mode

- /exec/configure

# spanning-tree port-priority

spanning-tree [ vlan <vlan-id> | bridge-domain <bd-id> ] port-priority <port-prio> | no spanning-tree [ vlan <vlan-id> | bridge-domain <bd-id> ] port-priority [ <port-prio> ]

## Syntax Description

### Syntax Description

|                  |   |
|------------------|---|
| no               | Negate a command or set its defaults                  |
| spanning-tree    | Spanning Tree Subsystem                               |
| vlan             | (Optional) VLAN Switch Spanning Trees                 |
| bridge-domain    | (Optional) Bridge-Domain Switch Spanning Trees        |
| <i>vlan-id</i>   | (Optional) vlan range, Example: 1,3-5,7,9-11          |
| <i>bd-id</i>     | (Optional) Bridge-Domain range, Example: 2,4-5,7,9-11 |
| port-priority    | Change an interface's spanning tree port priority     |
| <i>port-prio</i> | Spanning-tree port priority                           |

## Command Mode

- /exec/configure/if-switching /exec/configure/if-ethernet-switch-m

## spanning-tree port type

spanning-tree port type <port-type> | no spanning-tree port type [ <port-type> ]

### Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults               |
| spanning-tree      |  | Spanning Tree Subsystem                            |
| port               |  | Spanning tree port options                         |
| type               |  | Specify a port type for spanning tree protocol use |
| <i>port-type</i>   |  | Specify a port type for spanning tree protocol use |

### Command Mode

- /exec/configure/if-switching /exec/configure/if-ethernet-switch-m

# spanning-tree port type edge bpdufilter default

[no] spanning-tree port type edge bpdufilter default

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults            |
| spanning-tree      | Spanning Tree Subsystem                                    |
| port               | Spanning tree port options                                 |
| type               | Specify a port type for spanning tree protocol use         |
| edge               | Consider the interface as edge port (enable portfast)      |
| bpdufilter         | Enable edge port (portfast) bpdu filter on this switch     |
| default            | Enable bdpu filter by default on all edge (portfast) ports |

## Command Mode

- /exec/configure

# spanning-tree port type edge bpduguard default

[no] spanning-tree port type edge bpduguard default

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults          |
| spanning-tree      | Spanning Tree Subsystem                                  |
| port               | Spanning tree port options                               |
| type               | Specify a port type for spanning tree protocol use       |
| edge               | Consider the interface as edge port (enable portfast)    |
| bpduguard          | Enable edge port (portfast) bpduguard on this switch     |
| default            | Enable bpduguard by default on all edge (portfast) ports |

## Command Mode

- /exec/configure



# spanning-tree port type edge default

[no] spanning-tree port type edge default

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults       |
| spanning-tree      | Spanning Tree Subsystem                               |
| port               | Spanning tree port options                            |
| type               | Specify a port type for spanning tree protocol use    |
| edge               | Consider the interface as edge port (enable portfast) |
| default            | Select edge port type by default on all access ports  |

## Command Mode

- /exec/configure

# spanning-tree port type edge trunk

spanning-tree port type edge trunk | no spanning-tree port type edge trunk

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults                                     |
| spanning-tree      |  | Spanning Tree Subsystem  |
| port               |  | Spanning tree port options   |
| type               |  | Specify a port type for spanning tree protocol use                       |
| edge               |  | Consider the interface as edge port (enable portfast)                    |
| trunk              |  | Consider the interface as edge port (enable portfast) even in trunk mode |

## Command Mode

- /exec/configure/if-switching /exec/configure/if-ethernet-switch-m

# spanning-tree port type network default

[no] spanning-tree port type network default

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults    |
| spanning-tree      | Spanning Tree Subsystem                            |
| port               | Spanning tree port options                         |
| type               | Specify a port type for spanning tree protocol use |
| network            | Consider the interface as inter-switch link        |
| default            | Select network port type by default on all ports   |

## Command Mode

- /exec/configure

# spanning-tree portfast

spanning-tree portfast [ <port-portfast> ] | no spanning-tree portfast [ <port-portfast> ]

## Syntax Description

### Syntax Description

|                      |   |
|----------------------|---|
| no                   | Negate a command or set its defaults                              |
| spanning-tree        | Spanning Tree Subsystem   |
| portfast             | Enable an interface to move directly to fwd on link up            |
| <i>port-portfast</i> | (Optional) Enable an interface to move directly to fwd on link up |

## Command Mode

- /exec/configure/if-switching /exec/configure/if-ethernet-switch-m

# spanning-tree portfast bpdufilter default

[no] spanning-tree portfast bpdufilter default

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults        |
| spanning-tree      | Spanning Tree Subsystem                                |
| portfast           | Enable an interface to move directly to fwd on link up |
| bpdufilter         | Enable portfast bpdu filter on this switch             |
| default            | Enable bdpu filter by default on all portfast ports    |

## Command Mode

- /exec/configure

# spanning-tree portfast bpduguard default

[no] spanning-tree portfast bpduguard default

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults        |
| spanning-tree      | Spanning Tree Subsystem                                |
| portfast           | Enable an interface to move directly to fwd on link up |
| bpduguard          | Enable portfast bpdu guard on this switch              |
| default            | Enable bdpu guard by default on all portfast ports     |

## Command Mode

- /exec/configure

# spanning-tree portfast default

[no] spanning-tree portfast default

## Syntax Description

| Syntax        | Description  |
|---------------|--|
| no            | (Optional) Negate a command or set its defaults        |
| spanning-tree | Spanning Tree Subsystem                                |
| portfast      | Enable an interface to move directly to fwd on link up |
| default       | Enable portfast by default on all access ports         |

## Command Mode

- /exec/configure

# spanning-tree pseudo-information

spanning-tree pseudo-information

## Syntax Description

---

### Syntax Description

---

|               |                         |
|---------------|-------------------------|
| spanning-tree | Spanning Tree Subsystem |
|---------------|-------------------------|

---

|                    |  |
|--------------------|--|
| pseudo-information | configure spanning tree pseudo information |
|--------------------|--|

---

## Command Mode

- /exec/configure



# spanning-tree vlan

[no] spanning-tree vlan <vlan-id>

## Syntax Description

|                           |                |   |
|---------------------------|----------------|---|
| <b>Syntax Description</b> | no             | (Optional) Negate a command or set its defaults |
|                           | spanning-tree  | Spanning Tree Subsystem                         |
|                           | vlan           | VLAN Switch Spanning Trees                      |
|                           | <i>vlan-id</i> | vlan range, Example: 1,3-5,7,9-11               |

## Command Mode

- /exec/configure

## spanning-tree vlan forward-time

spanning-tree { vlan <vlan-id> | bridge-domain <bd-id> } forward-time <fwd-time> | no spanning-tree { vlan <vlan-id> | bridge-domain <bd-id> } forward-time [ <fwd-time> ]

### Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults          |
| spanning-tree      |  | Spanning Tree Subsystem                       |
| vlan               |  | VLAN Switch Spanning Trees                    |
| bridge-domain      |  | Bridge-Domain Switch Spanning Trees           |
| <i>vlan-id</i>     |  | vlan range, Example: 1,3-5,7,9-11             |
| <i>bd-id</i>       |  | Bridge-Domain range, Example: 2,4-5,7,9-11    |
| forward-time       |  | Set the forward delay for the spanning tree   |
| <i>fwd-time</i>    |  | number of seconds for the forward delay timer |

### Command Mode

- /exec/configure

## spanning-tree vlan hello-time

```
spanning-tree { vlan <vlan-id> | bridge-domain <bd-id> } hello-time <hello-time-val> | no spanning-tree {
vlan <vlan-id> | bridge-domain <bd-id> } hello-time [ <hello-time-val> ]
```

### Syntax Description

| Syntax Description    |   |
|-----------------------|---|
| no                    | Negate a command or set its defaults                |
| spanning-tree         | Spanning Tree Subsystem                             |
| vlan                  | VLAN Switch Spanning Trees                          |
| bridge-domain         | Bridge-Domain Switch Spanning Trees                 |
| <i>vlan-id</i>        | vlan range, Example: 1,3-5,7,9-11                   |
| <i>bd-id</i>          | Bridge-Domain range, Example: 2,4-5,7,9-11          |
| hello-time            | Set the hello interval for the spanning tree        |
| <i>hello-time-val</i> | number of seconds between generation of config bpdu |

### Command Mode

- /exec/configure

## spanning-tree vlan max-age

spanning-tree { vlan <vlan-id> | bridge-domain <bd-id> } max-age <max-age-val> | no spanning-tree { vlan <vlan-id> | bridge-domain <bd-id> } max-age [ <max-age-val> ]

### Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults                         |
| spanning-tree      |  | Spanning Tree Subsystem                                      |
| vlan               |  | VLAN Switch Spanning Trees                                   |
| bridge-domain      |  | Bridge-Domain Switch Spanning Trees                          |
| <i>vlan-id</i>     |  | vlan range, Example: 1,3-5,7,9-11                            |
| <i>bd-id</i>       |  | Bridge-Domain range, Example: 2,4-5,7,9-11                   |
| max-age            |  | Set the max age interval for the spanning tree               |
| <i>max-age-val</i> |  | maximum number of seconds the information in a bpdu is valid |

### Command Mode

- /exec/configure

## spanning-tree vlan priority

```
spanning-tree { vlan <vlan-id> | bridge-domain <bd-id> } priority <prio> | no spanning-tree { vlan <vlan-id>
| bridge-domain <bd-id> } priority [ <prio> ]
```

### Syntax Description

| Syntax Description         |  |   |
|----------------------------|--|---|
| <code>no</code>            |  | Negate a command or set its defaults          |
| <code>spanning-tree</code> |  | Spanning Tree Subsystem                       |
| <code>vlan</code>          |  | VLAN Switch Spanning Trees                    |
| <code>bridge-domain</code> |  | Bridge-Domain Switch Spanning Trees           |
| <code>vlan-id</code>       |  | vlan range, Example: 1,3-5,7,9-11             |
| <code>bd-id</code>         |  | Bridge-Domain range, Example: 2,4-5,7,9-11    |
| <code>priority</code>      |  | Set the bridge priority for the spanning tree |
| <code>prio</code>          |  | bridge priority in increments of 4096         |

### Command Mode

- /exec/configure

## spanning-tree vlan root

```
spanning-tree { vlan <vlan-id> | bridge-domain <bd-id> } root <root-type> [ diameter <diameter-val> [
hello-time <hello-time-val> ] ] | no spanning-tree { vlan <vlan-id> | bridge-domain <bd-id> } root [ <root-type>
[ diameter <diameter-val> [ hello-time <hello-time-val> ] ] ]
```

### Syntax Description

| Syntax Description    |  |
|-----------------------|--|
| no                    | Negate a command or set its defaults                           |
| spanning-tree         | Spanning Tree Subsystem  |
| vlan                  | VLAN Switch Spanning Trees                                     |
| bridge-domain         | Bridge-Domain Switch Spanning Trees                            |
| <i>vlan-id</i>        | vlan range, Example: 1,3-5,7,9-11                              |
| <i>bd-id</i>          | Bridge-Domain range, Example: 2,4-5,7,9-11                     |
| diameter              | (Optional) Network diameter of this spanning tree              |
| <i>diameter-val</i>   | (Optional) Maximum number of bridges between any two end nodes |
| root                  | configure switch as root                                       |
| <i>root-type</i>      | configure switch as root                                       |
| hello-time            | (Optional) Set the hello interval for the spanning tree        |
| <i>hello-time-val</i> | (Optional) number of seconds between generation of config bpdu |

### Command Mode

- /exec/configure

# speed-group

speed-group <gspeed\_val> | no speed-group [ <gspeed\_val> ]

## Syntax Description

|                           |                              |                                      |
|---------------------------|------------------------------|--------------------------------------|
| <b>Syntax Description</b> | no                           | Negate a command or set its defaults |
|                           | speed-group port group speed |                                      |
|                           | <i>gspeed_val</i>            | Interface port speed                 |

## Command Mode

- /exec/configure/if-eth-base

# speed

```
speed { <speed_val> }
```

## Syntax Description

---

### Syntax Description

---

|       |                      |
|-------|----------------------|
| speed | Enter the port speed |
|-------|----------------------|

---

|                  |                      |
|------------------|----------------------|
| <i>speed_val</i> | Interface port speed |
|------------------|----------------------|

---

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-eth-non-member /exec/configure/if-port-channel



# speed

speed { <speed\_val> }

## Syntax Description

---

### Syntax Description

---

|       |                      |
|-------|----------------------|
| speed | Enter the port speed |
|-------|----------------------|

---

|                  |                      |
|------------------|----------------------|
| <i>speed_val</i> | Interface port speed |
|------------------|----------------------|

---

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-eth-non-member /exec/configure/if-port-channel

# speed

```
[no] speed [ { <speed_val> | auto [ 100 [ 1000 ] ] } ]
```

## Syntax Description

| Syntax Description | no               | Description                          |
|--------------------|------------------|--------------------------------------|
|                    | no               | Negate a command or set its defaults |
|                    | speed            | Enter the port speed                 |
|                    | <i>speed_val</i> | (Optional) Interface port speed      |
|                    | auto             | (Optional) auto negotiate speed      |
|                    | 100              | (Optional) 100 Mbps speed            |
|                    | 1000             | (Optional) 1000 Mbps speed           |

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-eth-non-member /exec/configure/if-port-channel

# speed

```
[no] speed [ { <speed_val> | auto [ 100 [ 1000 ] ] } ]
```

## Syntax Description

| Syntax           | Description                          |
|------------------|--------------------------------------|
| no               | Negate a command or set its defaults |
| speed            | Enter the port speed                 |
| <i>speed_val</i> | (Optional) Interface port speed      |
| auto             | (Optional) auto negotiate speed      |
| 100              | (Optional) 100 Mbps speed            |
| 1000             | (Optional) 1000 Mbps speed           |

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-eth-non-member /exec/configure/if-port-channel

# speed

speed { <speed\_val> }

## Syntax Description

---

### Syntax Description

---

|       |                      |
|-------|----------------------|
| speed | Enter the port speed |
|-------|----------------------|

---

|                  |                      |
|------------------|----------------------|
| <i>speed_val</i> | Interface port speed |
|------------------|----------------------|

---

## Command Mode

- /exec/configure/if-mgmt-ether

# speed

```
[no] speed [ { <speed_val> | auto [ 100 [ 1000 ] ] } ]
```

## Syntax Description

| Syntax Description |                                      |
|--------------------|--------------------------------------|
| no                 | Negate a command or set its defaults |
| speed              | Enter the port speed                 |
| <i>speed_val</i>   | (Optional) Interface port speed      |
| auto               | (Optional) auto negotiate speed      |
| 100                | (Optional) 100 Mbps speed            |
| 1000               | (Optional) 1000 Mbps speed           |

## Command Mode

- /exec/configure/if-mgmt-ether

# speed

[no] speed <i0>

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <i>no</i> (Optional) Negate a command or set its defaults |
|                           | <i>speed</i> Set the transmit and receive speeds          |
|                           | <i>i0</i> Transmit and receive speeds                     |

## Command Mode

- /exec/configure/com1

# speed

[no] speed <i0>

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <b>no</b> (Optional) Negate a command or set its defaults |
|                           | <b>speed</b> Set the transmit and receive speeds          |
|                           | <b>i0</b> Transmit and receive speeds                     |

## Command Mode

- /exec/configure/console

# speed auto

speed auto

## Syntax Description

---

### Syntax Description

---

`speed` Enter the port speed

---

`auto` auto negotiate speed

---

### Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-eth-non-member /exec/configure/if-port-channel



# speed auto 100

speed auto 100

## Syntax Description

---

### Syntax Description

---

speed Enter the port speed

---

auto auto negotiate speed

---

100 100 Mbps speed

---

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-eth-non-member /exec/configure/if-port-channel

# speed auto 100 1000

```
speed auto 100 1000
```

## Syntax Description

---

### Syntax Description

---

|                    |                      |
|--------------------|----------------------|
| <code>speed</code> | Enter the port speed |
|--------------------|----------------------|

---

|                   |                      |
|-------------------|----------------------|
| <code>auto</code> | auto negotiate speed |
|-------------------|----------------------|

---

|                  |                |
|------------------|----------------|
| <code>100</code> | 100 Mbps speed |
|------------------|----------------|

---

|                   |                 |
|-------------------|-----------------|
| <code>1000</code> | 1000 Mbps speed |
|-------------------|-----------------|

---

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-eth-non-member /exec/configure/if-port-channel

# speed auto 100 1000

```
speed auto 100 1000
```

## Syntax Description

| Syntax Description | Description          |
|--------------------|----------------------|
| speed              | Enter the port speed |
| auto               | auto negotiate speed |
| 100                | 100 Mbps speed       |
| 1000               | 1000 Mbps speed      |

## Command Mode

- /exec/configure/if-mgmt-ether

# speed auto 100

speed auto 100

## Syntax Description

---

### Syntax Description

---

`speed` Enter the port speed

---

`auto` auto negotiate speed

---

`100` 100 Mbps speed

---

## Command Mode

- /exec/configure/if-mgmt-ether

# speed auto

speed auto

## Syntax Description

---

### Syntax Description

---

speed Enter the port speed

---

auto auto negotiate speed

---

## Command Mode

- /exec/configure/if-mgmt-ether

# spf-interval

spf-interval <max-wait> [ <initial-wait> <second-wait> ] | no spf-interval <max-wait> [ <initial-wait> <second-wait> ]

## Syntax Description

| Syntax Description  |  |
|---------------------|--|
| no                  | Negate a command or set its defaults                                     |
| spf-interval        | Configure SPF interval   |
| <i>max-wait</i>     | Maximum wait between trigger and SPF computation (milli-secs)            |
| <i>initial-wait</i> | (Optional) Initial wait between trigger and SPF computation (milli-secs) |
| <i>second-wait</i>  | (Optional) Second wait between trigger and SPF computation (milli-secs)  |

## Command Mode

- /exec/configure/otv-isis/otv-isis-vrf-common

# spf-interval

spf-interval <level> <max-wait> [ <initial-wait> <second-wait> ] | no spf-interval <level> <max-wait> [ <initial-wait> <second-wait> ]

## Syntax Description

### Syntax Description

|                           |  |
|---------------------------|--|
| <code>no</code>           | Negate a command or set its defaults                                     |
| <code>spf-interval</code> | Configure SPF interval   |
| <i>level</i>              | IS-IS level  |
| <i>max-wait</i>           | Maximum wait between trigger and SPF computation (milli-secs)            |
| <i>initial-wait</i>       | (Optional) Initial wait between trigger and SPF computation (milli-secs) |
| <i>second-wait</i>        | (Optional) Second wait between trigger and SPF computation (milli-secs)  |

## Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

# spf mode incremental

[no] spf mode incremental

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| spf                | Configure route computation related settings    |
| mode               | Set the mode of spf computation                 |
| incremental        | If possible, recompute only parts of the SPT    |

## Command Mode

- /exec/configure/router-ospf /exec/configure/router-ospf/vrf



# spf mode incremental

[no] spf mode incremental

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| spf                | Configure route computation related settings    |
| mode               | Set the mode of spf computation                 |
| incremental        | If possible, recompute only parts of the SPT    |

## Command Mode

- /exec/configure/router-ospf3/router-ospf3-af-ipv6 /exec/configure/router-ospf3/vrf/router-ospf3-af-ipv6

# spine-anycast-gateway

[no] spine-anycast-gateway

## Syntax Description

|                           |                       |   |
|---------------------------|-----------------------|---|
| <b>Syntax Description</b> | no                    | (Optional) Negate a command or set its defaults |
|                           | spine-anycast-gateway | Enable Spine-Anycast-Gateway                    |

## Command Mode

- /exec/configure/if-nve/vni

# sport

{ sport <sval> } | { no sport }

## Syntax Description

---

### Syntax Description

**no** Negate a command or set its defaults

---

**sport** Configure ngoam Udp source port range

---

*sval* Udp source port range, max span 1024, Example: 2000-3000,400,500

---

## Command Mode

- /exec/configure/configngoamprofile

# srom backplane

```
srom { backplane [ brief ] }
```

## Syntax Description

---

**Syntax Description**

---

srom    set SPROM contents should be done very carefully

---

backplane    set backplane module srom contents

---

brief    (Optional) set minimal/essential backplane module srom contents

---

## Command Mode

- /exec

# sptom recover backplane

sptom recover backplane <i0>

## Syntax Description

---

### Syntax Description

---

sptom set SPROM contents should be done very carefully

---

recover SPROM recovery

---

backplane set backplane module sptom contents

---

*i0* please enter instance of backplane sptom

---

## Command Mode

- /exec

# ssh

```
{ ssh <s0> [ [ [ vrf { <vrf-name> | <vrf-known-name> } ] [ source-ip <s1> ] ] ] [ source-interface <intf> ] ] }
| { ssh <s0> [ [ [ source-ip <s1> ] [ vrf { <vrf-name> | <vrf-known-name> } ] ] ] [ source-interface <intf> ] ]
}
```

## Syntax Description

### Syntax Description

|                  |  |
|------------------|--|
| ssh              | SSH to another system                      |
| vrf              | (Optional) Display per-VRF information     |
| source-ip        | (Optional) ip address to bind              |
| source-interface | (Optional) Select source interface         |
| s0               | Enter hostname or user@hostname            |
| vrf-name         | (Optional) VRF name                        |
| vrf-known-name   | (Optional) Known VRF name                  |
| s1               | (Optional) Enter source ip address to bind |
| intf             | (Optional)                                 |

## Command Mode

- /exec

# ssh6

```
{ ssh6 <s0> [ [ vrf { <vrf-name> | <vrf-known-name> } ] [ source-ip <s2> ] [ interface <s1> ] ] [ source-interface <intf> ] ] } | { ssh6 <s0> [ [ source-ip <s2> ] [ vrf { <vrf-name> | <vrf-known-name> } ] [ interface <s1> ] ] [ source-interface <intf> ] ] }
```

## Syntax Description

### Syntax Description

|                  |   |
|------------------|---|
| ssh6             | SSH to another system using IPv6 addressing |
| vrf              | (Optional) vrf to use                       |
| source-ip        | (Optional) ip address to bind               |
| source-interface | (Optional) Select source interface          |
| interface        | (Optional) interface to bind                |
| s0               | Enter hostname or user@hostname             |
| vrf-name         | (Optional) VRF name                         |
| vrf-known-name   | (Optional) Known VRF name                   |
| s2               | (Optional) Enter source ip address to bind  |
| s1               | (Optional) Enter interface to bind          |
| intf             | (Optional)                                  |

## Command Mode

- /exec

# ssh cipher-mode weak

```
{ { ssh cipher-mode weak } | { no ssh cipher-mode [ weak ] } }
```

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| ssh                |  | SSH to another system                |
| cipher-mode        |  | Set Cipher-mode for ssh              |
| weak               |  | Enable Weak Ciphers                  |

## Command Mode

- /exec/configure/



## ssh key dsa

```
{ ssh key { dsa [ force ] | rsa [ { <i0> | <oldrange> } [ force ] ] } | no ssh key [ { dsa [ force ] | rsa [ { <i0> | <oldrange> } [ force ] ] ] }
```

### Syntax Description

#### Syntax Description

|                 |   |
|-----------------|---|
| no              | Negate a command or set its defaults                                      |
| ssh             | SSH to another system   |
| key             | Generate SSH Key  |
| dsa             | Generate DSA keys   |
| force           | (Optional) Force the generation of keys even if previous ones are present |
| rsa             | Generate RSA keys   |
| <i>i0</i>       | (Optional) Enter number of bits (in multiples of 8)                       |
| <i>oldrange</i> | (Optional) Enter number of bits   |
| force           | (Optional) Force the generation of keys even if previous ones are present |
| force           | (Optional) Force the generation of keys even if previous ones are present |

### Command Mode

- /exec/configure

# ssh login-attempts

```
{ { ssh login-attempts <d0> } | { no ssh login-attempts [ <d0> ] } }
```

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| ssh                |  | SSH to another system                |
| login-attempts     |  | Set maximum login attempts from ssh  |
| <i>d0</i>          |  | Specify max-attempt number           |

## Command Mode

- /exec/configure/

# ssh server enable

[no] ssh server enable

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ssh                | Configure SSH parameters                        |
| server             | Configure SSH Server parameters                 |
| enable             | Enable SSH server                               |

## Command Mode

- /exec/configure

# standby

[no] standby [ ip <ip-addr-first> | IPv6 <ip-addrv6-first> ]

## Syntax Description

| Syntax Description   |            |                                      |
|----------------------|------------|--------------------------------------|
| no                   | (Optional) | Negate a command or set its defaults |
| standby              |            | Standby node                         |
| ip                   | (Optional) | ip address for standby node          |
| <i>ip-addr-first</i> | (Optional) | ITD node IPv4 address                |
| IPv6                 | (Optional) | IPv6 address                         |

## Command Mode

- /exec/configure/itd-dg-node

# standby

[no] standby [ ip <ip-addr-first> | IPv6 <ip-addrv6-first> ]

## Syntax Description

| Syntax Description   |   |
|----------------------|---|
| no                   | (Optional) Negate a command or set its defaults |
| standby              | Standby node                                    |
| ip                   | (Optional) ip address for standby node          |
| <i>ip-addr-first</i> | (Optional) ITD node IPv4 address                |
| IPv6                 | (Optional) IPv6 address                         |

## Command Mode

- /exec/configure/itd-dg-node

# standby

[no] standby [ ip <ip-addr-first> | IPv6 <ip-addrv6-first> ]

## Syntax Description

| Syntax Description   |            |                                      |
|----------------------|------------|--------------------------------------|
| no                   | (Optional) | Negate a command or set its defaults |
| standby              |            | Standby node                         |
| ip                   | (Optional) | ip address for standby node          |
| <i>ip-addr-first</i> | (Optional) | PLB node IPv4 address                |
| IPv6                 | (Optional) | IPv6 address                         |

## Command Mode

- /exec/configure/plb-dg-node

# start

start

## Syntax Description

---

### Syntax Description

---

**start** Start  
Trigger

---

## Command Mode

- /exec/elanms/sel3

# start

start

## Syntax Description

---

### Syntax Description

---

`start` Start  
Trigger

---

## Command Mode

- /exec/elanms/se14



# start

start

## Syntax Description

---

### Syntax Description

---

`start` Start  
Trigger

---

## Command Mode

- /exec/elanms/sel5

# start

start

## Syntax Description

---

### Syntax Description

---

`start` Start  
Trigger

---

## Command Mode

- /exec/elanms/sel6

# start

start

## Syntax Description

---

### Syntax Description

---

`start` Start  
Trigger

---

## Command Mode

- /exec/elanms/sel7

# start

start

## Syntax Description

---

### Syntax Description

---

`start` Start  
Trigger

---

## Command Mode

- /exec/elanms/outsel0

# start

start

## Syntax Description

---

### Syntax Description

---

**start** Start  
Trigger

---

## Command Mode

- /exec/elanms/outsel5

# state enabled

[no] state enabled

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| state              | Port-profile state                              |
| enabled            | Enable/ disable the port-profile                |

## Command Mode

- /exec/configure/port-profile

# stateful-ha

[no] stateful-ha [ pss-partial-lsp ]

## Syntax Description

| Syntax Description |                                       |
|--------------------|---------------------------------------|
| stateful-ha        | Configure RSVP stateful HA            |
| pss-partial-lsp    | (Optional) Enable PSS of partial lsps |

## Command Mode

- /exec/configure/ip-rsvp

# stateful-ha

[no] stateful-ha [ test-recovery ]

## Syntax Description

|                           |               |   |
|---------------------------|---------------|---|
| <b>Syntax Description</b> | no            | (Optional) Negate a command or set its defaults |
|                           | stateful-ha   | Enable stateful IS-IS HA                        |
|                           | test-recovery | (Optional) Test stateful HA recovery            |

## Command Mode

- /exec/configure/router-isis/router-isis-vrf-common



# statistics

[no] statistics

## Syntax Description

---

### Syntax Description

---

**n** (Optional) Negate a command or set its defaults

---

### Command Mode

- /exec/configure/ipacl /exec/configure/vacl

# statistics

[no] statistics

## Syntax Description

---

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | <b>n</b> (Optional) Negate a command or set its defaults |
|---------------------------|--|

---

## Command Mode

- /exec/configure/ipv6acl

# statistics

[no] statistics

## Syntax Description

---

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | <b>n</b> (Optional) Negate a command or set its defaults |
|---------------------------|--|

---

## Command Mode

- /exec/configure/macac1

# statistics collection-interval

statistics collection-interval <interval-val> | no statistics collection-interval

## Syntax Description

| Syntax Description |                     |   |
|--------------------|---------------------|---|
|                    | no                  | Negate a command or set its defaults                |
|                    | statistics          | Statistics related commands                         |
|                    | collection-interval | How often to retrieve statistics                    |
|                    | <i>interval-val</i> | Collection interval in seconds (0 = do not collect) |

## Command Mode

- /exec/configure/openflow/switch

## statistics per-entry

[no] statistics per-entry

### Syntax Description

---

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | <b>n</b> (Optional) Negate a command or set its defaults |
|---------------------------|--|

---

### Command Mode

- /exec/configure/ipacl /exec/configure/vacl

# statistics per-entry

[no] statistics per-entry

## Syntax Description

---

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | <b>n</b> (Optional) Negate a command or set its defaults |
|---------------------------|--|

---

## Command Mode

- /exec/configure/ipv6acl

## statistics per-entry

[no] statistics per-entry

### Syntax Description

---

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | <b>n</b> (Optional) Negate a command or set its defaults |
|---------------------------|--|

---

### Command Mode

- /exec/configure/macac1

# stats-reporting-period

stats-reporting-period <time-in-sec> | no stats-reporting-period

## Syntax Description

| Syntax Description     |  |  |
|------------------------|--|--|
| no                     |  | Negate a command or set its defaults                       |
| stats-reporting-period |  | Interval after which statistics are sent to the BMP server |
| <i>time-in-sec</i>     |  | Delay value  |

## Command Mode

- /exec/configure/router-bgp/router-bgp-bmp-server



# status

status

## Syntax Description

---

### Syntax Description

---

`status` Status of  
Trigger

---

## Command Mode

- /exec/elanms/sel3

# status

status

## Syntax Description

---

### Syntax Description

---

status Status of  
Trigger

---

## Command Mode

- /exec/elamns/se14

# status

status

## Syntax Description

---

### Syntax Description

---

|        |                   |
|--------|-------------------|
| status | Status of Trigger |
|--------|-------------------|

---

## Command Mode

- /exec/elanms/sel5

# status

status

## Syntax Description

---

### Syntax Description

---

status Status of  
Trigger

---

## Command Mode

- /exec/elamns/sel6

# status

status

## Syntax Description

---

### Syntax Description

---

`status` Status of  
Trigger

---

## Command Mode

- /exec/elanms/sel7

# status

status

## Syntax Description

---

### Syntax Description

---

status Status of  
Trigger

---

## Command Mode

- /exec/elanms/outse10

# status

status

## Syntax Description

---

### Syntax Description

---

`status` Status of  
Trigger

---

## Command Mode

- /exec/elanms/outsel5

# stopbits 1

[no] stopbits { 1 | 2 }

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| stopbits           | Set async line stopbits                         |
| 1                  | One stop bit                                    |
| 2                  | Two stop bits                                   |

## Command Mode

- /exec/configure/com1



# stopbits 1

[no] stopbits { 1 }

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| stopbits           | Set async line stopbits                         |
| 1                  | One stop bit                                    |

## Command Mode

- /exec/configure/console

# storm-control-cpu

storm-control-cpu { { arp rate } <pps> } | no storm-control-cpu arp

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults           |
| storm-control-cpu  |  | Configure Interface storm control cpu          |
| arp                |  | arp storm control                              |
| rate               |  | Set allowed arp traffic rate on this interface |
| <i>pps</i>         |  | value in packets per sec                       |

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-eth-non-member /exec/configure/if-port-channel

# storm-control

```
storm-control { { { broadcast blevel | multicast mlevel | unicast ulevel } <level> } | action { shutdown | trap } } | no storm-control { { { broadcast blevel | multicast mlevel | unicast ulevel } [ <level> ] } | action [ shutdown | trap ] }
```

## Syntax Description

### Syntax Description

|               |   |
|---------------|---|
| no            | Negate a command or set its defaults                  |
| storm-control | Configure Interface storm control                     |
| broadcast     | Broadcast address storm control                       |
| multicast     | Multicast address storm control                       |
| unicast       | Unicast address storm control                         |
| blevel        | Set allowed broadcast traffic level on this interface |
| mlevel        | Set allowed multicast traffic level on this interface |
| ulevel        | Set allowed unicast traffic level on this interface   |
| <i>level</i>  | Enter the storm suppression level                     |
| action        | Action on storm control                               |
| shutdown      | Shutdown (Err-Disable) port                           |
| trap          | Generate SNMP trap                                    |

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-eth-l2-non-member /exec/configure/if-eth-port-channel-switch

# streetaddress

{ streetaddress <line> | no streetaddress }

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | Negate a command or set its defaults           |
| streetaddress      | Configure replacement part shipping address.   |
| <i>line</i>        | Provide street address (white spaces are fine) |

## Command Mode

- /exec/configure/callhome

# stub

```
{ { [ eigrp ] stub [ { [ direct | connected | static | summary ] [ redistributed ] } + [ leak-map <leak-map> ] | {
receive-only } ] } } | { no [ eigrp ] stub [ { [ direct | connected | static | summary ] [ redistributed ] } + [ leak-map
<leak-map> ] | { receive-only } ] } }
```

## Syntax Description

### Syntax Description

|                 |   |
|-----------------|---|
| no              | Negate a command or set its defaults                    |
| eigrp           | (Optional) EIGRP router configuration commands          |
| stub            | Set IP-EIGRP as stubbed router                          |
| direct          | (Optional) Do advertise connected routes                |
| connected       | (Optional) Do advertise connected routes                |
| static          | (Optional) Do advertise static routes                   |
| summary         | (Optional) Do advertise summary routes                  |
| redistributed   | (Optional) Do advertise redistributed routes            |
| leak-map        | (Optional) Allow dynamic prefixes based on the leak-map |
| <i>leak-map</i> | (Optional) leak-map name                                |
| receive-only    | (Optional) Set IP-EIGRP as receive only neighbor        |

## Command Mode

- /exec/configure/router-eigrp/router-eigrp-vrf-common /exec/configure/router-eigrp/router-eigrp-af-common

## sub-switch vlan

sub-switch <subswitch-id> vlan <vlan-id> | no sub-switch <subswitch-id>

### Syntax Description

| Syntax Description  |  |                                      |
|---------------------|--|--------------------------------------|
| no                  |  | Negate a command or set its defaults |
| sub-switch          |  | Logical sub-switch id                |
| <i>subswitch-id</i> |  | Logical subswitch-id(2 to 10)        |
| vlan                |  | VLAN-id or VLAN-range                |
| <i>vlan-id</i>      |  | VLAN-id or VLAN-range                |

### Command Mode

- /exec/configure/openflow/switch

# subscription

[no] subscription <sub-id>

## Syntax Description

|                           |              |   |
|---------------------------|--------------|---|
| <b>Syntax Description</b> | no           | (Optional) Negate a command or set its defaults |
|                           | subscription | Create a Subscription                           |

## Command Mode

- /exec/configure/telemetry

# summary-address

[no] summary-address { <ip-dest> <ip-mask> | <ip-prefix> } [ tag <tagval> | not-advertise ]

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults             |
| summary-address    |            | Configure route summarization for redistribution |
| <i>ip-dest</i>     |            | IP prefix format: i.i.i.i                        |
| <i>ip-mask</i>     |            | IP network mask format: m.m.m.m                  |
| <i>ip-prefix</i>   |            | IP prefix format: x.x.x.x/ml                     |
| tag                | (Optional) | 32-bit tag value                                 |
| <i>tagval</i>      | (Optional) | 32-bit tag value                                 |
| not-advertise      | (Optional) | Supress advertising the specified summary        |

## Command Mode

- /exec/configure/router-ospf /exec/configure/router-ospf/vrf



# summary-address

summary-address { <ip-addr> <ip-mask> | <ip-prefix> } <level> | no summary-address { <ip-addr> <ip-mask> | <ip-prefix> } [ <level> ]

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| summary-address    |  | Configure IP address summaries       |
| <i>ip-addr</i>     |  | IP summary address                   |
| <i>ip-mask</i>     |  | IP summary mask                      |
| <i>ip-prefix</i>   |  | IP summary prefix                    |
| <i>level</i>       |  | Level to summarize into              |

## Command Mode

- /exec/configure/router-isis/router-isis-vrf-common /exec/configure/router-isis/router-isis-af-ipv4

# summary-address

summary-address <ipv6-prefix> <level> | no summary-address <ipv6-prefix> [ <level> ]

## Syntax Description

|                           |                 |                                      |
|---------------------------|-----------------|--------------------------------------|
| <b>Syntax Description</b> | no              | Negate a command or set its defaults |
|                           | summary-address | Configure IP address summaries       |
|                           | <i>level</i>    | Level to summarize into              |

## Command Mode

- /exec/configure/router-isis/router-isis-af-ipv6

# summary-address

[no] summary-address <ipv6-prefix> [ tag <tagval> | not-advertise ]

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults       |
| summary-address    | Configure route summarization for redistribution      |
| tag                | (Optional) 32-bit tag value                           |
| <i>tagval</i>      | (Optional) 32-bit tag value                           |
| not-advertise      | (Optional) Suppress advertising the specified summary |

## Command Mode

- /exec/configure/router-ospf3/router-ospf3-af-ipv6 /exec/configure/router-ospf3/vrf/router-ospf3-af-ipv6

# suppress-arp

[no] suppress-arp

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| suppress-arp       | Enable ARP suppression                          |

## Command Mode

- /exec/configure/if-nve/vni

# suppress-fib-pending

[no] suppress-fib-pending

## Syntax Description

|                           |                      |  |
|---------------------------|----------------------|--|
| <b>Syntax Description</b> | no                   | (Optional) Negate a command or set its defaults                |
|                           | suppress-fib-pending | Advertise only routes that are programmed in hardware to peers |

## Command Mode

- /exec/configure/router-bgp

# suppress-fib-pending

[no] suppress-fib-pending

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

suppress-fib-pending Advertise only routes that are programmed in hardware to peers

---

## Command Mode

- /exec/configure/router-igrp/router-igrp-vrf-common /exec/configure/router-igrp/router-igrp-af-common

# suppress-inactive

[no] suppress-inactive

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| suppress-inactive  | Advertise only active routes to peers           |

## Command Mode

- /exec/configure/router-bgp/router-bgp-af

# suppress-inactive

[ no | default ] suppress-inactive

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| default            | (Optional) | Inherit values from a peer template  |
| suppress-inactive  |            | Advertise only active routes to peer |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af  
/exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv4-mdt



# suppress-signaling-protocol ldp

[ no | default ] suppress-signaling-protocol ldp

## Syntax Description

| Syntax Description          |   |  |
|-----------------------------|---|--|
| no                          | (Optional) Negate a command or set its defaults |  |
| default                     | (Optional) Inherit values from a peer template  |  |
| suppress-signaling-protocol | Suppress VPLS BGP AD protocol                   |  |
| ldp                         | LDP signaling                                   |  |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-l2vpn-vpls

# suppress mac-route

[no] suppress mac-route

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| suppress           | Suppress MAC only route advertisement           |
| mac-route          | MAC route                                       |

## Command Mode

- /exec/configure/if-nve

# switch-id

switch-id <asid> | no switch-id

## Syntax Description

| Syntax Description |                                      |
|--------------------|--------------------------------------|
| no                 | Negate a command or set its defaults |
| switch-id          | Configure Switch ID                  |
| asid               | Anycast Switch ID                    |

## Command Mode

- /exec/configure/anycast

# switch-priority

{ switch-priority <i0> | no switch-priority }

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults       |
| switch-priority    |  | Priority of the switch(0-highest 7-lowest) |
| <i>i0</i>          |  | Priority of the switch(0-highest 7-lowest) |

## Command Mode

- /exec/configure/callhome

# switch-profile

switch-profile <s0>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| switch-profile     | Enter switch-profile configuration mode |
| <i>s0</i>          | Enter the name of the switch-profile    |

## Command Mode

- /exec/configure

# switch-profile

[no] switch-profile <s0> { profile-only { local | all } | local-config | all-config }

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults                                    |
| switch-profile     |  | Enter switch-profile configuration mode                                 |
| s0                 |  | Enter the name of the switch-profile                                    |
| profile-only       |  | Deletion of profile only and no other configuration                     |
| local              |  | Deletion of profile only and no other configurations in local switch    |
| all                |  | Deletion of profile only and no other configurations from all the peers |
| local-config       |  | Deletion of profile and local configuration                             |
| all-config         |  | Deletion of profile, local and peer configurations                      |

## Command Mode

- /exec/configure

# switch-scope controller

{ switch-scope controller <controller-id> | no switch-scope controller }

## Syntax Description

|                           |                      |                                      |
|---------------------------|----------------------|--------------------------------------|
| <b>Syntax Description</b> | no                   | Negate a command or set its defaults |
|                           | switch-scope         | switch-scope                         |
|                           | controller           | Controller command                   |
|                           | <i>controller-id</i> | Controller id                        |

## Command Mode

- /exec

# switch pipeline

switch <switch-id> pipeline <pipeline-id> | no switch <switch-id>

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults   |
| switch             |  | Switch   |
| <i>switch-id</i>   |  | Logical switch-id  |
| pipeline           |  | Select forwarding profile, use 'show openflow hardware capabilities' for choices |
| <i>pipeline-id</i> |  | Pipeline id  |

## Command Mode

- /exec/configure/openflow



# switchback

switchback

## Syntax Description

---

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | switchback switchback to default<br>vdc |
|---------------------------|---|

---

## Command Mode

- /exec

# switching-mode fabric-speed 40g

[no] switching-mode fabric-speed 40g

## Syntax Description

|                           |                |   |
|---------------------------|----------------|---|
| <b>Syntax Description</b> | no             | (Optional) Negate a command or set its defaults |
|                           | switching-mode | Configure the operating switching-mode of asics |
|                           | fabric-speed   | fabric speed settings                           |
|                           | 40g            | fabric speed at 40g instead of 42g              |

## Command Mode

- /exec/configure

# switching-mode store-forward

[no] switching-mode store-forward

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| switching-mode     | Configure the operating switching-mode of asics |
| store-forward      | Operate in store and forward mode               |

## Command Mode

- /exec/configure

# switchport

switchport

## Syntax Description

---

### Syntax Description

---

switchport Configure switchport parameters

---

## Command Mode

- /exec/configure/if-eth-non-member /exec/configure/if-ethernet-all /exec/configure/if-port-channel /exec/configure/if-ethernet-p2p

# switchport

[no] switchport

## Syntax Description

| Syntax Description |                                      |
|--------------------|--------------------------------------|
| no                 | Negate a command or set its defaults |
| switchport         | Configure switchport parameters      |

## Command Mode

- /exec/configure/if-ethernet-switch /exec/configure/if-eth-non-member /exec/configure/if-ethernet /exec/configure/if-ethernet-switch /exec/configure/if-ethernet-all /exec/configure/if-port-channel /exec/configure/if-ethernet-p2p

# switchport autostate exclude

```
switchport autostate exclude [ vlan { <exclude-vlans> | add <add-vlans> | except <except-vlans> | remove
<remove-vlans> | all | none } ] | no switchport autostate exclude [ dummy ] [ vlan { <exclude-vlans> | add
<add-vlans> } ]
```

## Syntax Description

### Syntax Description

|                      |  |
|----------------------|--|
| no                   | Negate a command or set its defaults                                     |
| switchport           | Configure switchport parameters  |
| autostate            | Include or exclude this port from vlan link up calculation               |
| exclude              | Exclude this port from vlan link up calculation                          |
| vlan                 | (Optional) VLAN Id   |
| <i>exclude-vlans</i> | (Optional) VLAN IDs of the VLANs to auto-state exclude on this interface |
| add                  | (Optional) add VLANs to except list                                      |
| <i>add-vlans</i>     | (Optional) VLAN IDs of the VLANs to auto-state exclude on this interface |
| except               | (Optional) List of VLANs to excepted from auto-state exclude             |
| <i>except-vlans</i>  | (Optional) VLAN IDs of the VLANs to auto-state exclude on this interface |
| remove               | (Optional) remove VLANs from except list                                 |
| <i>remove-vlans</i>  | (Optional) VLAN IDs of the VLANs to auto-state exclude on this interface |
| all                  | (Optional) Exclude all VLANs   |
| none                 | (Optional) Exclude no VLANs  |
| dummy                | (Optional) Hidden Keyword  |

## Command Mode

- /exec/configure/if-ethernet-switch /exec/configure/if-ethernet-all /exec/configure/if-gig-ether  
/exec/configure/if-port-channel-range /exec/configure/if-eth-port-channel-switch  
/exec/configure/if-remote-ethernet-switch

# switchport block unicast

switchport block { unicast | multicast } | no switchport block { unicast | multicast }

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | Negate a command or set its defaults           |
| switchport         | Configure switchport parameters                |
| block              | Block specified outbound traffic for all VLANs |
| unicast            | Block unknown unicast traffic                  |
| multicast          | Block flood multicast traffic                  |

## Command Mode

- /exec/configure/if-eth-l2-non-member /exec/configure/if-ethernet-all  
/exec/configure/if-eth-port-channel-switch

# switchport dot1q etherType

switchport dot1q etherType { 0x8100 | 0x88A8 | 0x9100 | <any> } | no switchport dot1q etherType [ <any> ]

## Syntax Description

| Syntax Description | Description                                |
|--------------------|--|
| no                 | Negate a command or set its defaults       |
| switchport         | Configure switchport parameters            |
| dot1q              | Configure dot1q EtherType value            |
| etherType          | Configure dot1q EtherType value            |
| 0x8100             | Default EtherType for 802.1q frames        |
| 0x88A8             | EtherType for 802.1ad double tagged frames |
| 0x9100             | EtherType for QinQ frames                  |
| any                | Any EtherType                              |

## Command Mode

- /exec/configure/if-eth-l2-non-member /exec/configure/if-ethernet-all



# switchport dot1q ethertype

switchport dot1q ethertype { 0x8100 | 0x88A8 | 0x9100 | <any> } | no switchport dot1q ethertype [ <any> ]

## Syntax Description

| Syntax Description | Description                                |
|--------------------|--|
| no                 | Negate a command or set its defaults       |
| switchport         | Configure switchport parameters            |
| dot1q              | Configure dot1q EtherType value            |
| ethertype          | Configure dot1q EtherType value            |
| 0x8100             | Default EtherType for 802.1q frames        |
| 0x88A8             | EtherType for 802.1ad double tagged frames |
| 0x9100             | EtherType for QinQ frames                  |
| any                | Any EtherType                              |

## Command Mode

- /exec/configure/if-eth-port-channel-switch

# switchport host

[no] switchport host

## Syntax Description

|                           |            |   |
|---------------------------|------------|---|
| <b>Syntax Description</b> | no         | (Optional) Negate a command or set its defaults |
|                           | switchport | Configure switchport parameters                 |
|                           | host       | Set port host                                   |

## Command Mode

- /exec/configure/if-eth-l2-non-member /exec/configure/if-ethernet-switch  
/exec/configure/if-ethernet-switch-m /exec/configure/if-ethernet-all

# switchport isolated

[no] switchport isolated

## Syntax Description

|                           |            |   |
|---------------------------|------------|---|
| <b>Syntax Description</b> | no         | (Optional) Negate a command or set its defaults |
|                           | switchport | Configure switchport parameters                 |
|                           | isolated   | Disable loop-free detection.                    |

## Command Mode

- /exec/configure/if-eth-l2-non-member /exec/configure/if-ethernet-all  
/exec/configure/if-eth-port-channel-switch

# switchport mac-learn disable

switchport mac-learn disable | no switchport mac-learn disable

## Syntax Description

|                           |            |  |
|---------------------------|------------|--|
| <b>Syntax Description</b> | no         | Negate a command or set its defaults           |
|                           | switchport | Configure switchport parameters                |
|                           | mac-learn  | Disable/enable mac learning on interface       |
|                           | disable    | Disable mac learning on all VLANs on interface |

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-eth-non-member /exec/configure/if-port-channel

# switchport mode

{ switchport mode { <port\_mode> } | no switchport mode }

## Syntax Description

|                           |                  |                                      |
|---------------------------|------------------|--------------------------------------|
| <b>Syntax Description</b> | no               | Negate a command or set its defaults |
|                           | switchport       | Configure switchport parameters      |
|                           | mode             | Enter the port mode                  |
|                           | <i>port_mode</i> | port mode                            |

## Command Mode

- /exec/configure/if-eth-l2-non-member /exec/configure/if-ethernet-all  
/exec/configure/if-eth-port-channel-switch

# switchport mode

{ switchport mode { <port\_mode> } | no switchport mode }

## Syntax Description

|                           |                  |                                      |
|---------------------------|------------------|--------------------------------------|
| <b>Syntax Description</b> | no               | Negate a command or set its defaults |
|                           | switchport       | Configure switchport parameters      |
|                           | mode             | Enter the port mode                  |
|                           | <i>port_mode</i> | port mode                            |

## Command Mode

- /exec/configure/if-eth-l2-non-member /exec/configure/if-ethernet-all  
/exec/configure/if-eth-port-channel-switch

# switchport mode fabricpath

[no] switchport mode fabricpath

## Syntax Description

|                           |            |   |
|---------------------------|------------|---|
| <b>Syntax Description</b> | no         | (Optional) Negate a command or set its defaults |
|                           | switchport | Configure switchport parameters                 |
|                           | mode       | Enter the port mode                             |
|                           | fabricpath | port mode fabricpath                            |

## Command Mode

- /exec/configure/if-eth-l2-non-member /exec/configure/if-ethernet-all  
/exec/configure/if-eth-port-channel-switch

# switchport mode monitor buffer-limit

switchport mode monitor buffer-limit { <value> [ packets | bytes | kbytes | mbytes ] } | no switchport mode monitor buffer-limit

## Syntax Description

| Syntax Description |            |   |
|--------------------|------------|---|
| no                 |            | Negate a command or set its defaults        |
| switchport         |            | Configure switchport parameters             |
| mode               |            | Enter the port mode                         |
| monitor            |            | Configures an interface as span-destination |
| buffer-limit       |            | Set buffer limit for span destination       |
| <i>value</i>       |            | Limit in terms of packets                   |
| packets            | (Optional) | Packets                                     |
| bytes              | (Optional) | Bytes                                       |
| kbytes             | (Optional) | Kilo bytes                                  |
| mbytes             | (Optional) | Mega bytes                                  |

## Command Mode

- /exec/configure/if-eth-l2-non-member /exec/configure/if-ethernet-all /exec/configure/if-eth-port-channel-switch



## switchport mode private-vlan

```
{ switchport mode private-vlan <port_mode> } | { no switchport mode private-vlan [ <port_mode> ] }
```

### Syntax Description

| Syntax Description |         |                                      |
|--------------------|---------|--------------------------------------|
| no                 |         | Negate a command or set its defaults |
| switchport         |         | Configure switchport parameters      |
| mode               |         | Enter the port mode                  |
| private-vlan       |         | Set the private VLAN configuration   |
| <i>port_mode</i>   | private | vlan mode                            |

### Command Mode

- /exec/configure/if-ethernet-switch /exec/configure/if-ethernet-all /exec/configure/if-eth-port-channel-switch /exec/configure/if-remote-ethernet-switch

# switchport mode private-vlan trunk

```
{ switchport mode private-vlan trunk <trunk_mode> } | { no switchport mode private-vlan trunk [
<trunk_mode> ] }
```

## Syntax Description

| Syntax Description | no                                 | Negate a command or set its defaults |
|--------------------|------------------------------------|--------------------------------------|
| switchport         | Configure switchport parameters    |                                      |
| mode               | Enter the port mode                |                                      |
| private-vlan       | Set the private VLAN configuration |                                      |
| trunk              | private-vlan trunk                 |                                      |
| <i>trunk_mode</i>  | private vlan trunk mode            |                                      |

## Command Mode

- /exec/configure/if-ethernet-switch /exec/configure/if-ethernet-all /exec/configure/if-eth-port-channel-switch /exec/configure/if-remote-ethernet-switch

# switchport port-security

[no] switchport port-security

## Syntax Description

|                           |               |   |
|---------------------------|---------------|---|
| <b>Syntax Description</b> | no            | (Optional) Negate a command or set its defaults |
|                           | switchport    | Configure switchport parameters                 |
|                           | port-security | Port security related command                   |

## Command Mode

- /exec/configure/if-switching

# switchport port-security aging time

[no] switchport port-security aging time <value>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults         |
| switchport         | Configure switchport parameters                         |
| port-security      | Port security related command                           |
| aging              | Port-security aging commands                            |
| time               | Port-security aging time                                |
| value              | Aging time in minutes. Enter a value between 1 and 1440 |

## Command Mode

- /exec/configure/if-switching

# switchport port-security aging type absolute

[no] switchport port-security aging type { absolute | inactivity }

## Syntax Description

| Syntax Description | Description                                     |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| switchport         | Configure switchport parameters                 |
| port-security      | Port security related command                   |
| aging              | Port-security aging commands                    |
| type               | Type of timers                                  |
| absolute           | Absolute Timer                                  |
| inactivity         | Inactivity Timer                                |

## Command Mode

- /exec/configure/if-switching

## switchport port-security mac-address

[no] switchport port-security mac-address <mac-address> [ vlan <vlanid> ]

### Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults            |
| switchport         | Configure switchport parameters                            |
| port-security      | Port security related command                              |
| mac-address        | MAC address  |
| <i>mac-address</i> | 48 bit mac address format HHHH.HHHH.HHHH                   |
| vlan               | (Optional) Vlan on which the mac address should be secured |
| <i>vlanid</i>      | (Optional) vlan id. Enter a value between 1 and 4094       |

### Command Mode

- /exec/configure/if-switching

# switchport port-security mac-address sticky

[no] switchport port-security mac-address sticky

## Syntax Description

|                           |               |   |
|---------------------------|---------------|---|
| <b>Syntax Description</b> | no            | (Optional) Negate a command or set its defaults |
|                           | switchport    | Configure switchport parameters                 |
|                           | port-security | Port security related command                   |
|                           | mac-address   | MAC address                                     |
|                           | sticky        | Sticky MAC address                              |

## Command Mode

- /exec/configure/if-switching

# switchport port-security maximum

[no] switchport port-security maximum <value> [ vlan <vlanid> ]

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults            |
| switchport         | Configure switchport parameters                            |
| port-security      | Port security related command                              |
| maximum            | Max secure addresses                                       |
| <i>value</i>       | Maximum addresses 1 to 1025                                |
| vlan               | (Optional) Vlan on which the mac address should be secured |
| <i>vlanid</i>      | (Optional) vlan id. Enter a value between 1 and 4094       |

## Command Mode

- /exec/configure/if-switching



# switchport port-security violation

[no] switchport port-security violation { protect | restrict | shutdown }

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| switchport         | Configure switchport parameters                 |
| port-security      | Port security related command                   |
| violation          | Security violation mode                         |
| protect            | security violation protect mode                 |
| restrict           | security violation restrict mode                |
| shutdown           | security violation shutdown mode                |

## Command Mode

- /exec/configure/if-switching

# switchport private-vlan association trunk

```
{ switchport private-vlan association trunk <primary-vlan> <secondary-vlan> } | { no switchport private-vlan
association trunk [ <primary-vlan> [ <secondary-vlan> ] ] }
```

## Syntax Description

| Syntax Description    |                                |                                      |
|-----------------------|--------------------------------|--------------------------------------|
| switchport            |                                | Configure switchport parameters      |
| private-vlan          |                                | Set the private VLAN configuration   |
| association           | private vlan trunk association |                                      |
| trunk                 | private-vlan trunk secondary   |                                      |
| no                    |                                | Negate a command or set its defaults |
| <i>primary-vlan</i>   |                                | Primary VLAN ID                      |
| <i>secondary-vlan</i> |                                | Secondary VLAN ID                    |

## Command Mode

- /exec/configure/if-switching /exec/configure/if-eth-port-channel-switch

# switchport private-vlan host-association

{ switchport private-vlan host-association <primary-vlan> <secondary-vlan> } | { no switchport private-vlan host-association }

## Syntax Description

| Syntax Description    |  |                                       |
|-----------------------|--|---------------------------------------|
| switchport            |  | Configure switchport parameters       |
| private-vlan          |  | Set the private VLAN configuration    |
| host-association      |  | Set the private VLAN host association |
| no                    |  | Negate a command or set its defaults  |
| <i>primary-vlan</i>   |  | Primary VLAN ID                       |
| <i>secondary-vlan</i> |  | Secondary VLAN ID                     |

## Command Mode

- /exec/configure/if-switching /exec/configure/if-eth-port-channel-switch

## switchport private-vlan mapping

```
{ switchport private-vlan mapping <primary-vlan> [ { add | remove } ] <secondary_vlans> } | { no switchport private-vlan mapping [ <primary-vlan> <secondary_vlans> ] }
```

### Syntax Description

| Syntax Description | switchport             | Configure switchport parameters                       |
|--------------------|------------------------|---|
|                    | private-vlan           | Set the private VLAN configuration                    |
|                    | mapping                | Set the private VLAN access/trunk promiscuous mapping |
|                    | add                    | (Optional) Add a VLAN to private VLAN list            |
|                    | remove                 | (Optional) Remove a VLAN from private VLAN list       |
|                    | no                     | Negate a command or set its defaults                  |
|                    | <i>primary-vlan</i>    | Primary private VLAN                                  |
|                    | <i>secondary_vlans</i> | Secondary VLAN IDs                                    |

### Command Mode

- /exec/configure/if-switching /exec/configure/if-eth-port-channel-switch

# switchport private-vlan mapping trunk

```
{ switchport private-vlan mapping trunk <primary-vlan> [ { add | remove } ] <secondary_vlans> } | { no
switchport private-vlan mapping trunk [ <primary-vlan> [ <secondary_vlans> ] ] }
```

## Syntax Description

| Syntax Description     |  |   |
|------------------------|--|---|
| switchport             |  | Configure switchport parameters                       |
| private-vlan           |  | Set the private VLAN configuration                    |
| mapping                |  | Set the private VLAN access/trunk promiscuous mapping |
| add                    |  | (Optional) Add a VLAN to private VLAN list            |
| remove                 |  | (Optional) Remove a VLAN from private VLAN list       |
| no                     |  | Negate a command or set its defaults                  |
| trunk                  |  | private-vlan trunk promiscuous                        |
| <i>primary-vlan</i>    |  | Primary private VLAN                                  |
| <i>secondary_vlans</i> |  | Secondary VLAN IDs                                    |

## Command Mode

- /exec/configure/if-switching /exec/configure/if-eth-port-channel-switch

## switchport private-vlan trunk allowed vlan

switchport private-vlan trunk allowed vlan { <allowed-vlans> | add <add-vlans> | except <except-vlans> | remove <remove-vlans> | all | none } | no switchport private-vlan trunk allowed vlan <no-allowed-vlans>

### Syntax Description

#### Syntax Description

|                         |   |
|-------------------------|---|
| switchport              | Configure switchport parameters   |
| private-vlan            | Set the private VLAN configuration  |
| trunk                   | Set the private vlan trunking configuration                                   |
| allowed                 | Set allowed VLANs when interface is in private-vlan trunking mode             |
| vlan                    | VLAN status   |
| <i>allowed-vlans</i>    | VLAN IDs of the allowed VLANs when interface is in private-vlan trunking mode |
| add                     | add VLANs to the current list   |
| <i>add-vlans</i>        | VLAN IDs of the allowed VLANs when interface is in private-vlan trunking mode |
| except                  | all VLANs except the following  |
| <i>except-vlans</i>     | VLAN IDs of disallowed VLANs when this port is in trunking mode               |
| remove                  | remove VLANs from the current list  |
| <i>remove-vlans</i>     | VLAN IDs of disallowed VLANs when this port is in trunking mode               |
| all                     | all VLANs   |
| none                    | no VLANs  |
| no                      | Negate a command or set its defaults  |
| <i>no-allowed-vlans</i> | VLAN IDs of disallowed VLANs when this port is in trunking mode               |

### Command Mode

- /exec/configure/if-switching /exec/configure/if-eth-port-channel-switch

# switchport private-vlan trunk native vlan

{ switchport private-vlan trunk native vlan <native-vlan> } | { no switchport private-vlan trunk native vlan }

## Syntax Description

|                           |                    |  |
|---------------------------|--------------------|--|
| <b>Syntax Description</b> | switchport         | Configure switchport parameters                    |
|                           | private-vlan       | Set the private VLAN configuration                 |
|                           | no                 | Negate a command or set its defaults               |
|                           | trunk              | Set the private vlan trunking configuration        |
|                           | native             | Set the private vlan trunking native configuration |
|                           | vlan               | VLAN status  |
|                           | <i>native-vlan</i> | native vlan id                                     |

## Command Mode

- /exec/configure/if-switching /exec/configure/if-eth-port-channel-switch

# switchto vdc

```
switchto vdc <e-vdc2> [ force ] [ bypass ] [ __readonly__ <vdc_id> <invalid_vdc_id> <noauth_vdc_id>
<no_first> ]
```

## Syntax Description

### Syntax Description

|                       |  |
|-----------------------|--|
| switchto              | Goto specific Virtual Device Context <vdc-name>   <vdc-id> |
| vdc                   | Manage Virtual Device Context                              |
| <i>e-vdc2</i>         | Enter Virtual Device Context <vdc-id>                      |
| <i>__readonly__</i>   | (Optional) Read Only                                       |
| <i>force</i>          | (Optional) force   |
| <i>vdc_id</i>         | (Optional) Enter Virtual Device Context <vdc-id>           |
| <i>invalid_vdc_id</i> | (Optional) Enter Virtual Device Context <vdc-id>           |
| <i>noauth_vdc_id</i>  | (Optional) Enter Virtual Device Context <vdc-id>           |
| <i>no_first</i>       | (Optional) Enter Virtual Device Context <vdc-id>           |
| <i>bypass</i>         | (Optional) Enter Virtual Device Context <vdc-id>           |

## Command Mode

- /exec/



## sync-peers destination

sync-peers destination <dst-ip> [ source <src-ip> | vrf <vrf-name> ] + | no sync-peers destination [ <dst-ip> [ source <src-ip> ] ]

### Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | Negate a command or set its defaults                   |
| sync-peers         | Specify peers to whom configuration needs to be synced |
| destination        | Specify destination ip address of peer switch          |
| <i>dst-ip</i>      | IPv4 address (A.B.C.D) of destination                  |
| source             | (Optional) Source interface for sending out configs    |
| <i>src-ip</i>      | (Optional) IPv4 address (A.B.C.D) of source            |
| vrf                | (Optional) vrf to be used default/management           |
| <i>vrf-name</i>    | (Optional) vrf to be used                              |

### Command Mode

- /exec/configure

# sync-snmp-password

sync-snmp-password <s0>

## Syntax Description

---

### Syntax Description

---

|                    |                       |
|--------------------|-----------------------|
| sync-snmp-password | sync snmp<br>password |
|--------------------|-----------------------|

---

|           |          |
|-----------|----------|
| <i>s0</i> | password |
|-----------|----------|

---

## Command Mode

- /exec

# sync-snmp-password

sync-snmp-password <s0> <s1> <s2>

## Syntax Description

| Syntax Description |                    |
|--------------------|--------------------|
| sync-snmp-password | sync snmp password |
| <i>s0</i>          | password           |
| <i>s1</i>          | user               |
| <i>s2</i>          | snmp client host   |

## Command Mode

- /exec

# sync-snmp-password

[no] sync-snmp-password <s0>

## Syntax Description

|                           |                    |   |
|---------------------------|--------------------|---|
| <b>Syntax Description</b> | no                 | (Optional) Negate a command or set its defaults |
|                           | sync-snmp-password | sync snmp password                              |
|                           | s0                 | password  |

## Command Mode

- /exec/configure

# syslog

```
syslog { msg <s0> | priority { <i0> msg1 <s1> | alerts msg2 <s2> | critical msg3 <s3> | debugging msg4 <s4>
| emergencies msg5 <s5> | errors msg6 <s6> | informational msg7 <s7> | notifications msg8 <s8> | warnings
msg9 <s9> } }
```

## Syntax Description

### Syntax Description

|               |                                   |
|---------------|-----------------------------------|
| syslog        | Execute a logging command         |
| msg           | Log EEM action message            |
| <i>s0</i>     | Enter the msg (max 300 chars)     |
| priority      | Priority of the log message       |
| <i>i0</i>     | Enter priority of the log message |
| msg1          | Log EEM action message            |
| <i>s1</i>     | Enter the msg (max 300 chars)     |
| alerts        | Alert log message                 |
| msg2          | Log EEM action message            |
| <i>s2</i>     | Enter the msg (max 300 chars)     |
| critical      | Critical log message              |
| msg3          | Log EEM action message            |
| <i>s3</i>     | Enter the msg (max 300 chars)     |
| debugging     | Debugging log message             |
| msg4          | Log EEM action message            |
| <i>s4</i>     | Enter the msg (max 300 chars)     |
| emergencies   | Emergency log message             |
| msg5          | Log EEM action message            |
| <i>s5</i>     | Enter the msg (max 300 chars)     |
| errors        | Error log message                 |
| msg6          | Log EEM action message            |
| <i>s6</i>     | Enter the msg (max 300 chars)     |
| informational | Informational log message         |
| msg7          | Log EEM action message            |

|               |                               |
|---------------|-------------------------------|
| <i>s7</i>     | Enter the msg (max 300 chars) |
| notifications | Notifications log message     |
| msg8          | Log EEM action message        |
| <i>s8</i>     | Enter the msg (max 300 chars) |
| warnings      | Warning log message           |
| msg9          | Log EEM action message        |
| <i>s9</i>     | Enter the msg (max 300 chars) |

**Command Mode**

- /exec

# system-mac

system-mac <sysmac> | no system-mac

## Syntax Description

|                           |               |                                      |
|---------------------------|---------------|--------------------------------------|
| <b>Syntax Description</b> | no            | Negate a command or set its defaults |
|                           | system-mac    | Configure system mac address         |
|                           | <i>sysmac</i> | specify system mac address           |

## Command Mode

- /exec/configure/vpc-domain

# system-mac

[no] system-mac <mac-addr>

## Syntax Description

|                           |                 |   |
|---------------------------|-----------------|---|
| <b>Syntax Description</b> | no              | (Optional) Negate a command or set its defaults |
|                           | system-mac      | Mac Address                                     |
|                           | <i>mac-addr</i> | specify system mac address                      |

## Command Mode

- /exec/configure/if-eth-port-channel/ethernet-segment



# system-priority

system-priority <syspri> | no system-priority <syspri>

## Syntax Description

| Syntax Description |                                      |
|--------------------|--------------------------------------|
| no                 | Negate a command or set its defaults |
| system-priority    | Configure system priority            |
| <i>syspri</i>      | specify system priority              |

## Command Mode

- /exec/configure/vpc-domain

# system

```
[no] system { { routing { hierarchical def-max-mode l3 64b-alpm | non-hierarchical [ max-mode l3-nh [
64b-alpm-nh ] ] | max-mode host | max-mode-tor { l2 | l3 | l2-l3 } | template-overlay-host-scale |
template-lpm-heavy | template-lpm-scale-v6-64 | template-dual-stack-host-scale | template-dynamic-trie-scale
| template-multicast-heavy | template-vxlan-scale | template-mpls-heavy | template-internet-peering |
template-multicast-nbm } } | { non-hierarchical-routing [ max-l3-mode ] } } }
```

## Syntax Description

### Syntax Description

|                                |  |
|--------------------------------|--|
| no                             | (Optional) Negate a command or set its defaults                      |
| system                         | System Management Commands   |
| routing                        | Layer-3 routing  |
| hierarchical                   | Host routing on LC and LPM routing in FM                             |
| non-hierarchical               | Disable mode of host routing on LC and LPM routing in Fabric modules |
| non-hierarchical-routing       | Disable mode of host routing on LC and LPM routing in Fabric modules |
| def-max-mode                   | Maximum scale to be enabled  |
| max-mode                       | (Optional) Maximum scale to be enabled                               |
| max-mode-tor                   | Maximum scale to be enabled  |
| l2                             | Max Layer-2 records and fewer Layer-3 host routes                    |
| l3                             | Layer-3 longest-prefix-match (LPM) routes                            |
| l2-l3                          | Balance of both Layer-2 records and Layer-3 host routes              |
| l3-nh                          | (Optional) Layer-3 longest-prefix-match (LPM) routes                 |
| 64b-alpm                       | IPv6 routes with masks /64 or shorter                                |
| 64b-alpm-nh                    | (Optional) IPv6 routes with masks /64 or shorter                     |
| max-l3-mode                    | (Optional) Enable ALPM mode (Mode-4 in T2)                           |
| host                           | host routes  |
| template-internet-peering      | Internet Peering   |
| template-overlay-host-scale    | Overlay Host Scale   |
| template-lpm-heavy             | LPM Heavy  |
| template-lpm-scale-v6-64       | LPM Scale V6 64  |
| template-dual-stack-host-scale | Dual Stack Host Scale  |

---

|                             |                       |
|-----------------------------|-----------------------|
| template-dynamic-trie-scale | Dynamic TRIE Scale    |
| template-multicast-heavy    | Multicast Heavy Scale |
| template-multicast-nbm      | Multicast NBM Scale   |
| template-mpls-heavy         | MPLS Heavy Scale      |
| template-vxlan-scale        | Vxlan Scale           |

---

**Command Mode**

- /exec/configure

# system auto-collect tech-support

system [ no ] auto-collect tech-support [ timeout <time> ]

## Syntax Description

### Syntax Description

|              |  |
|--------------|--|
| system       | System management commands                                       |
| no           | (Optional) Negate a command or set its defaults                  |
| auto-collect | Auto collection of information                                   |
| tech-support | Collect tech-support in case of service causing supervisor reset |
| timeout      | (Optional) Collect tech-support timeout                          |
| <i>time</i>  | (Optional) Timeout in seconds                                    |

## Command Mode

- /exec

## system cores

```
{ system cores { { <uri0> } | { <uri1> vrf <vrf-known-name> } } | no system cores [ { { <uri0> } | { <uri1> vrf <vrf-known-name> } } ] }
```

### Syntax Description

| Syntax Description    |  |                                      |
|-----------------------|--|--------------------------------------|
| no                    |  | Negate a command or set its defaults |
| system                |  | System configuration commands        |
| cores                 |  | Copy cores to destination            |
| <i>uri0</i>           |  | Select destination filesystem        |
| <i>uri1</i>           |  | Select destination filesystem        |
| vrf                   |  | Enter the vrf name                   |
| <i>vrf-known-name</i> |  | VRF name                             |

### Command Mode

- /exec/configure

# system cores retain

[no] system cores retain

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | no (Optional) Negate a command or set its defaults |
|                           | system System configuration commands               |
|                           | cores Copy cores to destination                    |
|                           | retain keep the cores                              |

## Command Mode

- /exec/configure

## system default interface

```
{ system default interface { congestion { timeout <i0> mode { core | edge } | mode { core | edge } } | pause
{ timeout <i1> mode1 { core | edge } | mode1 { core | edge } } } | no system default interface { congestion {
timeout <i0> mode { core | edge } | mode { core | edge } } | pause { timeout <i1> mode1 { core | edge } |
mode1 { core | edge } } } }
```

### Syntax Description

#### Syntax Description

|            |   |
|------------|---|
| no         | Negate a command or set its defaults                |
| system     | System configuration commands                       |
| default    | Configure system default values                     |
| interface  | Configure system default interface values           |
| congestion | Configure system timeout values for congestion drop |
| pause      | Configure system timeout values for pause frame     |
| timeout    | Configure system timeout values                     |
| <i>i0</i>  | Configure number of milliseconds                    |
| <i>i1</i>  | Configure number of milliseconds                    |
| mode       | Configure mode                                      |
| mode1      | Configure mode                                      |
| core       | Enter the port type                                 |
| edge       | Enter the port type                                 |

### Command Mode

- /exec/configure

# system default switchport

{ [ no ] system default switchport }

## Syntax Description

|                           |            |   |
|---------------------------|------------|---|
| <b>Syntax Description</b> | no         | (Optional) Negate a command or set its defaults |
|                           | system     | System configuration commands                   |
|                           | default    | Configure system default values                 |
|                           | switchport | Configure switchport                            |

## Command Mode

- /exec/configure



# system default switchport fabricpath

{ system default switchport fabricpath | no system default switchport fabricpath }

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults      |
| system             |  | System configuration commands             |
| default            |  | Configure system default values           |
| switchport         |  | Configure switchport                      |
| fabricpath         |  | Configure default port mode as fabricpath |

## Command Mode

- /exec/configure

# system default switchport shutdown

{ [ no ] system default switchport shutdown }

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| system             | System configuration commands                   |
| default            | Configure system default values                 |
| switchport         | Configure switchport                            |
| shutdown           | Configure admin state                           |

## Command Mode

- /exec/configure

# system dme enable

[no] system dme enable

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | no (Optional) Negate a command or set its defaults |
|                           | system System Management Commands                  |
|                           | dme Manage 4G DME enable/disable                   |
|                           | enable enable                                      |

## Command Mode

- /exec/configure

# system dot1q-tunnel transit

[no] system dot1q-tunnel transit

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| system             | System Management Commands                      |  |
| dot1q-tunnel       | Dot1Q tunnel                                    |  |
| transit            | Transit box for multi-tag Ethernet Frames       |  |

## Command Mode

- /exec/configure

# system fabric-mode full-rate

[no] system fabric-mode full-rate

## Syntax Description

|                           |             |   |
|---------------------------|-------------|---|
| <b>Syntax Description</b> | no          | (Optional) Negate a command or set its defaults |
|                           | system      | System Management Commands                      |
|                           | fabric-mode | Configure the operating mode of the fabrics     |
|                           | full-rate   | Operates fabrics in Full Rate Mode              |

## Command Mode

- /exec/configure

# system fast-reload stabilization-timer

system fast-reload stabilization-timer <time>

## Syntax Description

---

### Syntax Description

|                     |  |
|---------------------|--|
| system              | System management commands   |
| fast-reload         | fast-reload software   |
| stabilization-timer | Network stabilization time in seconds before fast-reload can be executed after the previous reload |
| <i>time</i>         | time in secs   |

---

## Command Mode

- /exec/configure

# system hap-reset

system hap-reset

## Syntax Description

---

### Syntax Description

---

system System management commands

---

hap-reset enables resetting of local or remote sup on ha failures

---

## Command Mode

- /exec

# system hap-reset

system no hap-reset

## Syntax Description

---

### Syntax Description

---

system System management commands

---

no Negate a command or set its defaults

---

hap-reset enables resetting of local or remote sup on ha failures

---

## Command Mode

- /exec



# system health check bootflash

system health check bootflash [ fix-errors ]

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| system             | System management commands             |
| health             | system health exec commands            |
| check              | run consistency check on compact flash |
| bootflash          | check internal bootflash               |
| fix-errors         | (Optional) fix bootflash errors        |

## Command Mode

- /exec

# system heartbeat

system heartbeat

## Syntax Description

---

### Syntax Description

---

system System management commands

---

heartbeat enables heartbeat

---

## Command Mode

- /exec

# system heartbeat

system no heartbeat

## Syntax Description

| Syntax Description |                                      |
|--------------------|--------------------------------------|
| system             | System management commands           |
| no                 | Negate a command or set its defaults |
| heartbeat          | enables heartbeat                    |

## Command Mode

- /exec

# system high-multicast-priority

[no] system high-multicast-priority

## Syntax Description

| Syntax Description      |                  |                                      |
|-------------------------|------------------|--------------------------------------|
| no                      | (Optional)       | Negate a command or set its defaults |
| system                  |                  | System Management Commands           |
| high-multicast-priority | high priority to | multicast                            |

## Command Mode

- /exec/configure

# system inband queuing

```
[no] system inband queuing [ { [ round-robin ] [ bpdu weight <weight-val> ] [ q0 weight <weight-val> ] [ q1 weight <weight-val> ] [ q0 no-drop ] [ q1 no-drop ] [ pick_packets ] [ bpdu map <q-index> ] [ arp map <q-index> ] [ q0 map <q-index> ] [ q1 map <q-index> ] } ]
```

## Syntax Description

| Syntax Description | Description                                     |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| system             | System-related show commands                    |
| inband             | System Inband configuration                     |
| queuing            | System Inband Queuing Algorithm                 |
| round-robin        | (Optional) Simple Round-Robin                   |
| bpdu               | (Optional) bpdu queue                           |
| arp                | (Optional) arp queue                            |
| q0                 | (Optional) q0 queue (cos 4,5,6,7)               |
| q1                 | (Optional) q1 queue (cos 0,1,2,3)               |
| weight             | (Optional) weight associated with the queue     |
| no-drop            | (Optional) set no drop option on queue          |
| <i>weight-val</i>  | (Optional) weights                              |
| pick_packets       | (Optional) enable packet rx                     |
| map                | (Optional) map to queue                         |
| <i>q-index</i>     | (Optional) queue index                          |

## Command Mode

- /exec/configure

# system inband queuing

system inband queuing { clear-pm-counters | clear-klm-counters | clear-all-counters | enable-timestamp | disable-timestamp }

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| system             |  | System-related show commands           |
| inband             |  | System Inband configuration            |
| queuing            |  | System Inband Queueing Algorithm       |
| clear-pm-counters  |  | clear user space inband queue counters |
| clear-klm-counters |  | clear KLM VDC inband queue counters    |
| clear-all-counters |  | clear all inband queue counters        |
| enable-timestamp   |  | enable timestamping in klm vdc         |
| disable-timestamp  |  | disable timestamping in klm vdc        |

## Command Mode

- /exec

# system interface shutdown

[no] system interface shutdown [ exclude fex-fabric ]

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| system             | System configuration commands                   |
| interface          | Configure system interface config               |
| shutdown           | Configure interface shutdown                    |
| exclude            | (Optional) exclude                              |
| fex-fabric         | (Optional) fex-fabric                           |

## Command Mode

- /exec/configure

# system internal aclmgr global lock session

system internal aclmgr global lock <acquire-or-release> session <session\_id> [ pss-only ]

## Syntax Description

### Syntax Description

|                           |  |
|---------------------------|--|
| system                    | System management commands                               |
| internal                  | Commands for internal use                                |
| aclmgr                    | Configure aclmgr internals                               |
| global                    | Global database lock                                     |
| lock                      | Lock   |
| <i>acquire-or-release</i> |  |
| session                   | PPF Session id   |
| <i>session_id</i>         | PPF session id   |
| pss-only                  | (Optional) Force the values to be set and written to PSS |

## Command Mode

- /exec



# system internal aclmgr inject

system internal aclmgr inject <error-type> <err\_id>

## Syntax Description

### Syntax Description

|                   |   |
|-------------------|---|
| system            | System management commands                            |
| internal          | Commands for internal use                             |
| aclmgr            | Configure aclmgr internals                            |
| inject            | Inject error to state machine in next available event |
| <i>error-type</i> | Error type  |
| <i>err_id</i>     | Syserr id   |

## Command Mode

- /exec/configure

# system internal aclmgr remove policies interface

system internal aclmgr remove policies interface <ifname>

## Syntax Description

---

### Syntax Description

---

system System management commands

---

internal Commands for internal use

---

aclmgr Configure aclmgr internals

---

remove Remove access-lists

---

policies Policies

---

interface Interface whose policies need to be removed

---

*ifname* Interface name

---

## Command Mode

- /exec/configure

# system internal aclmgr vcache

```
system internal aclmgr vcache { { <add_or_rem> vlans <vlans> | reset } interface <ifname> | rebuild }
```

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| system             |  | System management commands  |
| internal           |  | Commands for internal use   |
| aclmgr             |  | Configure aclmgr internals  |
| <i>add_or_rem</i>  |  | Add or Remove vlan members to vlans   |
| vcache             |  | Vlan cache ut command, donot use this in production systems                   |
| vlans              |  | Vlans which need to be added/removed from the interface                       |
| <i>vlans</i>       |  | List of VLANs   |
| reset              |  | Reset all vlans on the interface  |
| rebuild            |  | Rebuild the vlan cache completely by requesting information from vlan manager |
| interface          |  | Interface(s) which need to be added/removed/reset to/from vlans               |
| <i>ifname</i>      |  | Interface name list   |

## Command Mode

- /exec/configure

## system internal clis event-history size

```
[no] system internal clis event-history { nvdb | client | errors | parser | ha | cli } size { <size_in_text> | <size_in_bytes> }
```

### Syntax Description

| Syntax Description |                      |   |
|--------------------|----------------------|---|
|                    | no                   | (Optional) Negate a command or set its defaults     |
|                    | system               | System configuration commands                       |
|                    | internal             | Commands for internal use                           |
|                    | clis                 | cli server  |
|                    | event-history        | Event history logs for clis                         |
|                    | nvdb                 | Log of NVDB and PSS events                          |
|                    | client               | Log of client interaction events                    |
|                    | errors               | Log of errors                                       |
|                    | parser               | Log of parser events                                |
|                    | ha                   | Log of ha events                                    |
|                    | cli                  | Log of command events                               |
|                    | size                 | Enter size  |
|                    | <i>size_in_text</i>  | Buffer size   |
|                    | <i>size_in_bytes</i> | Enter an integer value for the event history buffer |

### Command Mode

- /exec/configure

## system internal npacl event-history size

```
[no] system internal npacl event-history { acl | ppf | cli | internal } size { <size_in_text> | <size_in_Kbytes>
}
```

### Syntax Description

| Syntax Description    |   |  |
|-----------------------|---|--|
| no                    | (Optional) Negate a command or set its defaults |  |
| system                | System management commands                      |  |
| internal              | Commands for internal use                       |  |
| npacl                 | Configure NPACL feature                         |  |
| event-history         | event history                                   |  |
| acl                   | acl policy history of npacl                     |  |
| ppf                   | ppf interaction history of npacl                |  |
| cli                   | cli history of npacl                            |  |
| internal              | internal of npacl                               |  |
| size                  | Configure the size of the event-hist buffer     |  |
| <i>size_in_text</i>   | Buffer size                                     |  |
| <i>size_in_Kbytes</i> | Size of the file in kbytes                      |  |

### Command Mode

- /exec

# system internal policy-resync module

system internal policy-resync module <module>

## Syntax Description

| Syntax Description |        |                            |
|--------------------|--------|----------------------------|
| system             |        | System management commands |
| internal           |        | Commands for internal use  |
| policy-resync      | resync | PPF policy                 |
| module             | resync | Module                     |
| <i>module</i>      |        | Module number to resync    |

## Command Mode

- /exec

# system internal snapshot service

system internal snapshot service <s0>

## Syntax Description

---

### Syntax Description

---

system System management commands

---

internal Commands for internal usage

---

snapshot Generate debug snapshots

---

service Generate debug snapshot for service

---

s0 please enter service name

---

## Command Mode

- /exec

# system jumbomtu

{ system jumbomtu <mtu> | no system jumbomtu [ <mtu> ] }

## Syntax Description

|                           |          |                                      |
|---------------------------|----------|--------------------------------------|
| <b>Syntax Description</b> | no       | Negate a command or set its defaults |
|                           | system   | System configuration commands        |
|                           | jumbomtu | Configure system jumbomtu            |
|                           | mtu      | Enter jumbomtu                       |

## Command Mode

- /exec/configure



# system kernel-trace

system kernel-trace [ enable | disable ]

## Syntax Description

|                           |              |                                    |
|---------------------------|--------------|------------------------------------|
| <b>Syntax Description</b> | system       | system management commands         |
|                           | kernel-trace | kernel tracing                     |
|                           | enable       | (Optional) enables kernel tracing  |
|                           | disable      | (Optional) disables kernel tracing |

## Command Mode

- /exec

# system kgdb

system kgdb

## Syntax Description

---

### Syntax Description

---

system System management commands

---

kgdb enables kgdb

---

## Command Mode

- /exec

# system kgdb

system no kgdb

## Syntax Description

---

### Syntax Description

---

system System management commands

---

no Negate a command or set its defaults

---

kgdb enables kgdb

---

## Command Mode

- /exec

# system login block-for

[no] system login block-for

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| system             |  | System configuration commands        |
| login              |  | Enable secure login checking         |
| block-for          |  | Set quiet-mode active time period    |

## Command Mode

- /exec/configure

# system login block-for attempts within

system login block-for <i1> attempts <i2> within <i3>

## Syntax Description

| Syntax Description |                                   |
|--------------------|-----------------------------------|
| system             | System configuration commands     |
| login              | Enable secure login checking      |
| block-for          | Set quiet-mode active time period |
| <i>i1</i>          | Time period in seconds            |
| attempts           | Set max number of fail attempts   |
| <i>i2</i>          | Fail attempts max value           |
| within             | Watch period for fail attempts    |
| <i>i3</i>          | Time period in seconds            |

## Command Mode

- /exec/configure

# system login quiet-mode

[no] system login quiet-mode

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
|                    | no         | Negate a command or set its defaults |
|                    | system     | System configuration commands        |
|                    | login      | Enable secure login checking         |
|                    | quiet-mode | Set quiet-mode options               |

## Command Mode

- /exec/configure

# system login quiet-mode access-class

system login quiet-mode access-class <access-list>

## Syntax Description

| Syntax Description |  |                               |
|--------------------|--|-------------------------------|
| system             |  | System configuration commands |
| login              |  | Enable secure login checking  |
| quiet-mode         |  | Set quiet-mode options        |
| access-class       |  | Set access class              |
| <i>access-list</i> |  | Access-list name              |

## Command Mode

- /exec/configure

# system memory-thresholds minor severe critical

[no] system memory-thresholds minor <minor> severe <severe> critical <crit>

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 | (Optional) Negate a command or set its defaults    |  |
| system             | System configuration commands                      |  |
| memory-thresholds  | Set memory thresholds on the card                  |  |
| minor              | enter minor threshold                              |  |
| <i>minor</i>       | please enter minor memory threshold as % memory    |  |
| severe             | enter severe treshold                              |  |
| <i>severe</i>      | please enter severe memory threshold as % memory   |  |
| critical           | enter critical treshold                            |  |
| <i>crit</i>        | please enter critical memory threshold as % memory |  |

## Command Mode

- /exec/configure



# system minlife

system minlife <i0>

## Syntax Description

---

### Syntax Description

---

system System management commands

---

minlife Set system minlife (in seconds)

---

*i0* Set minlife

---

## Command Mode

- /exec

# system mode maintenance

[no] system mode maintenance [ dont-generate-profile ] [ non-interactive ] | system mode maintenance [ dont-generate-profile | shutdown ] [ non-interactive ]

## Syntax Description

| Syntax Description    |            |   |
|-----------------------|------------|---|
| no                    |            | Negate a command or set its defaults                |
| system                |            | System configuration commands                       |
| mode                  |            | system mode commands                                |
| maintenance           |            | system maintenance mode                             |
| dont-generate-profile | (Optional) | do not generate the maintenance/normal-mode profile |
| shutdown              | (Optional) | issue shutdown instead of isolate (default)         |
| non-interactive       | (Optional) | do operation non interactively in background        |

## Command Mode

- /exec/configure

# system mode maintenance always-use-custom-profile

[no] system mode maintenance always-use-custom-profile

## Syntax Description

| Syntax Description |                           |  |
|--------------------|---------------------------|--|
|                    | no                        | (Optional) Negate a command or set its defaults          |
|                    | system                    | System configuration commands                            |
|                    | mode                      | system mode commands                                     |
|                    | maintenance               | system maintenance mode                                  |
|                    | always-use-custom-profile | always use custom profile when entering maintenance mode |

## Command Mode

- /exec/configure

# system mode maintenance on-reload reset-reason

[no] system mode maintenance on-reload reset-reason <reason>

## Syntax Description

| Syntax Description |            |  |
|--------------------|------------|--|
| no                 | (Optional) | Negate a command or set its defaults     |
| system             |            | System configuration commands            |
| mode               |            | system mode commands                     |
| maintenance        |            | system maintenance mode                  |
| on-reload          |            | on reload maintenance mode configuration |
| reset-reason       |            | reset reason                             |
|                    |            | <i>reason</i>                            |

## Command Mode

- /exec/configure

# system mode maintenance snapshot-delay

[no] system mode maintenance snapshot-delay <delay-value>

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 | (Optional) Negate a command or set its defaults            |  |
| system             | System configuration commands                              |  |
| mode               | system mode commands                                       |  |
| maintenance        | system maintenance mode                                    |  |
| snapshot-delay     | delay after which after_maintenance snapshot will be taken |  |
| <i>delay-value</i> | delay value in seconds                                     |  |

## Command Mode

- /exec/configure

# system mode maintenance timeout

[no] system mode maintenance timeout <timer-value>

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| system             | System configuration commands                   |  |
| mode               | system mode commands                            |  |
| maintenance        | system maintenance mode                         |  |
| timeout            | restart maintenance mode timer with a new value |  |
| <i>timer-value</i> | timer value in minutes                          |  |

## Command Mode

- /exec/configure

# system module failure-action shutdown

[no] system module failure-action shutdown

## Syntax Description

| Syntax         | Description                                     |
|----------------|---|
| no             | (Optional) Negate a command or set its defaults |
| system         | system Internal Information                     |
| module         | module commands                                 |
| failure-action | Configure module action on failure              |
| shutdown       | action on failure - shutdown                    |

## Command Mode

- /exec/configure

# system mrouting performance-mode

[no] system mrouting performance-mode

## Syntax Description

| Syntax Description |                  |   |
|--------------------|------------------|---|
|                    | no               | (Optional) Negate a command or set its defaults |
|                    | system           | System Management Commands                      |
|                    | mrouting         | Layer-3 mrouting                                |
|                    | performance-mode | Multicast Performance Mode                      |

## Command Mode

- /exec/configure



# system nve drop-glean

system nve drop-glean | no system nve drop-glean

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate the command or set its defaults    |
| system             |  | System Management Commands                |
| nve                |  | VXLAN interface                           |
| drop-glean         |  | Disable glean processing for VXLAN routes |

## Command Mode

- /exec/configure

# system nve ecmp-reuse

system nve ecmp-reuse | no system nve ecmp-reuse

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate the command or set its defaults |
| system             |  | System Management Commands             |
| nve                |  | VXLAN interface                        |
| ecmp-reuse         |  | Enable ECMP reuse to scale             |

## Command Mode

- /exec/configure

# system nve infra-vlans

system nve infra-vlans <vlan-range> | no system nve infra-vlans <vlan-range>

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate the command or set its defaults  |
| system             |  | System Management Commands  |
| nve                |  | VXLAN interface   |
| infra-vlans        |  | Configure Vxlan SVI Uplinks(requires system reload)   |
| <i>vlan-range</i>  |  | VLAN ID 1-4094 or range(s): 1-5, 10 or 2-5,7-19 (The range of vlans configured must not exceed 512) |

## Command Mode

- /exec/configure

## system nve infra-vlans force

system nve infra-vlans <vlan-range> force

### Syntax Description

#### Syntax Description

|                   |   |
|-------------------|---|
| system            | System Management Commands  |
| nve               | VXLAN interface   |
| infra-vlans       | Configure Vxlan SVI Uplinks(requires system reload)   |
| <i>vlan-range</i> | VLAN ID 1-4094 or range(s): 1-5, 10 or 2-5,7-19 (The range of vlans configured must not exceed 512) |
| force             | Force-set infra-vlans   |

### Command Mode

- /exec/configure

# system nve ingress-replication round-robin

[no] system nve ingress-replication round-robin

## Syntax Description

| Syntax Description  |   |  |
|---------------------|---|--|
| no                  | (Optional) Negate a command or set its defaults                           |  |
| system              | System Management Commands  |  |
| nve                 | VXLAN interface   |  |
| ingress-replication | VXLAN Ingress replication   |  |
| round-robin         | Round-Robin hashing of underlay-paths for VXLAN ingress-replication peers |  |

## Command Mode

- /exec/configure

## system nve ipmc global index-size

system nve ipmc global index-size { <size> | default } | no system nve ipmc global index-size [ <size> ]

### Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate the command or set its defaults |
| system             |  | System Management Commands             |
| nve                |  | VXLAN interface                        |
| ipmc               |  | Configure ipmc index size              |
| global             |  | Configure global ipmc size             |
| index-size         |  | Configure index size                   |
| <i>size</i>        |  | ipmc allowed size                      |
| default            |  | Default size is 3000                   |

### Command Mode

- /exec/configure

# system nve mac-learn-disable

system nve mac-learn-disable | no system nve mac-learn-disable

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate the command or set its defaults |
| system             |  | System Management Commands             |
| nve                |  | VXLAN interface                        |
| mac-learn-disable  |  | Disable mac learning on VXLAN tunnels  |

## Command Mode

- /exec/configure

# system nve mac-nat-enable

system nve mac-nat-enable | no system nve mac-nat-enable

## Syntax Description

| Syntax Description |                |  |
|--------------------|----------------|--|
|                    | no             | Negate the command or set its defaults |
|                    | system         | System Management Commands             |
|                    | nve            | VXLAN interface                        |
|                    | mac-nat-enable | Enable mac NATing for VXLAN routes     |

## Command Mode

- /exec/configure



# system nve peer-vni-counter

system nve peer-vni-counter | no system nve peer-vni-counter

## Syntax Description

| Syntax Description |                  |  |
|--------------------|------------------|--|
|                    | no               | Negate the command or set its defaults |
|                    | system           | System Management Commands             |
|                    | nve              | VXLAN interface                        |
|                    | peer-vni-counter | Enable per-peer-per-vni counters       |

## Command Mode

- /exec/configure

# system nve policy-install-all

system nve policy-install-all | no system nve policy-install-all

## Syntax Description

| Syntax Description |                    |   |
|--------------------|--------------------|---|
|                    | no                 | Negate the command or set its defaults            |
|                    | system             | System Management Commands                        |
|                    | nve                | VXLAN interface                                   |
|                    | policy-install-all | Install policies on all slices of forwarding ASIC |

## Command Mode

- /exec/configure

# system offline

system offline

## Syntax Description

---

|                           |        |                            |
|---------------------------|--------|----------------------------|
| <b>Syntax Description</b> | system | System management commands |
|---------------------------|--------|----------------------------|

---

|  |         |            |
|--|---------|------------|
|  | offline | Go offline |
|--|---------|------------|

---

## Command Mode

- /exec

# system private-vlan fex trunk

[no] system private-vlan fex trunk

## Syntax Description

| Syntax Description |              |   |
|--------------------|--------------|---|
|                    | no           | (Optional) Negate a command or set its defaults |
|                    | system       | System configuration commands                   |
|                    | private-vlan | Configure Private VLANs                         |
|                    | fex          | Configure PVLANS on FEX Host Interface          |
|                    | trunk        | Configure PVLANS on FEX Trunk Ports             |

## Command Mode

- /exec/configure

# system pss shrink

system pss shrink

## Syntax Description

|                           |                                   |
|---------------------------|-----------------------------------|
| <b>Syntax Description</b> | system System management commands |
|                           | pss PSS commands                  |
|                           | shrink shrink pss files           |

## Command Mode

- /exec

# system qos

system qos

## Syntax Description

---

### Syntax Description

---

system System management commands

---

qos QoS parameters

---

## Command Mode

- /exec/configure

# system release mod-lock uuid nodeid

system release mod-lock uuid <uuid-hex> nodeid <nodeid-hex>

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| system             |  | System management commands           |
| release            |  | release                              |
| mod-lock           |  | module lock                          |
| uuid               |  | uuid of the service holding the lock |
| <i>uuid-hex</i>    |  | uuid                                 |
| nodeid             |  | node-id                              |
| <i>nodeid-hex</i>  |  | nodeid                               |

## Command Mode

- /exec

## system restart vdc service name

system restart vdc { <e-vdc2> | <vdc-id> } service name <s0>

### Syntax Description

| Syntax Description | Description                |
|--------------------|----------------------------|
| system             | System management commands |
| restart            | Restart a service          |
| vdc                | VDC number                 |
| <i>e-vdc2</i>      | Enter VDC <vdc-id>         |
| <i>vdc-id</i>      | vdc number                 |
| service            | Service to be restarted    |
| name               | Name of a service          |
| <i>s0</i>          | Name of service            |

### Command Mode

- /exec/configure



# system routing performance-mode

[no] system routing performance-mode

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| system             | System Management Commands                      |  |
| routing            | Layer-3 routing                                 |  |
| performance-mode   | Performance Mode                                |  |

## Command Mode

- /exec/configure

# system routing unknown-unicast-flood

[no] system routing unknown-unicast-flood

## Syntax Description

| Syntax Description    |  |  |
|-----------------------|--|--|
| no                    | (Optional) Negate a command or set its defaults                                    |  |
| system                | System Management Commands   |  |
| routing               | Layer-3 routing  |  |
| unknown-unicast-flood | Hardware flood post-routed traffic on SVI if dest-mac->layer2-port binding unknown |  |

## Command Mode

- /exec/configure

# system shutdown fan-direction mismatch

system shutdown fan-direction mismatch | no system shutdown fan-direction mismatch

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| system             |  | System management commands           |
| shutdown           |  | Shutdown management commands         |
| fan-direction      |  | Fan-direction check                  |
| mismatch           |  | Mismatch in check                    |

## Command Mode

- /exec/configure

# system standby manual-boot

system no standby manual-boot

## Syntax Description

---

### Syntax Description

---

|             |   |
|-------------|---|
| system      | System management commands                    |
| no          | Negate a command or set its defaults          |
| standby     | System standby manual boot                    |
| manual-boot | No action taken to force-download standby sup |

---

## Command Mode

- /exec

# system standby manual-boot

system standby manual-boot

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| system             |  | System management commands                    |
| standby            |  | System standby management commands            |
| manual-boot        |  | No action taken to force-download standby sup |

## Command Mode

- /exec

# system standby reload vdc

system standby reload vdc { <e-vdc2> | <i0> }

## Syntax Description

### Syntax Description

system System management commands

standby System standby management commands

reload Reload

vdc vdc to reload

*e-vdc2* Enter VDC <vdc-id>

*i0* vdc number

## Command Mode

- /exec

# system startup-config init

system startup-config init

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| system             |  | System management commands           |
| startup-config     |  | System startup-config commands       |
| init               |  | Initialize the startup-configuration |

## Command Mode

- /exec

# system startup-config kill config-update

system startup-config kill config-update

## Syntax Description

| Syntax Description |  |                                |
|--------------------|--|--------------------------------|
| system             |  | System management commands     |
| startup-config     |  | System startup-config commands |
| kill               |  | Kill configuration update      |
| config-update      |  | Kill configuration update      |

## Command Mode

- /exec



# system startup-config unlock

system startup-config unlock <i0>

## Syntax Description

| Syntax Description |  |                                |
|--------------------|--|--------------------------------|
| system             |  | System management commands     |
| startup-config     |  | System startup-config commands |
| unlock             |  | Unlock startup-config          |
| <i>i0</i>          |  | Startup-config lock id         |

## Command Mode

- /exec

# system statistics

system statistics

## Syntax Description

---

### Syntax Description

---

system System management commands

---

statistics enables sysmgr statistics

---

## Command Mode

- /exec

# system statistics

system no statistics

## Syntax Description

---

### Syntax Description

---

system System management commands

---

no Negate a command or set its defaults

---

statistics disable the sysmgr statistics

---

## Command Mode

- /exec

# system switch-mode

```
system switch-mode { <mode> }
```

## Syntax Description

| Syntax Description |             |                                |
|--------------------|-------------|--------------------------------|
|                    | system      | System management commands     |
|                    | switch-mode | change switch operational mode |
|                    | <i>mode</i> | switch mode                    |

## Command Mode

- /exec/configure

# system switchover

system switchover

## Syntax Description

| Syntax Description |                                       |
|--------------------|---------------------------------------|
| system             | System management commands            |
| switchover         | Switch over to the standby supervisor |

## Command Mode

- /exec

# system switchover force

system switchover force

## Syntax Description

---

### Syntax Description

---

|        |                            |
|--------|----------------------------|
| system | System management commands |
|--------|----------------------------|

---

|            |                                       |
|------------|---------------------------------------|
| switchover | Switch over to the standby supervisor |
|------------|---------------------------------------|

---

|       |   |
|-------|---|
| force | Force switch over to the standby supervisor |
|-------|---|

---

## Command Mode

- /exec

# system swover-timeout-reset

[no] system swover-timeout-reset

## Syntax Description

|                           |                      |   |
|---------------------------|----------------------|---|
| <b>Syntax Description</b> | no                   | (Optional) Negate a command or set its defaults |
|                           | system               | System management commands                      |
|                           | swover-timeout-reset | switchover timeout and reset                    |

## Command Mode

- /exec

# system trace

{ system trace <i0> | no system trace [ <i0> ] }

## Syntax Description

|                           |        |                                      |
|---------------------------|--------|--------------------------------------|
| <b>Syntax Description</b> | no     | Negate a command or set its defaults |
|                           | system | System configuration commands        |
|                           | trace  | To configure system trace level      |
|                           | i0     | Select the mask                      |

## Command Mode

- /exec/configure



# system urpf disable

[no] system urpf disable

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | no (Optional) Negate a command or set its defaults |
|                           | system System Management Commands                  |
|                           | urpf Manage urpf enable/disable                    |
|                           | disable disable                                    |

## Command Mode

- /exec/configure

# system vlan reserve

system vlan <start-val> reserve | no system vlan <start-val> reserve

## Syntax Description

---

### Syntax Description

---

|                  |  |
|------------------|--|
| system           | system wide configuration                          |
| no               | Select default reserved vlans group vlan 3968-4094 |
| vlan             | Vlan commands                                      |
| <i>start-val</i> | minimum VLANs value                                |
| reserve          | reservation  |

---

## Command Mode

- /exec/configure

# system vrf-member-change retain-l3-config

[no] system vrf-member-change retain-l3-config

## Syntax Description

| Syntax Description |                         |                                      |
|--------------------|-------------------------|--------------------------------------|
| no                 | (Optional)              | Negate a command or set its defaults |
| system             |                         | System management commands           |
| vrf-member-change  | vrf member change       |                                      |
| retain-l3-config   | retain L3 configuration |                                      |

## Command Mode

- /exec/configure

# system watchdog

system no watchdog

## Syntax Description

---

### Syntax Description

---

|        |                            |
|--------|----------------------------|
| system | System management commands |
|--------|----------------------------|

---

|    |                                      |
|----|--------------------------------------|
| no | Negate a command or set its defaults |
|----|--------------------------------------|

---

|          |                  |
|----------|------------------|
| watchdog | enables watchdog |
|----------|------------------|

---

## Command Mode

- /exec

# system watchdog

system watchdog

## Syntax Description

---

|                           |        |                            |
|---------------------------|--------|----------------------------|
| <b>Syntax Description</b> | system | System management commands |
|---------------------------|--------|----------------------------|

---

|  |          |                  |
|--|----------|------------------|
|  | watchdog | enables watchdog |
|--|----------|------------------|

---

## Command Mode

- /exec

# system watchdog kgdb

system no watchdog kgdb

## Syntax Description

---

### Syntax Description

---

|          |                                      |
|----------|--------------------------------------|
| system   | System management commands           |
| no       | Negate a command or set its defaults |
| watchdog | enables watchdog                     |
| kgdb     | enter kgdb on watchdog failure       |

---

## Command Mode

- /exec

# system watchdog kgdb

system watchdog kgdb

## Syntax Description

| Syntax Description |                                |
|--------------------|--------------------------------|
| system             | System management commands     |
| watchdog           | enables watchdog               |
| kgdb               | enter kgdb on watchdog failure |

## Command Mode

- /exec







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---

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# table-map

[no] table-map <rmap-name> [ filter ]

## Syntax Description

|                           |                  |   |
|---------------------------|------------------|---|
| <b>Syntax Description</b> | no               | (Optional) Negate a command or set its defaults       |
|                           | table-map        | Apply table-map to filter routes downloaded into URIB |
|                           | <i>rmap-name</i> | Route-map name  |
|                           | filter           | (Optional) Selective route download                   |

## Command Mode

- /exec/configure/router-bgp/router-bgp-af

# table-map

[no] table-map <policy-name> [ filter ]

## Syntax Description

|                           |                    |   |
|---------------------------|--------------------|---|
| <b>Syntax Description</b> | no                 | (Optional) Negate a command or set its defaults                       |
|                           | table-map          | Policy for filtering/modifying OSPF routes before sending them to RIB |
|                           | <i>policy-name</i> | Route-map name  |
|                           | filter             | (Optional) To block the OSPF routes from being sent to RIB            |

## Command Mode

- /exec/configure/router-ospf /exec/configure/router-ospf/vrf

# table-map

[no] table-map <table-map-name>

## Syntax Description

|                           |                       |   |
|---------------------------|-----------------------|---|
| <b>Syntax Description</b> | no                    | (Optional) Negate a command or set its defaults |
|                           | table-map             | Configure a table map                           |
|                           | <i>table-map-name</i> | Table map name                                  |

## Command Mode

- /exec/configure



# table-map

table-map <default-tmap-enum-name>

## Syntax Description

| Syntax Description |                               |                       |
|--------------------|-------------------------------|-----------------------|
|                    | table-map                     | Configure a table map |
|                    | <i>default-tmap-enum-name</i> |                       |

## Command Mode

- /exec/configure

# table-map

[no] table-map <policy-name> [ filter ]

## Syntax Description

### Syntax Description

|                    |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults                                      |
| table-map          | Table-map policy used to filter routes and tune attributes before downloading to RIB |
| filter             | (Optional) Filter the routes based on policy results                                 |
| <i>policy-name</i> | A 'routing-rules' route-map name   |

## Command Mode

- /exec/configure/router-isis/router-isis-vrf-common /exec/configure/router-isis/router-isis-af-ipv4

# table-map

[no] table-map <policy-name> [ filter ]

## Syntax Description

|                           |                    |  |
|---------------------------|--------------------|--|
| <b>Syntax Description</b> | no                 | (Optional) Negate a command or set its defaults                                      |
|                           | table-map          | Table-map policy used to filter routes and tune attributes before downloading to RIB |
|                           | filter             | (Optional) Filter the routes based on policy results                                 |
|                           | <i>policy-name</i> | A 'routing-rules' route-map name   |

## Command Mode

- /exec/configure/router-isis/router-isis-af-ipv6

# table-map

[no] table-map <policy-name> [ filter ]

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

table-map Policy for filtering/modifying OSPFV3 routes before sending them to RIB

---

*policy-name* Route-map name

---

filter (Optional) To block the OSPFV3 routes from being sent to RIB

---

## Command Mode

- /exec/configure/router-ospf3/router-ospf3-af-ipv6 /exec/configure/router-ospf3/vrf/router-ospf3-af-ipv6

# table-map

[no] table-map <map> [ filter ]

## Syntax Description

|                           |                  |  |
|---------------------------|------------------|--|
| <b>Syntax Description</b> | <i>no</i>        | (Optional) Negate a command or set its defaults          |
|                           | <i>table-map</i> | Configure Table Map information                          |
|                           | <i>map</i>       | Route-map name   |
|                           | <i>filter</i>    | (Optional) Filter routes which are rejected by route-map |

## Command Mode

- /exec/configure/router-eigrp/router-eigrp-vrf-common /exec/configure/router-eigrp/router-eigrp-af-common

# tac-pac

tac-pac [ <uri0> ]

## Syntax Description

---

### Syntax Description

---

tac-pac save tac info in a compressed .gz file at specific location

---

*uri0* (Optional) Select destination filesystem

---

## Command Mode

- /exec

# tac-pac

tac-pac [ <uri0> [ vrf <vrf-known-name> ] ]

## Syntax Description

| Syntax Description    |            |   |
|-----------------------|------------|---|
| tac-pac               |            | save tac info in a compressed .gz file at specific location |
| <i>uri0</i>           | (Optional) | Select destination filesystem                               |
| vrf                   | (Optional) | Display per-VRF information                                 |
| <i>vrf-known-name</i> | (Optional) | Known VRF name  |

## Command Mode

- /exec

# tacacs-server deadline

[no] tacacs-server deadline <i0>

## Syntax Description

|                           |               |  |
|---------------------------|---------------|--|
| <b>Syntax Description</b> | no            | (Optional) Negate a command or set its defaults    |
|                           | tacacs-server | Configure TACACS+ server related parameters        |
|                           | deadline      | duration for which non-reachable server is skipped |
|                           | <i>i0</i>     | Length of time, in minutes                         |

## Command Mode

- /exec/configure



# tacacs-server directed-request

[no] tacacs-server directed-request

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| tacacs-server      | Configure TACACS+ server related parameters     |
| directed-request   | enable direct authentication requests to server |

## Command Mode

- /exec/configure

## tacacs-server host key 0 6 7

```
{ { [ no ] tacacs-server host { <hostipname> } { { key { 0 <s0> | 6 <s6> | 7 <s1> | <s2> } [ port <i1> ] [
timeout <i2> ] } } | { [ port1 <i3> ] [ timeout1 <i4> ] } } } | { no tacacs-server host <hostipname> key } }
```

### Syntax Description

| Syntax Description |   |
|--------------------|---|
| <i>key</i>         | 0   |
| no                 | (Optional) Negate a command or set its defaults     |
| tacacs-server      | Configure TACACS+ server related parameters         |
| host               | TACACS+ server's DNS name or its IP address         |
| <i>hostipname</i>  | IPV4/IPV6 address or DNS name                       |
| key                | TACACS+ shared secret                               |
| 0                  | TACACS+ shared secret(clear text)                   |
| <i>s0</i>          | TACACS+ shared secret(clear text)                   |
| port               | (Optional) TACACS+ server port                      |
| <i>i1</i>          | (Optional) TACACS+ server port                      |
| timeout            | (Optional) TACACS+ server timeout period in seconds |
| <i>i2</i>          | (Optional) TACACS+ server timeout period in seconds |
| 6                  | TACACS+ shared secret(type-6 encrypted)             |
| <i>s6</i>          | TACACS+ shared secret(encrypted)                    |
| 7                  | TACACS+ shared secret(encrypted)                    |
| <i>s1</i>          | TACACS+ shared secret(encrypted)                    |
| port1              | (Optional) TACACS+ server port                      |
| <i>i3</i>          | (Optional) TACACS+ server port                      |
| timeout1           | (Optional) TACACS+ server timeout period in seconds |
| <i>i4</i>          | (Optional) TACACS+ server timeout period in seconds |
| <i>s2</i>          | TACACS+ shared secret(clear text)                   |

### Command Mode

- /exec/configure

## tacacs-server host test

```
[no] tacacs-server host <hostipnam> test { { username <s0> { [ password <s1> [ idle-time <i1> ] ] [ idle-time <i1> ] } } | { password <s1> [ idle-time <i1> ] } | { idle-time <i1> } }
```

### Syntax Description

| Syntax Description |  |
|--------------------|--|
| <i>username</i>    | <s0>   |
| no                 | (Optional) Negate a command or set its defaults    |
| tacacs-server      | Configure TACACS+ server related parameters        |
| host               | TACACS+ server's DNS name or its IP address        |
| <i>hostipnam</i>   | IPV4/IPV6 address or DNS name                      |
| test               | Parameters to send test packets                    |
| <i>s0</i>          | user name  |
| password           | (Optional) user password in test packets           |
| <i>s1</i>          | (Optional) user password                           |
| idle-time          | (Optional) time interval for monitoring the server |
| <i>i1</i>          | (Optional) time period in minutes                  |

### Command Mode

- /exec/configure

## tacacs-server key 0 6 7

```
{ { [ no ] tacacs-server key { 0 <s0> [ timeout <i0> ] | 6 <s6> [ timeout6 <i6> ] | 7 <s1> [ timeout1 <i1> ] | <s2> [ timeout2 <i2> ] } } | { no tacacs-server key } }
```

### Syntax Description

| Syntax Description |            |   |
|--------------------|------------|---|
| no                 | (Optional) | Negate a command or set its defaults            |
| tacacs-server      |            | Configure TACACS+ server related parameters     |
| key                |            | Global TACACS+ server shared secret             |
| 0                  |            | default TACACS+ shared secret(clear text)       |
| s0                 |            | default TACACS+ shared secret(clear text)       |
| timeout            | (Optional) | Global TACACS+ server timeout period in seconds |
| i0                 | (Optional) | Global TACACS+ server timeout period in seconds |
| 6                  |            | default TACACS+ shared secret(type-6 encrypted) |
| s6                 |            | default TACACS+ shared secret(type-6 encrypted) |
| timeout6           | (Optional) | Global TACACS+ server timeout period in seconds |
| i6                 | (Optional) | Global TACACS+ server timeout period in seconds |
| 7                  |            | default TACACS+ shared secret(encrypted)        |
| s1                 |            | default TACACS+ shared secret(encrypted)        |
| timeout1           | (Optional) | Global TACACS+ server timeout period in seconds |
| i1                 | (Optional) | Global TACACS+ server timeout period in seconds |
| s2                 |            | default TACACS+ shared secret(clear text)       |
| timeout2           | (Optional) | Global TACACS+ server timeout period in seconds |
| i2                 | (Optional) | Global TACACS+ server timeout period in seconds |

### Command Mode

- /exec/configure

## tacacs-server test

```
[no] tacacs-server test { { username <s0> { [ password <s1> [ idle-time <i1> ] ] | [ idle-time <i1> ] } } | { password <s1> [ idle-time <i1> ] } | { idle-time <i1> } }
```

### Syntax Description

| Syntax Description   |  |
|----------------------|--|
| <i>username</i>      | <s0>   |
| <i>no</i>            | (Optional) Negate a command or set its defaults    |
| <i>tacacs-server</i> | Configure TACACS+ server related parameters        |
| <i>test</i>          | Parameters to send test packets                    |
| <i>s0</i>            | user name  |
| <i>password</i>      | (Optional) user password in test packets           |
| <i>s1</i>            | (Optional) user password                           |
| <i>idle-time</i>     | (Optional) time interval for monitoring the server |
| <i>i1</i>            | (Optional) time period in minutes                  |

### Command Mode

- /exec/configure

# tacacs-server timeout

[no] tacacs-server timeout <i0>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| tacacs-server      | Configure TACACS+ server related parameters     |
| timeout            | Global TACACS+ server timeout period in seconds |
| <i>i0</i>          | Global TACACS+ server timeout period in seconds |

## Command Mode

- /exec/configure

# tacacs enable

[no] tacacs + enable

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | <b>no</b> (Optional) Negate a command or set its defaults |
|                           | <b>enable</b> Enable tacacs+                              |

## Command Mode

- /exec/configure

# tag

```
{ { no | default } tag | tag <text> }
```

## Syntax Description

### Syntax Description

---

no

---

default Set a command to its defaults

---

tag User defined tag

---

*text* Tag string line

---

## Command Mode

- /exec/configure/ip-sla/udp /exec/configure/ip-sla/jitter /exec/configure/ip-sla/tcp  
/exec/configure/ip-sla/icmpEcho /exec/configure/ip-sla/dns /exec/configure/ip-sla/fabricPathEcho  
/exec/configure/ip-sla/http



# tag happens in

[no] tag <tag\_id> <op> <tag\_id> [ <op> <tag\_id> [ <op> <tag\_id> ] ] happens <threshold> in <interval> |  
no tag

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults          |
| tag                | event tag identifier                                     |
| <i>tag_id</i>      | tag name   |
| <i>op</i>          | boolean operator   |
| happens            | The number of occurrences before raising the event       |
| <i>threshold</i>   | Occurs value   |
| in                 | Number of occurrences must occur within this time period |
| <i>interval</i>    | Enter seconds value                                      |

## Command Mode

- /exec/configure/event-manager-applet

# tahoe-python module

tahoe-python module <module>

## Syntax Description

---

**Syntax Description**      tahoe-python    enter python mode for tahoe systems

---

module            Module number of the linecard

---

*module*            Enter module number

---

## Command Mode

- /exec

# tahoe-python module quoted

tahoe-python module <module> quoted <quoted-cmd>

## Syntax Description

|                           |                   |   |
|---------------------------|-------------------|---|
| <b>Syntax Description</b> | tahoe-python      | enter python mode for tahoe systems   |
|                           | module            | Module number of the linecard   |
|                           | <i>module</i>     | Enter module number   |
|                           | quoted            | enter the command with quotes Add multiple commands separated by semi-colon |
|                           | <i>quoted-cmd</i> | the command(s) to run in tahoe python                                       |

## Command Mode

- /exec

# tail

```
tail <uri0> [ <i1> ]
```

## Syntax Description

---

**Syntax Description**

`tail` Display the last part of a file

---

*uri0* Filename to be displayed

---

*i1* (Optional) Enter the number of lines to be displayed

---

## Command Mode

- /exec

# tail

| tail [ -n <lines> ]

## Syntax Description

---

### Syntax Description

---

| Pipe command output to filter

---

tail Display last lines

---

-n (Optional) modify number of lines (default 10)

---

*lines* (Optional) number of lines to print

---

## Command Mode

- /output

# tar

```
tar { create <new-archive-file> [ gz-compress | bz2-compress | uncompressed ] + [ remove | absolute | verbose ] + <files> + | append <archive-file> [ remove | absolute | verbose ] + <files> + | extract <archive-file> [ screen | to <dest-dir> | keep-old | verbose ] + | list <archive-file> }
```

## Syntax Description

### Syntax Description

|                         |  |
|-------------------------|--|
| tar                     | archiving operations   |
| create                  | create an archive (merge several files together)   |
| append                  | append some files to an existing archive   |
| extract                 | extract files from archive (unmerge them)  |
| verbose                 | (Optional) display files while merging/extracting  |
| gz-compress             | (Optional) compress archive with gzip, the default -> .tar.gz  |
| bz2-compress            | (Optional) compress archive with bzip2 -> .tar.bz2   |
| uncompressed            | (Optional) dont compress archive -> .tar   |
| remove                  | (Optional) remove files after adding them to the archive   |
| absolute                | (Optional) don't strip leading `/s from file names   |
| keep-old                | (Optional) don't replace existing files when extracting  |
| screen                  | (Optional) extract files to screen   |
| list                    | shows the list of files which are part of the archive  |
| <i>new-archive-file</i> | the name of the archive (extension will be added if none of tar/tgz/tar.gz/tar.bz2/tbz2/tar.Z specified) |
| <i>archive-file</i>     | the name of the archive (extension will be added if none of tar/tgz/tar.gz/tar.bz2/tbz2/tar.Z specified) |
| <i>files</i>            | name of file to be added into archive  |
| to                      | (Optional) extract to specific directory (default is bootflash)  |
| <i>dest-dir</i>         | (Optional) destination dir where to extract to (created if not exist), default is bootflash              |

## Command Mode

- /exec

# tclsh

tclsh <file> [ <args> ] +

## Syntax Description

|                           |   |
|---------------------------|---|
| <b>Syntax Description</b> | tclsh source tclsh script                 |
|                           | <i>file</i> the file to run               |
|                           | <i>args</i> (Optional) args to tcl script |

## Command Mode

- /exec

# tclsh

tclsh

## Syntax Description

---

### Syntax Description

---

tclsh Execute  
tclsh

---

## Command Mode

- /exec



# tcp-connect

```
[no] tcp-connect { <hostname> | <ip-address> } <dest-port> { [ control { disable | enable } ] [ source-ip { <source-ip-hostname> | <source-ip-address> } ] [ source-port <src-port> ] } +
```

## Syntax Description

| Syntax Description        |  |
|---------------------------|--|
| <i>no</i>                 | (Optional)   |
| <i>control</i>            | (Optional) enable  |
| <i>source-ip-address</i>  | (Optional) <src-port>  |
| tcp-connect               | TCP Connect Operation  |
| <i>hostname</i>           | Destination hostname, broadcast disallowed                         |
| <i>ip-address</i>         | Destination IP address, broadcast disallowed                       |
| <i>dest-port</i>          | Port Number (Recommended port range between 1025-65534)            |
| enable                    | (Optional) Enable control packets exchange (default)               |
| disable                   | (Optional) Disable control packets exchange                        |
| source-ip                 | (Optional) Source address  |
| <i>source-ip-hostname</i> | (Optional) source IP hostname, broadcast disallowed                |
| source-port               | (Optional) Source Port   |
| <i>src-port</i>           | (Optional) Port Number (Recommended port range between 1025-65534) |

## Command Mode

- /exec/configure/ip-sla

# telemetry

[no] telemetry

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its default |
| telemetry          |  |

## Command Mode

- /exec/configure

# telnet

```
{ telnet { <so> | <host> } } [ <i0> ] [ [ source { <host_src> | <interface> } ] [ vrf { <vrf-name> | <vrf-known-name> } ] ]
```

## Syntax Description

| Syntax Description    |            |                                   |
|-----------------------|------------|-----------------------------------|
| telnet                |            | Telnet to another system          |
| <i>so</i>             |            | Enter hostname                    |
| <i>host</i>           |            | Enter a valid IPv4 address        |
| source                | (Optional) | Set source address in IPv4 header |
| <i>host_src</i>       | (Optional) | Set IPV4 address as source        |
| <i>interface</i>      | (Optional) | Set interface to send IPv4 packet |
| vrf                   | (Optional) | Display per-VRF information       |
| <i>vrf-name</i>       | (Optional) | VRF name                          |
| <i>vrf-known-name</i> | (Optional) | Known VRF name                    |
| <i>i0</i>             | (Optional) | Enter the port number             |

## Command Mode

- /exec

# telnet6

```
{ telnet6 { <s1> | <host1> } } [ <i0> ] [ [ source { <host1_src> | <interface> } ] [ vrf { <vrf-name> | <vrf-known-name> } ] ]
```

## Syntax Description

### Syntax Description

|                       |   |
|-----------------------|---|
| telnet6               | Telnet6 to another system using IPv6 addressing |
| <i>s1</i>             | Enter hostname                                  |
| source                | (Optional) Set source address in IPv6 header    |
| <i>interface</i>      | (Optional) Set interface to send IPv6 packet    |
| vrf                   | (Optional) Display per-VRF information          |
| <i>vrf-name</i>       | (Optional) VRF name                             |
| <i>vrf-known-name</i> | (Optional) Known VRF name                       |
| <i>i0</i>             | (Optional) Enter the port number                |

## Command Mode

- /exec

# telnet login-attempts

```
{ { telnet login-attempts <d0> } | { no telnet login-attempts [ <d0> ] } }
```

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| telnet             |  | telnet login                         |
| login-attempts     |  | Set maximum login attempts           |
| <i>d0</i>          |  | Specify max-attempt number           |

## Command Mode

- /exec/configure/

# telnet server enable

[no] telnet server enable

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| telnet             | Enable telnet                                   |
| server             | Enable telnet                                   |
| enable             | Enable telnet                                   |

## Command Mode

- /exec/configure

# template

template <res-mgr-template-known-name-all>

## Syntax Description

| Syntax Description                     |                                  |
|--|----------------------------------|
| template                               | Change the template for this vdc |
| <i>res-mgr-template-known-name-all</i> | Resource template for this vdc   |

## Command Mode

- /exec/configure/vdc

# template data timeout

```
{ [ no ] template data timeout <time> | no template data timeout }
```

## Syntax Description

---

**Syntax Description**

---

`template` Version 9 Template

---

`data` Data

---

`timeout` Template Data resend  
time

---

*time* Time in seconds

---

## Command Mode

- /exec/configure/nfm-exporter-v9



# template peer-policy

[no] template peer-policy <peer-policy-template-name>

## Syntax Description

| Syntax Description               |   |  |
|----------------------------------|---|--|
| no                               | (Optional) Negate a command or set its defaults |  |
| template                         | Enter template command mode                     |  |
| peer-policy                      | Template configuration for policy parameters    |  |
| <i>peer-policy-template-name</i> | Name of peer-policy template                    |  |

## Command Mode

- /exec/configure/router-bgp

# template peer-session

[no] template peer-session <peer-session-template-name>

## Syntax Description

| Syntax Description                |  |   |
|-----------------------------------|--|---|
| no                                |  | (Optional) Negate a command or set its defaults |
| template                          |  | Enter template command mode                     |
| peer-session                      |  | Template configuration for session parameters   |
| <i>peer-session-template-name</i> |  | Name of peer-session template                   |

## Command Mode

- /exec/configure/router-bgp

# template peer

[no] template peer <peer-template-name>

## Syntax Description

| Syntax Description |                           |   |
|--------------------|---------------------------|---|
|                    | no                        | (Optional) Negate a command or set its defaults |
|                    | template                  | Enter template command mode                     |
|                    | peer                      | Template configuration for peer parameters      |
|                    | <i>peer-template-name</i> | Neighbor template name                          |

## Command Mode

- /exec/configure/router-bgp

# terminal

```
terminal { monitor | no { monitor1 | monitor-force } }
```

## Syntax Description

---

**Syntax Description**

---

|               |   |
|---------------|---|
| terminal      | Set terminal line parameters                    |
| monitor       | Copy Syslog output to the current terminal line |
| no            | Negate a command or set its defaults            |
| monitor1      | Copy Syslog output to the current terminal line |
| monitor-force | Copy Syslog output to the current terminal line |

---

## Command Mode

- /exec

# terminal alias

[no] terminal alias [ persist ] [ <alias-name> [ <command> ] ]

## Syntax Description

### Syntax Description

|                   |   |
|-------------------|---|
| <i>no</i>         | (Optional) Negate a command or set its defaults   |
| <i>terminal</i>   | Set terminal line parameters  |
| <i>alias</i>      | show aliases (if no arguments) create 'exec' aliases (not persistent). Persistent aliases are in config mode, see 'cli alias  |
| <i>persist</i>    | (Optional) add terminal alias to <username>.rc.cli file (auto-executed at login time)   |
| <i>alias-name</i> | (Optional) Name of the alias. (if last argument: shows the value of that alias) Command lines can start with an alias and it will be expanded before parsing. An alias can also be used right after a pipe. The substitution text can contain things like '\$1 \$2' and those \$<number> will be substituted by correspondingly numbered token from the command line starting the counting after the alias. |
| <i>command</i>    | (Optional) Value of the alias (what the alias will be substituted with)   |

## Command Mode

- /exec

# terminal ask-on-term

[no] terminal ask-on-term <term>

## Syntax Description

|                           |                    |   |
|---------------------------|--------------------|---|
| <b>Syntax Description</b> | <i>no</i>          | (Optional) Negate a command or set its defaults |
|                           | <i>terminal</i>    | Set terminal line parameters                    |
|                           | <i>ask-on-term</i> | ask backend driven question on given terminal   |
|                           | <i>term</i>        | the terminal (/dev/ptsX)                        |

## Command Mode

- /exec

# terminal color

[no] terminal color [ persist ]

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

terminal Set terminal line parameters

---

color enable colorization of prompt(green if last command ok, red if error), command line (blue), output (default color)

---

persist (Optional) add command to <username>.rc.cli file (auto-execed at login time)

---

## Command Mode

- /exec

# terminal context management

[no] terminal context management

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| terminal           | Set terminal line parameters                    |
| context            | set the vrf context                             |
| management         | vrf context management                          |

## Command Mode

- /exec



# terminal deep-help

[no] terminal deep-help

## Syntax Description

|                           |           |   |
|---------------------------|-----------|---|
| <b>Syntax Description</b> | no        | (Optional) Negate a command or set its defaults |
|                           | terminal  | Set terminal line parameters                    |
|                           | deep-help | enable cli syntax and list                      |

## Command Mode

- /exec

# terminal dont-ask

[no] terminal dont-ask [ persist ]

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

terminal Set terminal line parameters

---

dont-ask Don't ask 'are you sure' questions, take default answer instead

---

persist (Optional) add command to <username>.rc.cli file (auto-executed at login time)

---

## Command Mode

- /exec

# terminal edit-mode vi

[no] terminal edit-mode vi [ persist ]

## Syntax Description

---

**Syntax Description**

---

no (Optional) Negate a command or set its defaults

---

terminal Set terminal line parameters

---

edit-mode set command line edition keys (vi or emacs emacs is default)

---

vi edit like in vi by default in insert-mode, use ~ for command-mode

---

persist (Optional) add command to <username>.rc.cli file (auto-execed at login time)

---

## Command Mode

- /exec

# terminal event-manager bypass

terminal [ <noarg> ] event-manager bypass

## Syntax Description

| Syntax Description |               |  |
|--------------------|---------------|--|
|                    | terminal      | Set terminal line parameters           |
|                    | <i>noarg</i>  | (Optional)                             |
|                    | event-manager | Event manager cli event                |
|                    | bypass        | Bypass event manager cli event publish |

## Command Mode

- /exec

# terminal history no-exec-in-config

[no] terminal history no-exec-in-config

## Syntax Description

| Syntax Description |            |   |
|--------------------|------------|---|
| no                 | (Optional) | Negate a command or set its defaults            |
| terminal           |            | Set terminal line parameters                    |
| history            |            | configure terminal history properties           |
| no-exec-in-config  |            | don't recall exec commands while in config mode |

## Command Mode

- /exec

# terminal history no-exec-in-config

[no] terminal history no-exec-in-config

## Syntax Description

| Syntax Description |                   |   |
|--------------------|-------------------|---|
|                    | no                | (Optional) Negate a command or set its defaults |
|                    | terminal          | Set terminal line parameters                    |
|                    | history           | configure terminal history properties           |
|                    | no-exec-in-config | don't recall exec commands while in config mode |

## Command Mode

- /exec

# terminal history no-exec-in-config

[no] terminal history no-exec-in-config

## Syntax Description

| Syntax Description |            |   |
|--------------------|------------|---|
| no                 | (Optional) | Negate a command or set its defaults            |
| terminal           |            | Set terminal line parameters                    |
| history            |            | configure terminal history properties           |
| no-exec-in-config  |            | don't recall exec commands while in config mode |

## Command Mode

- /exec

# terminal home

terminal home

## Syntax Description

---

### Syntax Description

terminal Set terminal line parameters

home go back to line 1 position 1 without erasing the screen (to be used in cli command loops)

---

## Command Mode

- /exec



# terminal length

terminal length <i0>

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| terminal           | Set terminal line parameters                 |
| length             | Set number of lines on a screen              |
| <i>i0</i>          | Number of lines on screen (0 for no pausing) |

## Command Mode

- /exec

# terminal length

terminal length <i0>

## Syntax Description

---

### Syntax Description

---

terminal Set terminal line parameters

---

length Set number of lines on a screen

---

*i0* Number of lines on screen (0 for no pausing)

---

## Command Mode

- /exec/configure/console

# terminal lock

terminal lock

## Syntax Description

| Syntax Description |                              |
|--------------------|------------------------------|
| terminal           | Set terminal line parameters |
| lock               | Locks the CLI Config mode    |

## Command Mode

- /exec

# terminal log-all

[no] terminal log-all

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

terminal Configure terminal settings

---

log-all Accounting log all commands including the show commands

---

## Command Mode

- /exec/configure

# terminal no

terminal no { length | terminal-type | width }

## Syntax Description

| Syntax Description |               |                                      |
|--------------------|---------------|--------------------------------------|
|                    | terminal      | Set terminal line parameters         |
|                    | no            | Negate a command or set its defaults |
|                    | length        | Set number of lines on a screen      |
|                    | terminal-type | Set the terminal type                |
|                    | width         | Set width of the display terminal    |

## Command Mode

- /exec

# terminal output xml

[no] terminal output xml

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

terminal Set terminal line parameters

---

output how output of show commands should be formatted

---

xml xml output

---

## Command Mode

- /exec

# terminal output xml

[no] terminal output xml <namespace-version>

## Syntax Description

| Syntax Description |                          |   |
|--------------------|--------------------------|---|
|                    | no                       | (Optional) Negate a command or set its defaults |
|                    | terminal                 | Set terminal line parameters                    |
|                    | output                   | how output of show commands should be formatted |
|                    | xml                      | xml output                                      |
|                    | <i>namespace-version</i> | enter the version for xml output                |

## Command Mode

- /exec

# terminal output xml

[no] terminal output xml

## Syntax Description

---

**Syntax Description**

---

no (Optional) Negate a command or set its defaults

---

terminal Set terminal line parameters

---

output how output of show commands should be formatted

---

xml xml output

---

## Command Mode

- /exec



# terminal password

terminal password <password> | no terminal password [ <password> ]

## Syntax Description

---

### Syntax Description

no Negate a command or set its defaults

---

terminal Set terminal line parameters

---

password set a password to be used in copy scp/ftp commands use online help on the argument to disable echo so you don't need to type control-x-e twice (to toggle echo), echo will be re-enabled after carriage-return

---

*password* Enter the password (online help that you just did disabled echo so type your password and press return

---

## Command Mode

- /exec

# terminal prompt

[no] terminal prompt [ fix [ <name> ] [ with-cr ] | mode | { fq-command | command } | status | exec-time | time | no-echo ] +

## Syntax Description

### Syntax Description

|             |   |
|-------------|---|
| no          | (Optional) Negate a command or set its defaults   |
| terminal    | Set terminal line parameters  |
| prompt      | configure how the prompt should look like   |
| fix         | (Optional) set the prompt to a fix name (default _prompt_)                                      |
| with-cr     | (Optional) add a carriage return at the end of the prompt                                       |
| <i>name</i> | (Optional) name to use as a fix prompt  |
| mode        | (Optional) include the cli mode name (ex: config-if) into the prompt                            |
| fq-command  | (Optional) include the fully qualified command just executed (formatted like in accounting log) |
| command     | (Optional) include the previous command (not including the mode and mode instance)              |
| status      | (Optional) include the status of previous command (0=success)                                   |
| exec-time   | (Optional) include the time it took to execute previous command                                 |
| time        | (Optional) include the time when prompt was printed   |
| no-echo     | (Optional) dont echo the typed characters   |

## Command Mode

- /exec

# terminal redirection-mode

terminal redirection-mode <mode>

## Syntax Description

| Syntax Description |                  |                              |
|--------------------|------------------|------------------------------|
|                    | terminal         | Set terminal line parameters |
|                    | redirection-mode | Set the redirection mode     |
|                    | <i>mode</i>      |                              |

## Command Mode

- /exec

# terminal reset-role

terminal reset-role <num>

## Syntax Description

---

### Syntax Description

---

terminal Set terminal line parameters

---

reset-role Reset the privilege role to default

---

*num* Enter the role num

---

## Command Mode

- /exec

# terminal reset vlan-config-mutex

terminal reset vlan-config-mutex

## Syntax Description

| Syntax Description |                   |   |
|--------------------|-------------------|---|
|                    | terminal          | Set terminal line parameters              |
|                    | reset             | Force reset of the vlan config mode mutex |
|                    | vlan-config-mutex | Vlan configuration mutex                  |

## Command Mode

- /exec

# terminal session-timeout

terminal session-timeout <i0>

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| terminal           | Set terminal line parameters           |  |
| session-timeout    | Set session timeout                    |  |
| <i>i0</i>          | Enter timeout in minutes, 0 to disable |  |

## Command Mode

- /exec

# terminal sticky-mode

terminal [ <noarg> ] sticky-mode

## Syntax Description

|                           |              |   |
|---------------------------|--------------|---|
| <b>Syntax Description</b> | terminal     | Set terminal line parameters                      |
|                           | <i>noarg</i> | (Optional)  |
|                           | sticky-mode  | Search for the command match in current mode only |

## Command Mode

- /exec

# terminal terminal-type

terminal terminal-type <s0>

## Syntax Description

---

**Syntax Description**

---

|          |                              |
|----------|------------------------------|
| terminal | Set terminal line parameters |
|----------|------------------------------|

---

|               |                       |
|---------------|-----------------------|
| terminal-type | Set the terminal type |
|---------------|-----------------------|

---

|    |               |
|----|---------------|
| s0 | Terminal type |
|----|---------------|

---

## Command Mode

- /exec



# terminal time

```
terminal time [ <name> ] [ delta ]
```

## Syntax Description

---

**Syntax Description**

---

*terminal* Set terminal line parameters

---

*time* save the current time under a variable

---

*name* (Optional) the variable to store the time in

---

*delta* (Optional) print the delta time to the currently saved time value

---

## Command Mode

- /exec

# terminal tree-update

terminal tree-update

## Syntax Description

---

### Syntax Description

---

|          |                              |
|----------|------------------------------|
| terminal | Set terminal line parameters |
|----------|------------------------------|

---

|             |                             |
|-------------|-----------------------------|
| tree-update | Updates the main parse tree |
|-------------|-----------------------------|

---

## Command Mode

- /exec

# terminal unlock

terminal unlock

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| terminal           | Set terminal line parameters           |
| unlock             | Force unlocking of the CLI config mode |

## Command Mode

- /exec

# terminal verify-only

```
terminal [ <noarg> ] verify-only [ username <user> ]
```

## Syntax Description

| Syntax Description       |   |
|--------------------------|---|
| <code>terminal</code>    | Set terminal line parameters              |
| <code>noarg</code>       | (Optional)                                |
| <code>verify-only</code> | Verify command and do not execute         |
| <code>username</code>    | (Optional) Username for aaa authorization |
| <code>user</code>        | (Optional) Username for aaa authorization |

## Command Mode

- /exec

# terminal width

terminal width <i0>

## Syntax Description

| Syntax Description |                                       |
|--------------------|---------------------------------------|
| terminal           | Set terminal line parameters          |
| width              | Set width of the display terminal     |
| <i>i0</i>          | Number of characters on a screen line |

## Command Mode

- /exec

# terminal width

terminal width <*i0*>

## Syntax Description

---

### Syntax Description

---

terminal Set terminal line parameters

---

width Set width of the display terminal

---

*i0* Number of characters on a screen line

---

## Command Mode

- /exec/configure/console

# threshold-percent

```
threshold-percent { percent-threshold { percentup <up-percentage> [ percentdown<down-percentage> ] |
percentdown<down-percentage> [ percentup <up-percentage> ] } } | no threshold-percent { percent-threshold
}
```

## Syntax Description

| Syntax Description   |  |                                      |
|----------------------|--|--------------------------------------|
| no                   |  | Negate a command or set its defaults |
| threshold-percent    |  | Threshold parameters                 |
| percent-threshold    |  | Percentage threshold                 |
| percentup            |  | Up threshold                         |
| <i>up-percentage</i> |  | Up threshold percentage              |

## Command Mode

- /exec/configure/tr-list-thrp

# threshold

{ { no | default } threshold | threshold <milliseconds> }

## Syntax Description

### Syntax Description

no

default Set a command to its defaults

threshold Operation threshold

*milliseconds* Millisecond threshold value

## Command Mode

- /exec/configure/ip-sla/udp /exec/configure/ip-sla/jitter /exec/configure/ip-sla/tcp  
/exec/configure/ip-sla/icmpEcho /exec/configure/ip-sla/dns /exec/configure/ip-sla/fabricPathEcho  
/exec/configure/ip-sla/http



# time-range

[no] time-range <name>

## Syntax Description

|                           |                   |   |
|---------------------------|-------------------|---|
| <b>Syntax Description</b> | <i>no</i>         | (Optional) Negate a command or set its defaults |
|                           | <i>time-range</i> | Define time range entries                       |
|                           | <i>name</i>       | Time range name                                 |

## Command Mode

- /exec/configure

# timeout

{ { no | default } timeout |

## Syntax Description

---

### Syntax Description

---

no

---

default Set a command to its defaults

---

timeout Timeout of an operation

---

## Command Mode

- /exec/configure/ip-sla/udp /exec/configure/ip-sla/jitter /exec/configure/ip-sla/tcp /exec/configure/ip-sla/icmpEcho /exec/configure/ip-sla/dns /exec/configure/ip-sla/fabricPathEcho /exec/configure/ip-sla/http

# timer

timer <value> | no timer

## Syntax Description

---

|                           |    |                                      |
|---------------------------|----|--------------------------------------|
| <b>Syntax Description</b> | no | Negate a command or set its defaults |
|---------------------------|----|--------------------------------------|

---

|  |       |                              |
|--|-------|------------------------------|
|  | timer | Configure Bundle timer value |
|--|-------|------------------------------|

---

|  |              |                   |
|--|--------------|-------------------|
|  | <i>value</i> | Hello timer value |
|--|--------------|-------------------|

---

## Command Mode

- /exec/configure/anycast

# timers

timers <keepalive-interval> <hold-time> | { no | default } timers [ <keepalive-interval> <hold-time> ]

## Syntax Description

| Syntax Description        |  |                                      |
|---------------------------|--|--------------------------------------|
| no                        |  | Negate a command or set its defaults |
| default                   |  | Inherit values from a peer template  |
| timers                    |  | Configure keepalive and hold timers  |
| <i>keepalive-interval</i> |  | Keepalive interval (seconds)         |
| <i>hold-time</i>          |  | Holdtime (seconds)                   |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor-sess

# timers

timers { <hello-time> { <hold-time> | msec-hold <msec-hold> } | msec-hello <msec-hello> { <hold-time> | msec-hold <msec-hold> } } | no timers

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | Negate a command or set its defaults   |
| timers             | Hello and hold timers                  |
| <i>hello-time</i>  | Hello interval in seconds              |
| <i>hold-time</i>   | Hold time in seconds                   |
| msec-hold          | Specify hold interval in milliseconds  |
| <i>msec-hold</i>   | Hold interval in milliseconds          |
| msec-hello         | Specify hello interval in milliseconds |
| <i>msec-hello</i>  | Hello interval in milliseconds         |

## Command Mode

- /exec/configure/if-eth-any/hsrp\_ipv4 /exec/configure/if-eth-any/hsrp\_ipv6

# timers

```
timers { <hello-time> { <hold-time> | ms-hold <hold-time-msec> } | ms-hello <hello-time-msec> {
<hold-time-sec> | msec-hold <hold-time-msec> } | redirect <redirect-time> <sec-hold-time> } | no timers [
{ <hello-time> [ { <hold-time> | ms-hold <hold-time-msec> } ] | ms-hello [ <hello-time-msec> [
<hold-time-sec> | msec-hold <hold-time-msec> ] ] | redirect [ <redirect-time> [ <sec-hold-time> ] ] } ]
```

## Syntax Description

### Syntax Description

|                        |  |
|------------------------|--|
| no                     | Negate a command or set its defaults                 |
| timers                 | Adjust GLBP timers                                   |
| <i>hello-time</i>      | Specify Hello interval in seconds                    |
| <i>hold-time</i>       | Specify Hold time in seconds                         |
| ms-hold                | Specify hold time in milliseconds                    |
| <i>hold-time-msec</i>  | Hold time in milliseconds                            |
| ms-hello               | Specify hello interval in milliseconds               |
| <i>hello-time-msec</i> | hello interval in milliseconds                       |
| <i>hold-time-sec</i>   | Hold time in seconds                                 |
| msec-hold              | Specify hold time in milliseconds                    |
| redirect               | Specify time-out value for failed forwarders         |
| <i>redirect-time</i>   | Interval in seconds to redirect to failed forwarders |
| <i>sec-hold-time</i>   | Time-out interval in seconds for failed forwarders   |

## Command Mode

- /exec/configure/if-eth-any/glbp

# timers

```
[no] timers { nsf { route-hold <hold-interval> | converge <converge-interval> | signal <signal-interval> } |
active-time [ <max-active-time> | disabled ] }
```

## Syntax Description

| Syntax                   | Description  |
|--------------------------|--|
| no                       | (Optional) Negate a command or set its defaults      |
| timers                   | Set EIGRP timers                                     |
| nsf                      | EIGRP NSF timer                                      |
| route-hold               | EIGRP hold time for routes learned from nsf peer     |
| <i>hold-interval</i>     | Seconds  |
| active-time              | EIGRP time limit for active state                    |
| <i>max-active-time</i>   | (Optional) EIGRP active-state time limit in minutes  |
| disabled                 | (Optional) disable EIGRP time limit for active state |
| converge                 | EIGRP time limit for convergence after switchover    |
| <i>converge-interval</i> | Seconds  |
| signal                   | EIGRP time limit for signaling NSF restart           |
| <i>signal-interval</i>   | Seconds  |

## Command Mode

- /exec/configure/router-eigrp/router-eigrp-vrf-common /exec/configure/router-eigrp/router-eigrp-af-common

# timers advertise

[no] timers advertise | timers advertise <val>

## Syntax Description

|                           |            |  |
|---------------------------|------------|--|
| <b>Syntax Description</b> | no         | Negate a command or set its defaults   |
|                           | timers     | Set the VRRP timers                    |
|                           | advertise  | Set the advertise timer                |
|                           | <i>val</i> | Advertisement interval in milliseconds |

## Command Mode

- /exec/configure/if-eth-any/vrrpv3



## timers basic

timers basic <update> <invalid> <holddown> <garbage> | no timers basic [ <update> <invalid> <holddown> <garbage> ]

### Syntax Description

| Syntax          | Description                          |
|-----------------|--------------------------------------|
| no              | Negate a command or set its defaults |
| timers          | RIP set timers                       |
| basic           | RIP set basic timers                 |
| <i>update</i>   | RIP update period                    |
| <i>invalid</i>  | RIP route timeout period             |
| <i>holddown</i> | RIP route holddown period            |
| <i>garbage</i>  | RIP route garbage period             |

### Command Mode

- /exec/configure/router-rip/router-rip-af-common /exec/configure/router-rip/router-rip-vrf-af-common

## timers bestpath-defer maximum

[no] timers bestpath-defer <bestpath-defer-time> maximum <bestpath-defer-time-max>

### Syntax Description

| Syntax Description             |  |  |
|--------------------------------|--|--|
| no                             | (Optional) Negate a command or set its defaults                  |  |
| timers                         | Configure bgp related timers                                     |  |
| bestpath-defer                 | Configure bestpath defer timer value for batch prefix processing |  |
| <i>bestpath-defer-time</i>     | Bestpath defer time (mseconds)                                   |  |
| maximum                        | Configure bestpath defer timer maximum value                     |  |
| <i>bestpath-defer-time-max</i> | Maximum bestpath defer time (mseconds)                           |  |

### Command Mode

- /exec/configure/router-bgp/router-bgp-af

# timers bestpath-limit

timers bestpath-limit <bestpath-timeout> [ always ] | no timers bestpath-limit [ <bestpath-timeout> ]

## Syntax Description

| Syntax Description      |  |  |
|-------------------------|--|--|
| no                      |  | Negate a command or set its defaults               |
| timers                  |  | Configure bgp related timers                       |
| bestpath-limit          |  | Configure timeout for first bestpath after restart |
| <i>bestpath-timeout</i> |  | Bestpath timeout (seconds)                         |
| always                  |  | (Optional) Configure update-delay-always option    |

## Command Mode

- /exec/configure/router-bgp/vrf-cmds

# timers bgp

[no] timers bgp <keepalive-interval> <hold-time>

## Syntax Description

| Syntax Description        |   |  |
|---------------------------|---|--|
| no                        | (Optional) Negate a command or set its defaults |  |
| timers                    | Configure bgp related timers                    |  |
| bgp                       | Configure different bgp keepalive and holdtimes |  |
| <i>keepalive-interval</i> | Keepalive interval (seconds)                    |  |
| <i>hold-time</i>          | Holdtime (seconds)                              |  |

## Command Mode

- /exec/configure/router-bgp/vrf-cmds

# timers lsa-arrival

```
{ { timers lsa-arrival <interval> } | { no timers lsa-arrival [ <interval> ] } }
```

## Syntax Description

|                           |                    |   |
|---------------------------|--------------------|---|
| <b>Syntax Description</b> | <b>no</b>          | Negate a command or set its defaults      |
|                           | <b>timers</b>      | Configure timer related constants         |
|                           | <b>lsa-arrival</b> | Minimum interval between arrival of a LSA |
|                           | <i>interval</i>    | Interval value (milliseconds)             |

## Command Mode

- /exec/configure/router-ospf /exec/configure/router-ospf/vrf

# timers lsa-arrival

```
{ { timers lsa-arrival <interval> } | { no timers lsa-arrival [ <interval> ] } }
```

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | Negate a command or set its defaults      |
| timers             | Configure timer related constants         |
| lsa-arrival        | Minimum interval between arrival of a LSA |
| <i>interval</i>    | Interval value (millisecond)              |

## Command Mode

- /exec/configure/router-ospf3 /exec/configure/router-ospf3/vrf

## timers lsa-group-pacing

```
{ { timers lsa-group-pacing <interval> } | { no timers lsa-group-pacing [ <interval> ] } }
```

### Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| timers             |  | Configure timer related constants    |
| lsa-group-pacing   |  | LSA group refresh/maxage interval    |
| <i>interval</i>    |  | Interval value (seconds)             |

### Command Mode

- /exec/configure/router-ospf /exec/configure/router-ospf/vrf

## timers lsa-group-pacing

```
{ { timers lsa-group-pacing <interval> } | { no timers lsa-group-pacing [ <interval> ] } }
```

### Syntax Description

| Syntax Description | no               | Negate a command or set its defaults |
|--------------------|------------------|--------------------------------------|
|                    | timers           | Configure timer related constants    |
|                    | lsa-group-pacing | LSA group refresh/maxage interval    |
|                    | <i>interval</i>  | Interval value (seconds)             |

### Command Mode

- /exec/configure/router-ospf3 /exec/configure/router-ospf3/vrf



## timers prefix-peer-timeout

timers prefix-peer-timeout <prefixpeer-timeout> | no timers prefix-peer-timeout [ <prefixpeer-timeout> ]

### Syntax Description

| Syntax Description        |  |  |
|---------------------------|--|--|
| no                        |  | Negate a command or set its defaults                     |
| timers                    |  | Configure bgp related timers                             |
| prefix-peer-timeout       |  | Configure how long state for a prefix peer is maintained |
| <i>prefixpeer-timeout</i> |  | Prefix Peer timeout (seconds)                            |

### Command Mode

- /exec/configure/router-bgp/vrf-cmds

## timers prefix-peer-wait

timers prefix-peer-wait <prefixpeer-wait> | no timers prefix-peer-wait [ <prefixpeer-wait> ]

### Syntax Description

| Syntax Description     |  |  |
|------------------------|--|--|
| no                     |  | Negate a command or set its defaults   |
| timers                 |  | Configure bgp related timers           |
| prefix-peer-wait       |  | Configure wait timer for a prefix peer |
| <i>prefixpeer-wait</i> |  | Prefix peer wait timer (seconds)       |

### Command Mode

- /exec/configure/router-bgp/vrf-cmds

## timers throttle lsa

```
{ { timers throttle lsa <start-time> <hold-time> <max-time> } | { no timers throttle lsa [ <start-time>
<hold-time> <max-time> ] } }
```

### Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults    |
| timers             |  | Configure timer related constants       |
| throttle           |  | Set rate-limiting values (milliseconds) |
| lsa                |  | Set rate-limiting for LSA generation    |
| <i>start-time</i>  |  | Start interval (milliseconds)           |
| <i>hold-time</i>   |  | Hold interval (milliseconds)            |
| <i>max-time</i>    |  | Max interval (milliseconds)             |

### Command Mode

- /exec/configure/router-ospf /exec/configure/router-ospf/vrf

## timers throttle lsa

```
{ { timers throttle lsa <start-time> <hold-time> <max-time> } | { no timers throttle lsa [ <start-time>
<hold-time> <max-time> ] } }
```

### Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults    |
| timers             |  | Configure timer related constants       |
| throttle           |  | Set rate-limiting values (milliseconds) |
| lsa                |  | Set rate-limiting for LSA generation    |
| <i>start-time</i>  |  | Start interval (milliseconds)           |
| <i>hold-time</i>   |  | Hold interval (milliseconds)            |
| <i>max-time</i>    |  | Max interval (milliseconds)             |

### Command Mode

- /exec/configure/router-ospf3 /exec/configure/router-ospf3/vrf

## timers throttle spf

```
{ { timers throttle spf <start-time> <hold-time> <max-time> } | { no timers throttle spf [ <start-time>
<hold-time> <max-time> ] } }
```

### Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults       |
| timers             |  | Configure timer related constants          |
| throttle           |  | Configure timer related constants          |
| spf                |  | OSPF SPF timers                            |
| <i>start-time</i>  |  | Initial SPF schedule delay in milliseconds |
| <i>hold-time</i>   |  | Minimum hold time between SPF calculations |
| <i>max-time</i>    |  | Maximum wait time between SPF calculations |

### Command Mode

- /exec/configure/router-ospf /exec/configure/router-ospf/vrf

## timers throttle spf

```
{ { timers throttle spf <start-time> <hold-time> <max-time> } | { no timers throttle spf [ <start-time>
<hold-time> <max-time> ] } }
```

### Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults       |
| timers             |  | Configure timer related constants          |
| throttle           |  | Configure timer related constants          |
| spf                |  | OSPF SPF timers                            |
| <i>start-time</i>  |  | Initial SPF schedule delay in milliseconds |
| <i>hold-time</i>   |  | Minimum hold time between SPF calculations |
| <i>max-time</i>    |  | Maximum wait time between SPF calculations |

### Command Mode

- /exec/configure/router-ospf3/router-ospf3-af-ipv6 /exec/configure/router-ospf3/vrf/router-ospf3-af-ipv6

# tls

[no] tls

## Syntax Description

---

### Syntax Description

---

**n** (Optional) Negate a command or set its defaults

---

**t** One Platform TLS transport configuration mode

---

## Command Mode

- /exec/configure/onep

## tls trust-point local remote

tls trust-point local <tp\_local> remote <tp\_remote> | no tls trust-point

### Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults   |
| tls                |  | OpenFlow switch tls                    |
| trust-point        |  | Configure local and remote trustpoints |
| local              |  | Configure local trustpoint             |
| <i>tp_local</i>    |  | Local trustpoint name                  |
| remote             |  | Configure remote trustpoint            |
| <i>tp_remote</i>   |  | Remote trustpoint name                 |

### Command Mode

- /exec/configure/openflow/switch



# tls trust-point local remote

tls trust-point local <tp\_local> remote <tp\_remote> | no tls trust-point

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults   |
| tls                |  | OpenFlow switch tls                    |
| trust-point        |  | Configure local and remote trustpoints |
| local              |  | Configure local trustpoint             |
| <i>tp_local</i>    |  | Local trustpoint name                  |
| remote             |  | Configure remote trustpoint            |
| <i>tp_remote</i>   |  | Remote trustpoint name                 |

## Command Mode

- /exec/configure/openflow/switch/sub-switch

# topology holddown sigerr

[no] topology holddown sigerr | topology holddown sigerr <sec>

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults      |
| topology           |  | Topology Database Configuration           |
| holddown           |  | Topology Database hold down timers        |
| sigerr             |  | Link hold down time for signalling errors |
| sec                |  | Hold down time in seconds                 |

## Command Mode

- /exec/configure/te

# tos

{ { no | default } tos | tos <tos-value> }

## Syntax Description

| Syntax Description |                               |
|--------------------|-------------------------------|
| no                 |                               |
| default            | Set a command to its defaults |
| tos                | Type of Service               |
| <i>tos-value</i>   | Type of Service Value         |

## Command Mode

- /exec/configure/ip-sla/udp /exec/configure/ip-sla/jitter /exec/configure/ip-sla/tcp /exec/configure/ip-sla/icmpEcho /exec/configure/ip-sla/http

## tr

```
| tr [ -c | -d | -s | -t ] + <SET1> [ <SET2> ]
```

**Syntax Description****Syntax Description**

|             |  |
|-------------|--|
|             | Pipe command output to filter  |
| tr          | Translate, squeeze, and/or delete characters   |
| -c          | (Optional) first complement SET1   |
| -d          | (Optional) delete characters in SET1, do not translate   |
| -s          | (Optional) replace each sequence of a repeated character from SET1 with single occurrence of that character  |
| -t          | (Optional) first truncate SET1 to length of SET2   |
| <i>SET1</i> | character SET1: CHAR1-CHAR2 = all characters from CHAR1 to CHAR2 in ascending order special chars: (tab) (new line) [:alnum:] [:alpha:] [:digit:] [:graph:] (printable, no space) [:print:] (printable, with space) [:lower:] [:upper:] [:space:] (tab or space) |
| <i>SET2</i> | (Optional) character SET2 (for translation length is extended to length of SET1 by repeating last char, excess chars are ignored): format same as SET1 [CHAR*] = copies of CHAR until length of SET1 [CHAR*REPEAT] = REPEAT copies of CHAR                       |

**Command Mode**

- /output

# trace buffer size

trace buffer { error | warning | event } size <size>

## Syntax Description

| Syntax Description |                             |
|--------------------|-----------------------------|
| trace              | MPLS static trace           |
| buffer             | MPLS static trace buffer    |
| error              | MPLS static error trace     |
| warning            | MPLS static warning trace   |
| event              | MPLS static event trace     |
| size               | trace buffer size in Kbytes |
| <i>size</i>        | trace buffer size in Kbytes |

## Command Mode

- /exec/configure/mpls\_static

# tracert

```
tracert { <host> | <hostname> } [ port <portnumber> ] [ [ source-interface <src-intf> ] | [ source { <host> | <hostname> | <interface> } ] ] [ vrf { <vrf-name> | <vrf-known-name> } ] ] ]
```

## Syntax Description

### Syntax Description

|                       |  |
|-----------------------|--|
| tracert               | Tracert                                    |
| <i>host</i>           | IP address of remote system                |
| <i>hostname</i>       | Hostname of remote system                  |
| port                  | (Optional) Set destination port            |
| <i>portnumber</i>     | (Optional) Enter destination port number   |
| source                | (Optional) Set source address in IP header |
| <i>interface</i>      | (Optional) Interface                       |
| vrf                   | (Optional) Display per-VRF information     |
| <i>vrf-name</i>       | (Optional) VRF name                        |
| <i>vrf-known-name</i> | (Optional) Known VRF name                  |
| source-interface      | (Optional) Select source interface         |
| <i>src-intf</i>       | (Optional) Specify interface               |

## Command Mode

- /exec

# traceroute6

```
traceroute6 { <host> | <hostname> } [ [ source { <host> | <hostname> | <interface> } ] [ vrf { <vrf-name> | <vrf-known-name> } ] ] [ source-interface <src-intf> ] ]
```

## Syntax Description

| Syntax Description      | traceroute6 | Traceroute6                                  |
|-------------------------|-------------|--|
| <i>hostname</i>         |             | Hostname of remote system                    |
| <i>source</i>           |             | (Optional) Set source address in IPv6 header |
| <i>interface</i>        |             | (Optional) Interface                         |
| <i>vrf</i>              |             | (Optional) Display per-VRF information       |
| <i>vrf-name</i>         |             | (Optional) VRF name                          |
| <i>vrf-known-name</i>   |             | (Optional) Known VRF name                    |
| <i>source-interface</i> |             | (Optional) Select source interface           |
| <i>src-intf</i>         |             | (Optional) Specify interface                 |

## Command Mode

- /exec

## traceroute mpls

```
traceroute mpls [ { nil-fec labels <comma-separated-labels> } { output { ointerface <tx-interface> } nexthop
<nexthop-ip-addr> } [ { timeout <seconds> } | { destination <addr-start> [ <addr-end> [ <addr-incr-mask> |
<addr-incr> ] ] } | { source <addr> } | { exp <exp-value> } | { ttl <ttl-max> } | { verbose } | { reply { { mode
{ <reply-mode-ipv4> | router-alert | no-reply } } | { dscp { <dscp-bits> | af11 | af12 | af13 | af21 | af22 | af23
| af31 | af32 | af33 | af41 | af42 | af43 | cs1 | cs2 | cs3 | cs4 | cs5 | cs6 | cs7 | default | ef } } } + {
force-explicit-null } | { flags { fec } } ] + ]
```

### Syntax Description

| Syntax Description | traceroute                    | need                   |
|--------------------|-------------------------------|------------------------|
|                    | mpls                          | Test                   |
|                    | nil-fec                       | (Optional) Target      |
|                    | labels                        | (Optional) A           |
|                    | <i>comma-separated-labels</i> | (Optional) A           |
|                    | timeout                       | (Optional) Timeout     |
|                    | <i>seconds</i>                | (Optional) Timeout     |
|                    | destination                   | (Optional) Destination |
|                    | <i>addr-start</i>             | (Optional) Destination |
|                    | <i>addr-end</i>               | (Optional) Destination |
|                    | <i>addr-incr-mask</i>         | (Optional) Destination |
|                    | <i>addr-incr</i>              | (Optional) Destination |
|                    | source                        | (Optional) Source      |
|                    | <i>addr</i>                   | (Optional) Source      |
|                    | exp                           | (Optional) EXP         |
|                    | <i>exp-value</i>              | (Optional) EXP         |
|                    | ttl                           | (Optional) Maximum     |
|                    | <i>ttl-max</i>                | (Optional) TTL         |
|                    | verbose                       | (Optional) Verbose     |
|                    | reply                         | (Optional) Reply       |
|                    | mode                          | (Optional) Reply       |
|                    | reply-mode-ipv4               | (Optional) Send        |



|                     |                              |
|---------------------|------------------------------|
| router-alert        | (Optional) Send              |
| no-reply            | (Optional) Send              |
| dscp                | (Optional) DSCP              |
| <i>dscp-bits</i>    | (Optional)<br>Differentiated |
| af11                | (Optional) Match             |
| af12                | (Optional) Match             |
| af13                | (Optional) Match             |
| af21                | (Optional) Match             |
| af22                | (Optional) Match             |
| af23                | (Optional) Match             |
| af31                | (Optional) Match             |
| af32                | (Optional) Match             |
| af33                | (Optional) Match             |
| af41                | (Optional) Match             |
| af42                | (Optional) Match             |
| af43                | (Optional) Match             |
| cs1                 | (Optional) Match             |
| cs2                 | (Optional) Match             |
| cs3                 | (Optional) Match             |
| cs4                 | (Optional) Match             |
| cs5                 | (Optional) Match             |
| cs6                 | (Optional) Match             |
| cs7                 | (Optional) Match             |
| default             | (Optional) Match             |
| ef                  | (Optional) Match             |
| force-explicit-null | (Optional) Force             |
| output              | (Optional) Output            |
| ointerface          | (Optional) Echo              |

|                        |                    |
|------------------------|--------------------|
| <i>tx-interface</i>    | (Optional) Echo    |
| <i>nexthop</i>         | (Optional) Next    |
| <i>nexthop-ip-addr</i> | (Optional) Next    |
| <i>flags</i>           | (Optional) Flag    |
| <i>fec</i>             | (Optional) Request |

**Command Mode**

- /exec

## traceroute nve

```
traceroute nve { { { ip { <numeric10> | <numeric11> | unknown } } [ vrf { <vrf-name> | <vrf-known-name>
} ] { <dot1qid1> } ] } | mac <dmac> <dot1qid> <intfid> } [ profile <pid> ] [ payload { [ mac-addr <dstmac>
<smac> ] [ dot1q <dot1q-id> ] [ ip <dstip> <srcip> | ipv6 <dstip6> <srcip6> ] [ port <sport> <dport> ] [
proto <proto-id> ] } payload-end ] [ source { <numeric1> | <numeric2> } ] |
```

### Syntax Description

| Syntax Description | traceroute            | Test  |
|--------------------|-----------------------|---|
|                    | nve                   | network virtualization edge   |
|                    | <i>numeric10</i>      | Ipv4 address of remote host / VTEP                                      |
|                    | unknown               | Peer vtep ip is unknown, will be derived from payload                   |
|                    | <i>intfid</i>         | Name of the interface for ngoam traceroute on which dot1q is configured |
|                    | profile               | (Optional) NGOAM profile to use   |
|                    | <i>pid</i>            | (Optional) NGOAM profile id   |
|                    | mac                   | Mac   |
|                    | <i>dmac</i>           | Destination mac address   |
|                    | <i>dot1qid</i>        | Encapsulation dot1q/bd on which the mac is learnt                       |
|                    | <i>dot1qid1</i>       | (Optional) Encapsulation dot1q/bd on which the mac is learnt            |
|                    | vrf                   | (Optional) Display per-VRF information                                  |
|                    | <i>vrf-name</i>       | (Optional) VRF name   |
|                    | <i>vrf-known-name</i> | (Optional) Known VRF name   |
|                    | source                | (Optional) Source   |
|                    | <i>numeric1</i>       | (Optional) IP   |
|                    | payload               | (Optional) Enter customer payload                                       |
|                    | mac-addr              | (Optional) Mac  |
|                    | <i>dstmac</i>         | (Optional) Destination mac address                                      |
|                    | <i>smac</i>           | (Optional) Source mac address   |
|                    | dot1q                 | (Optional) Encapsulation dot1q/bd                                       |
|                    | <i>dot1q-id</i>       | (Optional) Encapsulation dot1q/bd on which the mac is learnt            |
|                    | ip                    | ip address  |

|                    |                                     |
|--------------------|-------------------------------------|
| <i>dstip</i>       | (Optional) Destination ipv4 address |
| <i>srcip</i>       | (Optional) source ipv4 address      |
| <i>ipv6</i>        | (Optional) ipv6 address             |
| <i>port</i>        | (Optional) L4 port info             |
| <i>sport</i>       | (Optional) Source port              |
| <i>dport</i>       | (Optional) Destination port         |
| <i>proto</i>       | (Optional) Protocol                 |
| <i>proto-id</i>    | (Optional) IANA Protocol id         |
| <i>payload-end</i> | (Optional) End payload info input   |

**Command Mode**

- /exec

# track-adjacency-nexthop

[no] track-adjacency-nexthop

## Syntax Description

---

**Syntax Description**

no (Optional) Negate a command or set its defaults

---

track-adjacency-nexthop Track next-hop for same-site Overlay adjacencies

---

## Command Mode

- /exec/configure/otv-isis

# track

track <object-id>

## Syntax Description

|                           |                  |                                  |
|---------------------------|------------------|----------------------------------|
| <b>Syntax Description</b> | track            | Object tracking deletion command |
|                           | <i>object-id</i> | Tracked Object                   |

## Command Mode

- /exec/configure

# track

[no] track <object-id> [ force ]

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | Negate a command or set its defaults    |
| track              | Object tracking deletion command        |
| <i>object-id</i>   | Tracked Object                          |
| force              | (Optional) Completely remove the object |

## Command Mode

- /exec/configure

# track

```
track <object-id> { { ip_v4 route <route-prefix> reachability [ hmm ] } | { ip_v6 routev6 <v6route-prefix>
reachability [ hmm ] } }
```

## Syntax Description

### Syntax Description

|                     |                                       |
|---------------------|---------------------------------------|
| track               | Object tracking configuration command |
| <i>object-id</i>    | Tracked Object                        |
| ip_v4               | IPv4 protocol                         |
| route               | IPv4 route                            |
| <i>route-prefix</i> | Specify ipv4 route prefix             |
| ip_v6               | IPv6 protocol                         |
| routev6             | IPv6 route                            |
| reachability        | Route reachability state              |
| hmm                 | (Optional) Track routes owned by hmm  |

## Command Mode

- /exec/configure



# track

```
track <object-id> { ip_v4 sla <sla-id> [ sla_reachability | sla_state ] }
```

## Syntax Description

| Syntax Description |            |                                       |
|--------------------|------------|---------------------------------------|
| track              |            | Object tracking configuration command |
| <i>object-id</i>   |            | Tracked Object                        |
| ip_v4              |            | IPv4 protocol                         |
| sla                |            | IP Service Level Agreement            |
| <i>sla-id</i>      |            | Entry number                          |
| sla_reachability   | (Optional) | Reachability                          |
| sla_state          | (Optional) | return code state                     |

## Command Mode

- /exec/configure

# track

```
track <object-id> { list { boolean <bool-val> } }
```

## Syntax Description

| Syntax Description |                                       |
|--------------------|---------------------------------------|
| track              | Object tracking configuration command |
| <i>object-id</i>   | Tracked Object                        |
| list               | Object tracking list                  |
| boolean            | boolean list type                     |
| <i>bool-val</i>    | boolean list type                     |

## Command Mode

- /exec/configure

# track

```
track <object-id> { list threshold <weight-val> }
```

## Syntax Description

|                           |                   |                                       |
|---------------------------|-------------------|---------------------------------------|
| <b>Syntax Description</b> | track             | Object tracking configuration command |
|                           | <i>object-id</i>  | Tracked Object                        |
|                           | list              | Object tracking list                  |
|                           | threshold         | threshold type                        |
|                           | <i>weight-val</i> | threshold weight type                 |

## Command Mode

- /exec/configure

# track

```
track <object-id> { list threshold <percentage-val> }
```

## Syntax Description

| Syntax Description |                       |                                       |
|--------------------|-----------------------|---------------------------------------|
|                    | track                 | Object tracking configuration command |
|                    | <i>object-id</i>      | Tracked Object                        |
|                    | list                  | Object tracking list                  |
|                    | threshold             | threshold type                        |
|                    | <i>percentage-val</i> | threshold percentage type             |

## Command Mode

- /exec/configure

# track

[no] track <object-number> [ decrement <value> ]

## Syntax Description

| Syntax Description   |   |
|----------------------|---|
| no                   | (Optional) Negate a command or set its defaults     |
| track                | Associates track object to HSRP group               |
| <i>object-number</i> | Set the object number to the group                  |
| decrement            | (Optional) Decrements when tracked object goes down |
| <i>value</i>         | (Optional) Set the value to decrement from priority |

## Command Mode

- /exec/configure/if-eth-any/hsrp\_ipv4 /exec/configure/if-eth-any/hsrp\_ipv6

# track

track <object-number> | no track

## Syntax Description

| Syntax Description |                      |   |
|--------------------|----------------------|---|
|                    | no                   | Negate a command or set its defaults      |
|                    | track                | Associates track object to Anycast Bundle |
|                    | <i>object-number</i> | Set the object number                     |

## Command Mode

- /exec/configure/anycast

# track

track <track-obj> | no track <track-obj>

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | Negate a command or set its defaults               |
| track              | Tracking object to suspend vPC if object goes down |
| <i>track-obj</i>   | Tracked object                                     |

## Command Mode

- /exec/configure/vpc-domain

# track data

[no] track data <loc-uri>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| data               | User files to preserve                          |
| track              | Track file uri                                  |
| <i>loc-uri</i>     | Enter file uri                                  |

## Command Mode

- /exec/configure/personality



# track interface

```
track <object-id> interface <ifnum> { line-protocol | ipv4 routing | ipv6 routingv6 }
```

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| track              |  | Object tracking configuration commands |
| <i>object-id</i>   |  | Tracked Object                         |
| interface          |  | Interface to track                     |
| <i>ifnum</i>       |  | Interface type and number              |
| line-protocol      |  | Track interface line-protocol          |
| ipv4               |  | IPv4 parameters                        |
| routing            |  | Track interface ipv4 routing           |
| ipv6               |  | IPv6 parameters                        |
| routingv6          |  | Track interface ipv6 routing           |

## Command Mode

- /exec/configure

## track interface priority

```
{ { track { { interface <intf_num> priority <priority_value> } | { <object-num> [ decrement <decrement-value> ] } } } | { no track [ { { interface <intf_num> priority <priority_value> } | { <object-num> [ decrement <decrement-value> ] } } ] } }
```

### Syntax Description

#### Syntax Description

|                        |  |
|------------------------|--|
| no                     | Negate a command or set its defaults                         |
| track                  | Track the availability of another interface/object           |
| interface              | Select the tracked interface(Native tracking)                |
| <i>intf_num</i>        |  |
| priority               | Vr priority used when the tracked interface is down          |
| <i>priority_value</i>  |  |
| <i>object-num</i>      | Set the object number to the group(Object tracking)          |
| decrement              | (Optional) Decrements priority when tracked object goes down |
| <i>decrement-value</i> | (Optional) Set the value to decrement from priority          |

### Command Mode

- /exec/configure/if-eth-any/vrrp

# track running-state track startup-state

[no] track running-state | [ no ] track startup-state

## Syntax Description

| Syntax        | Description   |
|---------------|---|
| no            | (Optional) Negate a command or set its defaults         |
| track         | Track file uri  |
| running-state | active patches, third-party RPMs, and running-config    |
| startup-state | committed patches, third-party RPMs, and startup-config |

## Command Mode

- /exec/configure/personality

# traffic-class

```
{ { no | default } traffic-class | traffic-class <traffic-class> }
```

## Syntax Description

| Syntax Description   |                               |
|----------------------|-------------------------------|
| no                   |                               |
| default              | Set a command to its defaults |
| traffic-class        | Traffic Class                 |
| <i>traffic-class</i> | Traffic Class Value           |

## Command Mode

- /exec/configure/ip-sla/udp /exec/configure/ip-sla/jitter /exec/configure/ip-sla/tcp /exec/configure/ip-sla/icmpEcho /exec/configure/ip-sla/http

# traffic-share

[no] traffic-share { balanced | { min across-interfaces } }

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults   |  |
| traffic-share      | How to compute traffic share over alternate paths |  |
| balanced           | Share inversely proportional to metric            |  |
| min                | All traffic shared among min metric paths         |  |
| across-interfaces  | Use different interfaces for equal-cost paths     |  |

## Command Mode

- /exec/configure/router-eigrp/router-eigrp-vrf-common /exec/configure/router-eigrp/router-eigrp-af-common

# transmit-delay

```
{ { transmit-delay <delay> } | { no transmit-delay [ <delay> ] } }
```

## Syntax Description

| Syntax Description | no | Negate a command or set its defaults |
|--------------------|----|--------------------------------------|
| transmit-delay     |    | Packet transmission delay            |
| <i>delay</i>       |    | (seconds)                            |

## Command Mode

- /exec/configure/router-ospf/router-ospf-vlink /exec/configure/router-ospf/vrf/router-ospf-vlink

# transmit-delay

```
{ { transmit-delay <delay> } | { no transmit-delay [ <delay> ] } }
```

## Syntax Description

|                           |                |                                      |
|---------------------------|----------------|--------------------------------------|
| <b>Syntax Description</b> | no             | Negate a command or set its defaults |
|                           | transmit-delay | Packet transmission delay            |
|                           | <i>delay</i>   | (seconds)                            |

## Command Mode

- /exec/configure/router-ospf/vrf/router-ospf-slink

# transmit-delay

```
{ { transmit-delay <delay> } | { no transmit-delay [ <delay> ] } }
```

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| transmit-delay     |  | Packet transmission delay            |
| <i>delay</i>       |  | (seconds)                            |

## Command Mode

- /exec/configure/router-ospf3/router-ospf3-vlink /exec/configure/router-ospf3/vrf/router-ospf3-vlink



# transport connection-mode passive

[ no | default ] transport connection-mode passive

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| default            | (Optional) | Inherit values from a peer template  |
| transport          |            | BGP transport connection             |
| connection-mode    |            | Specify type of connection           |
| passive            |            | Allow passive connection setup only  |

## Command Mode

- /exec/configure/router-bgp/router-bgp-template-neighbor  
/exec/configure/router-bgp/router-bgp-neighbor-stmp /exec/configure/router-bgp/router-bgp-neighbor  
/exec/configure/router-bgp/router-bgp-vrf-neighbor

# transport email

```
{ transport email { from <s0> | reply-to <s1> | smtp-server { <hostipv4> | <hostipv6> | <hostname> } [ port <i1> ] [ use-vrf <s2> ] } } | no transport email smtp-server | no transport email { from | reply-to } }
```

## Syntax Description

### Syntax Description

|             |  |
|-------------|--|
| no          | Negate a command or set its defaults                   |
| transport   | Configure transport related configuration              |
| email       | Configure email transport related configuration        |
| from        | Configure from email address                           |
| s0          | Provide from email address, example: SJ-9500-1@xyz.com |
| reply-to    | Configure replyto email address                        |
| s1          | Provide reply-to email address, example: admin@xyz.com |
| smtp-server | Configure SMTP server address                          |
| hostname    | SMTP server(DNS name or IPv4 or IPv6 address)          |
| hostipv4    | IPV4 address of SMTP server                            |
| port        | (Optional) Configure SMTP server port (default:25)     |
| i1          | (Optional) SMTP server port                            |
| use-vrf     | (Optional) Configure vrf name                          |
| s2          | (Optional) vrf name                                    |

## Command Mode

- /exec/configure/callhome

## transport email mail-server

```
{ [ no ] transport email mail-server { <hostipv4> | <hostipv6> | <hostname> } [ port <i1> ] [ priority <i2> ]
[ use-vrf <s2> ] }
```

### Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults                      |
| transport          | Configure transport related configuration                            |
| email              | Configure email transport related configuration                      |
| mail-server        | Configure SMTP server address (for supporting multiple SMTP-servers) |
| <i>hostname</i>    | SMTP server(DNS name or IPv4 or IPv6 address)                        |
| <i>hostipv4</i>    | IPv4 address of SMTP server  |
| port               | (Optional) Configure SMTP server port (default:25)                   |
| <i>i1</i>          | (Optional) SMTP server port  |
| use-vrf            | (Optional) Configure vrf name  |
| <i>s2</i>          | (Optional) vrf name  |
| priority           | (Optional) Configure SMTP server priority (1-100) (default:50)       |
| <i>i2</i>          | (Optional) SMTP server priority                                      |

### Command Mode

- /exec/configure/callhome

# transport http proxy enable

[no] transport http proxy enable

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults                 |
| transport          | Configure transport related configuration                       |
| http               | Configure transport option for http urls                        |
| proxy              | Configure proxy for http transport                              |
| enable             | Enable the usage of proxy server for messages sent over http(s) |

## Command Mode

- /exec/configure/callhome

## transport http proxy server

```
{ transport http proxy server { <hostname> } [ port <i1> ] } | { no transport http proxy server }
```

### Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | Negate a command or set its defaults                              |
| transport          | Configure transport related configuration                         |
| http               | Configure transport option for http urls                          |
| proxy              | Configure proxy for http transport                                |
| server             | Configure proxy server address and port                           |
| <i>hostname</i>    | Proxy server name or IP address(DNS name or IPv4 or IPv6 address) |
| port               | (Optional) Configure Proxy server port (default:8080)             |
| <i>i1</i>          | (Optional) Proxy server port                                      |

### Command Mode

- /exec/configure/callhome

# transport http use-vrf

transport http use-vrf <s2> | no transport http use-vrf

## Syntax Description

|                           |           |   |
|---------------------------|-----------|---|
| <b>Syntax Description</b> | no        | Negate a command or set its defaults      |
|                           | transport | Configure transport related configuration |
|                           | http      | Configure transport option for http urls  |
|                           | use-vrf   | Configure vrf name                        |
|                           | s2        | vrf name                                  |

## Command Mode

- /exec/configure/callhome



|                     |  |
|---------------------|--|
| <i>localtp</i>      | (Optional) Local Trust Point Name                              |
| <i>remotecert</i>   | (Optional) Remote Certificate Validation                       |
| <i>remotetp</i>     | (Optional) Remote Trust Point Name                             |
| <i>port</i>         | (Optional) Port number   |
| <i>tpportnum</i>    | (Optional) Number  |
| <i>access-class</i> | (Optional) Filter incoming connections based on IP access list |
| <i>aclname</i>      | (Optional) IP access list name                                 |

**Command Mode**

- /exec/configure/onep



# transport udp

```
{ [ no ] transport udp <portnumber> | no transport udp }
```

## Syntax Description

| Syntax Description |                            |
|--------------------|----------------------------|
| transport          | Transport Destination Port |
| udp                | Destination UDP Port       |
| <i>portnumber</i>  | Destination UDP Port       |

## Command Mode

- /exec/configure/nfm-exporter

# trigger init ingress in-select 3 out-select 0

trigger init { ingress | egress } in-select 3 out-select 0

## Syntax Description

| Syntax Description |                         |  |
|--------------------|-------------------------|--|
| trigger            | Define A Trigger        |  |
| init               | Initialize Trigger      |  |
| ingress            | Ingress Fields          |  |
| egress             | Egress Fields           |  |
| in-select          | in-select               |  |
| out-select         | out-select              |  |
| 0                  | pktrw                   |  |
| 3                  | outer12-outer13-outer14 |  |

## Command Mode

- /exec/elanms

# trigger init ingress in-select 3 out-select 03

trigger init { ingress | egress } in-select 3 out-select 03

## Syntax Description

| Syntax Description |                         |
|--------------------|-------------------------|
| trigger            | Define A Trigger        |
| init               | Initialize Trigger      |
| ingress            | Ingress Fields          |
| egress             | Egress Fields           |
| in-select          | in-select               |
| out-select         | out-select              |
| 03                 | pkt_lsb                 |
| 3                  | outer12-outer13-outer14 |

## Command Mode

- /exec/alamns

# trigger init ingress in-select 3 out-select 0 reverse

trigger init { ingress | egress } in-select 3 out-select 0 reverse

## Syntax Description

| Syntax Description |                         |
|--------------------|-------------------------|
| trigger            | Define A Trigger        |
| init               | Initialize Trigger      |
| ingress            | Ingress Fields          |
| egress             | Egress Fields           |
| in-select          | in-select               |
| out-select         | out-select              |
| 0                  | pktrw                   |
| 3                  | outerl2-outerl3-outerl4 |
| reverse            | Program reverse<br>ELAM |

## Command Mode

- /exec/elanms

# trigger init ingress in-select 3 out-select 1

trigger init { ingress | egress } in-select 3 out-select 1

## Syntax Description

| Syntax Description |                         |
|--------------------|-------------------------|
| trigger            | Define A Trigger        |
| init               | Initialize Trigger      |
| ingress            | Ingress Fields          |
| egress             | Egress Fields           |
| in-select          | in-select               |
| out-select         | out-select              |
| 1                  | pkt_fifo_lsb            |
| 3                  | outerl2-outerl3-outerl4 |

## Command Mode

- /exec/alamns

## trigger init ingress in-select 3 out-select 2

trigger init { ingress | egress } in-select 3 out-select 2

### Syntax Description

| Syntax Description |                         |  |
|--------------------|-------------------------|--|
| trigger            | Define A Trigger        |  |
| init               | Initialize Trigger      |  |
| ingress            | Ingress Fields          |  |
| egress             | Egress Fields           |  |
| in-select          | in-select               |  |
| out-select         | out-select              |  |
| 2                  | pkt_fifo_msb            |  |
| 3                  | outer12-outer13-outer14 |  |

### Command Mode

- /exec/elanms

# trigger init ingress in-select 3 out-select 4

trigger init { ingress | egress } in-select 3 out-select 4

## Syntax Description

| Syntax Description |                         |
|--------------------|-------------------------|
| trigger            | Define A Trigger        |
| init               | Initialize Trigger      |
| ingress            | Ingress Fields          |
| egress             | Egress Fields           |
| in-select          | in-select               |
| out-select         | out-select              |
| 4                  | pkt_msb                 |
| 3                  | outerl2-outerl3-outerl4 |

## Command Mode

- /exec/alamns

# trigger init ingress in-select 3 out-select 5

trigger init { ingress | egress } in-select 3 out-select 5

## Syntax Description

| Syntax Description |                         |  |
|--------------------|-------------------------|--|
| trigger            | Define A Trigger        |  |
| init               | Initialize Trigger      |  |
| ingress            | Ingress Fields          |  |
| egress             | Egress Fields           |  |
| in-select          | in-select               |  |
| out-select         | out-select              |  |
| 5                  | sideband                |  |
| 3                  | outer12-outer13-outer14 |  |

## Command Mode

- /exec/alamns



# trigger init ingress in-select 3 out-select 5 reverse

trigger init { ingress | egress } in-select 3 out-select 5 reverse

## Syntax Description

| Syntax Description |                         |
|--------------------|-------------------------|
| trigger            | Define A Trigger        |
| init               | Initialize Trigger      |
| ingress            | Ingress Fields          |
| egress             | Egress Fields           |
| in-select          | in-select               |
| out-select         | out-select              |
| 5                  | sideband                |
| 3                  | outer12-outer13-outer14 |
| reverse            | Program reverse<br>ELAM |

## Command Mode

- /exec/elamns

# trigger init ingress in-select 4 out-select 0

trigger init { ingress | egress } in-select 4 out-select 0

## Syntax Description

| Syntax Description |                         |  |
|--------------------|-------------------------|--|
| trigger            | Define A Trigger        |  |
| init               | Initialize Trigger      |  |
| ingress            | Ingress Fields          |  |
| egress             | Egress Fields           |  |
| in-select          | in-select               |  |
| out-select         | out-select              |  |
| 0                  | pktrw                   |  |
| 4                  | inner12-inner13-inner14 |  |

## Command Mode

- /exec/alamns

# trigger init ingress in-select 4 out-select 04

trigger init { ingress | egress } in-select 4 out-select 04

## Syntax Description

| Syntax Description |                         |
|--------------------|-------------------------|
| trigger            | Define A Trigger        |
| init               | Initialize Trigger      |
| ingress            | Ingress Fields          |
| egress             | Egress Fields           |
| in-select          | in-select               |
| out-select         | out-select              |
| 04                 | pkt_msb                 |
| 4                  | innerl2-innerl3-innerl4 |

## Command Mode

- /exec/alamns

# trigger init ingress in-select 4 out-select 0 reverse

trigger init { ingress | egress } in-select 4 out-select 0 reverse

## Syntax Description

| Syntax Description |                         |
|--------------------|-------------------------|
| trigger            | Define A Trigger        |
| init               | Initialize Trigger      |
| ingress            | Ingress Fields          |
| egress             | Egress Fields           |
| in-select          | in-select               |
| out-select         | out-select              |
| 0                  | pktrw                   |
| 4                  | innerl2-innerl3-innerl4 |
| reverse            | Program reverse<br>ELAM |

## Command Mode

- /exec/elanms

# trigger init ingress in-select 4 out-select 1

trigger init { ingress | egress } in-select 4 out-select 1

## Syntax Description

| Syntax Description |                         |
|--------------------|-------------------------|
| trigger            | Define A Trigger        |
| init               | Initialize Trigger      |
| ingress            | Ingress Fields          |
| egress             | Egress Fields           |
| in-select          | in-select               |
| out-select         | out-select              |
| 1                  | pkt_fifo_lsb            |
| 4                  | innerl2-innerl3-innerl4 |

## Command Mode

- /exec/alamns

## trigger init ingress in-select 4 out-select 2

trigger init { ingress | egress } in-select 4 out-select 2

### Syntax Description

| Syntax Description |                         |  |
|--------------------|-------------------------|--|
| trigger            | Define A Trigger        |  |
| init               | Initialize Trigger      |  |
| ingress            | Ingress Fields          |  |
| egress             | Egress Fields           |  |
| in-select          | in-select               |  |
| out-select         | out-select              |  |
| 2                  | pkt_fifo_msb            |  |
| 4                  | inner12-inner13-inner14 |  |

### Command Mode

- /exec/alamns

# trigger init ingress in-select 4 out-select 3

trigger init { ingress | egress } in-select 4 out-select 3

## Syntax Description

| Syntax Description |                         |
|--------------------|-------------------------|
| trigger            | Define A Trigger        |
| init               | Initialize Trigger      |
| ingress            | Ingress Fields          |
| egress             | Egress Fields           |
| in-select          | in-select               |
| out-select         | out-select              |
| 3                  | pkt_lsb                 |
| 4                  | innerl2-innerl3-innerl4 |

## Command Mode

- /exec/alamns

# trigger init ingress in-select 4 out-select 5

trigger init { ingress | egress } in-select 4 out-select 5

## Syntax Description

| Syntax Description |                         |  |
|--------------------|-------------------------|--|
| trigger            | Define A Trigger        |  |
| init               | Initialize Trigger      |  |
| ingress            | Ingress Fields          |  |
| egress             | Egress Fields           |  |
| in-select          | in-select               |  |
| out-select         | out-select              |  |
| 5                  | sideband                |  |
| 4                  | inner12-inner13-inner14 |  |

## Command Mode

- /exec/alamns



# trigger init ingress in-select 4 out-select 5 reverse

trigger init { ingress | egress } in-select 4 out-select 5 reverse

## Syntax Description

| Syntax Description |                         |
|--------------------|-------------------------|
| trigger            | Define A Trigger        |
| init               | Initialize Trigger      |
| ingress            | Ingress Fields          |
| egress             | Egress Fields           |
| in-select          | in-select               |
| out-select         | out-select              |
| 5                  | sideband                |
| 4                  | inner12-inner13-inner14 |
| reverse            | Program reverse<br>ELAM |

## Command Mode

- /exec/elamns

# trigger init ingress in-select 5 out-select 0

trigger init { ingress | egress } in-select 5 out-select 0

## Syntax Description

| Syntax Description |                 |         |
|--------------------|-----------------|---------|
| trigger            | Define A        | Trigger |
| init               | Initialize      | Trigger |
| ingress            | Ingress         | Fields  |
| egress             | Egress          | Fields  |
| in-select          | in-select       |         |
| out-select         | out-select      |         |
| 0                  | pktrw           |         |
| 5                  | outerl2-innerl2 |         |

## Command Mode

- /exec/elamns

# trigger init ingress in-select 5 out-select 05

trigger init { ingress | egress } in-select 5 out-select 05

## Syntax Description

| Syntax Description |                    |
|--------------------|--------------------|
| trigger            | Define A Trigger   |
| init               | Initialize Trigger |
| ingress            | Ingress Fields     |
| egress             | Egress Fields      |
| in-select          | in-select          |
| out-select         | out-select         |
| 05                 | sideband           |
| 5                  | outerl2-innerl2    |

## Command Mode

- /exec/elanms

# trigger init ingress in-select 5 out-select 05 reverse

trigger init { ingress | egress } in-select 5 out-select 05 reverse

## Syntax Description

| Syntax Description |                         |
|--------------------|-------------------------|
| trigger            | Define A Trigger        |
| init               | Initialize Trigger      |
| ingress            | Ingress Fields          |
| egress             | Egress Fields           |
| in-select          | in-select               |
| out-select         | out-select              |
| 05                 | sideband                |
| 5                  | outer12-inner12         |
| reverse            | Program reverse<br>ELAM |

## Command Mode

- /exec/elanms

# trigger init ingress in-select 5 out-select 0 reverse

trigger init { ingress | egress } in-select 5 out-select 0 reverse

## Syntax Description

| Syntax Description |                         |
|--------------------|-------------------------|
| trigger            | Define A Trigger        |
| init               | Initialize Trigger      |
| ingress            | Ingress Fields          |
| egress             | Egress Fields           |
| in-select          | in-select               |
| out-select         | out-select              |
| 0                  | pktrw                   |
| 5                  | outerl2-innerl2         |
| reverse            | Program reverse<br>ELAM |

## Command Mode

- /exec/elamns

# trigger init ingress in-select 5 out-select 1

trigger init { ingress | egress } in-select 5 out-select 1

## Syntax Description

| Syntax Description |                 |         |
|--------------------|-----------------|---------|
| trigger            | Define A        | Trigger |
| init               | Initialize      | Trigger |
| ingress            | Ingress         | Fields  |
| egress             | Egress          | Fields  |
| in-select          | in-select       |         |
| out-select         | out-select      |         |
| 1                  | pkt_fifo_lsb    |         |
| 5                  | outerl2-innerl2 |         |

## Command Mode

- /exec/elanms

## trigger init ingress in-select 5 out-select 2

trigger init { ingress | egress } in-select 5 out-select 2

### Syntax Description

| Syntax Description |                    |
|--------------------|--------------------|
| trigger            | Define A Trigger   |
| init               | Initialize Trigger |
| ingress            | Ingress Fields     |
| egress             | Egress Fields      |
| in-select          | in-select          |
| out-select         | out-select         |
| 2                  | pkt_fifo_msb       |
| 5                  | outerl2-innerl2    |

### Command Mode

- /exec/elanms

# trigger init ingress in-select 5 out-select 3

trigger init { ingress | egress } in-select 5 out-select 3

## Syntax Description

| Syntax Description |                 |         |
|--------------------|-----------------|---------|
| trigger            | Define A        | Trigger |
| init               | Initialize      | Trigger |
| ingress            | Ingress         | Fields  |
| egress             | Egress          | Fields  |
| in-select          | in-select       |         |
| out-select         | out-select      |         |
| 3                  | pkt_lsb         |         |
| 5                  | outerl2-innerl2 |         |

## Command Mode

- /exec/elanms



# trigger init ingress in-select 5 out-select 4

trigger init { ingress | egress } in-select 5 out-select 4

## Syntax Description

| Syntax Description |                    |
|--------------------|--------------------|
| trigger            | Define A Trigger   |
| init               | Initialize Trigger |
| ingress            | Ingress Fields     |
| egress             | Egress Fields      |
| in-select          | in-select          |
| out-select         | out-select         |
| 4                  | pkt_msb            |
| 5                  | outerl2-innerl2    |

## Command Mode

- /exec/alamns

# trigger init ingress in-select 6 out-select 0

trigger init { ingress | egress } in-select 6 out-select 0

## Syntax Description

| Syntax Description |                 |         |
|--------------------|-----------------|---------|
| trigger            | Define A        | Trigger |
| init               | Initialize      | Trigger |
| ingress            | Ingress         | Fields  |
| egress             | Egress          | Fields  |
| in-select          | in-select       |         |
| out-select         | out-select      |         |
| 0                  | pktrw           |         |
| 6                  | outerl3-innerl3 |         |

## Command Mode

- /exec/elamns

# trigger init ingress in-select 6 out-select 0 reverse

trigger init { ingress | egress } in-select 6 out-select 0 reverse

## Syntax Description

| Syntax Description |                         |
|--------------------|-------------------------|
| trigger            | Define A Trigger        |
| init               | Initialize Trigger      |
| ingress            | Ingress Fields          |
| egress             | Egress Fields           |
| in-select          | in-select               |
| out-select         | out-select              |
| 0                  | pktrw                   |
| 6                  | outerl3-innerl3         |
| reverse            | Program reverse<br>ELAM |

## Command Mode

- /exec/elamns

# trigger init ingress in-select 6 out-select 1

trigger init { ingress | egress } in-select 6 out-select 1

## Syntax Description

| Syntax Description |                 |         |
|--------------------|-----------------|---------|
| trigger            | Define A        | Trigger |
| init               | Initialize      | Trigger |
| ingress            | Ingress         | Fields  |
| egress             | Egress          | Fields  |
| in-select          | in-select       |         |
| out-select         | out-select      |         |
| 1                  | pkt_fifo_lsb    |         |
| 6                  | outerl3-innerl3 |         |

## Command Mode

- /exec/elamns

# trigger init ingress in-select 6 out-select 2

trigger init { ingress | egress } in-select 6 out-select 2

## Syntax Description

| Syntax Description |                    |
|--------------------|--------------------|
| trigger            | Define A Trigger   |
| init               | Initialize Trigger |
| ingress            | Ingress Fields     |
| egress             | Egress Fields      |
| in-select          | in-select          |
| out-select         | out-select         |
| 2                  | pkt_fifo_msb       |
| 6                  | outerl3-innerl3    |

## Command Mode

- /exec/elanms

# trigger init ingress in-select 6 out-select 3

trigger init { ingress | egress } in-select 6 out-select 3

## Syntax Description

| Syntax Description |                 |         |
|--------------------|-----------------|---------|
| trigger            | Define A        | Trigger |
| init               | Initialize      | Trigger |
| ingress            | Ingress         | Fields  |
| egress             | Egress          | Fields  |
| in-select          | in-select       |         |
| out-select         | out-select      |         |
| 3                  | pkt_lsb         |         |
| 6                  | outerl3-innerl3 |         |

## Command Mode

- /exec/elamns

# trigger init ingress in-select 6 out-select 4

trigger init { ingress | egress } in-select 6 out-select 4

## Syntax Description

| Syntax Description |                    |
|--------------------|--------------------|
| trigger            | Define A Trigger   |
| init               | Initialize Trigger |
| ingress            | Ingress Fields     |
| egress             | Egress Fields      |
| in-select          | in-select          |
| out-select         | out-select         |
| 4                  | pkt_msb            |
| 6                  | outerl3-innerl3    |

## Command Mode

- /exec/alamns

# trigger init ingress in-select 6 out-select 5

trigger init { ingress | egress } in-select 6 out-select 5

## Syntax Description

| Syntax Description |                 |         |
|--------------------|-----------------|---------|
| trigger            | Define A        | Trigger |
| init               | Initialize      | Trigger |
| ingress            | Ingress         | Fields  |
| egress             | Egress          | Fields  |
| in-select          | in-select       |         |
| out-select         | out-select      |         |
| 5                  | sideband        |         |
| 6                  | outer13-inner13 |         |

## Command Mode

- /exec/elamns



# trigger init ingress in-select 6 out-select 5 reverse

trigger init { ingress | egress } in-select 6 out-select 5 reverse

## Syntax Description

| Syntax Description |                         |
|--------------------|-------------------------|
| trigger            | Define A Trigger        |
| init               | Initialize Trigger      |
| ingress            | Ingress Fields          |
| egress             | Egress Fields           |
| in-select          | in-select               |
| out-select         | out-select              |
| 5                  | sideband                |
| 6                  | outer13-inner13         |
| reverse            | Program reverse<br>ELAM |

## Command Mode

- /exec/elamns

# trigger init ingress in-select 7 out-select 0

trigger init { ingress | egress } in-select 7 out-select 0

## Syntax Description

| Syntax Description |                 |         |
|--------------------|-----------------|---------|
| trigger            | Define A        | Trigger |
| init               | Initialize      | Trigger |
| ingress            | Ingress         | Fields  |
| egress             | Egress          | Fields  |
| in-select          | in-select       |         |
| out-select         | out-select      |         |
| 0                  | pktrw           |         |
| 7                  | outerl4-innerl4 |         |

## Command Mode

- /exec/elanms

# trigger init ingress in-select 7 out-select 0 reverse

trigger init { ingress | egress } in-select 7 out-select 0 reverse

## Syntax Description

| Syntax Description |                         |
|--------------------|-------------------------|
| trigger            | Define A Trigger        |
| init               | Initialize Trigger      |
| ingress            | Ingress Fields          |
| egress             | Egress Fields           |
| in-select          | in-select               |
| out-select         | out-select              |
| 0                  | pktrw                   |
| 7                  | outerl4-innerl4         |
| reverse            | Program reverse<br>ELAM |

## Command Mode

- /exec/elamns

# trigger init ingress in-select 7 out-select 1

trigger init { ingress | egress } in-select 7 out-select 1

## Syntax Description

| Syntax Description |                 |         |
|--------------------|-----------------|---------|
| trigger            | Define A        | Trigger |
| init               | Initialize      | Trigger |
| ingress            | Ingress         | Fields  |
| egress             | Egress          | Fields  |
| in-select          | in-select       |         |
| out-select         | out-select      |         |
| 1                  | pkt_fifo_lsb    |         |
| 7                  | outerl4-innerl4 |         |

## Command Mode

- /exec/elamns

# trigger init ingress in-select 7 out-select 2

trigger init { ingress | egress } in-select 7 out-select 2

## Syntax Description

| Syntax Description |                    |
|--------------------|--------------------|
| trigger            | Define A Trigger   |
| init               | Initialize Trigger |
| ingress            | Ingress Fields     |
| egress             | Egress Fields      |
| in-select          | in-select          |
| out-select         | out-select         |
| 2                  | pkt_fifo_msb       |
| 7                  | outerl4-innerl4    |

## Command Mode

- /exec/alamns

# trigger init ingress in-select 7 out-select 3

trigger init { ingress | egress } in-select 7 out-select 3

## Syntax Description

| Syntax Description |                 |         |
|--------------------|-----------------|---------|
| trigger            | Define A        | Trigger |
| init               | Initialize      | Trigger |
| ingress            | Ingress         | Fields  |
| egress             | Egress          | Fields  |
| in-select          | in-select       |         |
| out-select         | out-select      |         |
| 3                  | pkt_lsb         |         |
| 7                  | outerl4-innerl4 |         |

## Command Mode

- /exec/elamns

# trigger init ingress in-select 7 out-select 4

trigger init { ingress | egress } in-select 7 out-select 4

## Syntax Description

| Syntax Description |                    |
|--------------------|--------------------|
| trigger            | Define A Trigger   |
| init               | Initialize Trigger |
| ingress            | Ingress Fields     |
| egress             | Egress Fields      |
| in-select          | in-select          |
| out-select         | out-select         |
| 4                  | pkt_msb            |
| 7                  | outerl4-innerl4    |

## Command Mode

- /exec/alamns

# trigger init ingress in-select 7 out-select 5

trigger init { ingress | egress } in-select 7 out-select 5

## Syntax Description

| Syntax Description |                 |         |
|--------------------|-----------------|---------|
| trigger            | Define A        | Trigger |
| init               | Initialize      | Trigger |
| ingress            | Ingress         | Fields  |
| egress             | Egress          | Fields  |
| in-select          | in-select       |         |
| out-select         | out-select      |         |
| 5                  | sideband        |         |
| 7                  | outerl4-innerl4 |         |

## Command Mode

- /exec/elanms



# trigger init ingress in-select 7 out-select 5 reverse

trigger init { ingress | egress } in-select 7 out-select 5 reverse

## Syntax Description

| Syntax Description |                         |
|--------------------|-------------------------|
| trigger            | Define A Trigger        |
| init               | Initialize Trigger      |
| ingress            | Ingress Fields          |
| egress             | Egress Fields           |
| in-select          | in-select               |
| out-select         | out-select              |
| 5                  | sideband                |
| 7                  | outerl4-innerl4         |
| reverse            | Program reverse<br>ELAM |

## Command Mode

- /exec/elamns

# trigger reset

trigger reset

## Syntax Description

---

### Syntax Description

---

trigger Define A  
Trigger

---

reset Reset triggers

---

## Command Mode

- /exec/elanms

# trustpoint server-identity

```
{ trustpoint server-identity <tp-server> } | { no trustpoint server-identity [ <tp-server> ] } | { [ no ] trustpoint
client-verification <tp-client> }
```

## Syntax Description

| Syntax Description  |  |                                      |
|---------------------|--|--------------------------------------|
| no                  |  | Negate a command or set its defaults |
| trustpoint          |  | Trustpoint configuration             |
| server-identity     |  | Server trustpoint                    |
| <i>tp-server</i>    |  | Trustpoint name                      |
| client-verification |  | Client trustpoint                    |
| <i>tp-client</i>    |  | Trustpoint name                      |

## Command Mode

- /exe/configure/onep/tls

# ttag-marker-interval

[no] ttag-marker-interval <seconds>

## Syntax Description

|                           |                      |   |
|---------------------------|----------------------|---|
| <b>Syntax Description</b> | no                   | (Optional) Negate a command or set its defaults |
|                           | ttag-marker-interval | Marker packet interval                          |
|                           | <i>seconds</i>       | Interval in seconds                             |

## Command Mode

- /exec/configure

# ttag-marker enable

[no] ttag-marker enable

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| ttag-marker        | Enable/Disable marker packet on interface       |
| enable             | Enable/Disable marker packet on interface       |

## Command Mode

- /exec/configure/if-eth-base /exec/configure/if-ethernet-all

# ttag

[no] ttag

## Syntax Description

---

### Syntax Description

no (Optional) Negate a command or set its defaults

---

ttag enable ingress packet with ttag on this interface

---

## Command Mode

- /exec/configure/if-eth-base /exec/configure/if-ethernet-all

# ttl-security hops

ttl-security hops <ebgp-ttl> | { no | default } ttl-security hops [ <ebgp-ttl> ]

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| default            |  | Inherit values from a peer template  |
| ttl-security       |  | Enable TTL Security Mechanism        |
| hops               |  | Specify hop count for remote peer    |
| <i>ebgp-ttl</i>    |  | EBGP hop count value                 |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor-sess

# tunnel destination

tunnel destination { { <ip-addr> | <ip-prefix> | { <ip-addr> <ip-mask> } } | <ipv6-addr> } | no tunnel destination  
 [ <ip-addr> | <ip-prefix> | { <ip-addr> <ip-mask> } | <ipv6-addr> ]

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| tunnel             |  | protocol-over-protocol tunneling     |
| destination        |  | destination of tunnel packets        |
| <i>ip-addr</i>     |  | IPv4 address (A.B.C.D)               |
| <i>ip-prefix</i>   |  | IPv4 mask (A.B.C.D/LEN)              |
| <i>ip-mask</i>     |  | IPv4 mask A.B.C.D                    |

## Command Mode

- /exec/configure/if-gre-tunnel



# tunnel mode

tunnel mode { { gre [ ip | ipv6 ] } | { ipip [ ip | ipv6 ] } | { ipip decapsulate-any [ ip | ipv6 ] } | { ipv6ip [ decapsulate-any ] } | { ipv6ip6 [ decapsulate-any ] } } | no tunnel mode

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| tunnel             |  | protocol-over-protocol tunneling     |
| mode               |  | tunnel encapsulation method          |
| gre                |  | generic route encapsulation protocol |
| ipip               |  | IP in IP protocol                    |
| decapsulate-any    |  | decapsulate any                      |
| ip                 |  | (Optional) over IP                   |
| ipv6               |  | (Optional) over IPv6                 |
| ipv6ip             |  | IPv6 in IPv4 protocol                |
| ipv6ip6            |  | IPv6 in IPv6 protocol                |

## Command Mode

- /exec/configure/if-any-tunnel

# tunnel path-mtu-discovery

[no] tunnel path-mtu-discovery

## Syntax Description

|                           |                    |   |
|---------------------------|--------------------|---|
| <b>Syntax Description</b> | no                 | (Optional) Negate a command or set its defaults |
|                           | tunnel             | protocol-over-protocol tunneling                |
|                           | path-mtu-discovery | Enable Path MTU Discovery on tunnel             |

## Command Mode

- /exec/configure/if-any-tunnel

# tunnel path-mtu-discovery age-timer

tunnel path-mtu-discovery age-timer { <age-time> | infinite } | no tunnel path-mtu-discovery age-timer [ { <age-time> | infinite } ]

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| tunnel             |  | protocol-over-protocol tunneling     |
| path-mtu-discovery |  | Enable Path MTU Discovery on tunnel  |
| age-timer          |  | Set PMTUD aging timer                |
| <i>age-time</i>    |  | Aging time                           |
| infinite           |  | Disable pathmtu aging timer          |

## Command Mode

- /exec/configure/if-any-tunnel

# tunnel path-mtu-discovery min-mtu

tunnel path-mtu-discovery min-mtu <mtu> | no tunnel path-mtu-discovery min-mtu [ <mtu> ]

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| tunnel             |  | protocol-over-protocol tunneling     |
| path-mtu-discovery |  | Enable Path MTU Discovery on tunnel  |
| min-mtu            |  | Min pmtud mtu allowed                |
| <i>mtu</i>         |  | Bytes                                |

## Command Mode

- /exec/configure/if-any-tunnel

# tunnel source

tunnel source { <intf> | <ip-prefix> | { <ip-addr> [ <ip-mask> ] } | <ipv6-addr> | direct } | no tunnel source [ <intf> | <ip-prefix> | { <ip-addr> [ <ip-mask> ] } | <ipv6-addr> | direct ]

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| tunnel             |  | protocol-over-protocol tunneling     |
| source             |  | source of tunnel packets             |
| <i>intf</i>        |  | interface                            |
| <i>ip-addr</i>     |  | IPv4 address (A.B.C.D)               |
| <i>ip-prefix</i>   |  | IPv4 address (A.B.C.D/LEN)           |
| <i>ip-mask</i>     |  | (Optional) IPv4 mask A.B.C.D         |
| direct             |  | all directly connected IP            |

## Command Mode

- /exec/configure/if-gre-tunnel

# tunnel ttl

tunnel ttl <ttl\_val> | no tunnel ttl [ <ttl\_val> ]

## Syntax Description

---

### Syntax Description

---

no      Negate a command or set its defaults

---

tunnel   protocol-over-protocol tunneling

---

ttl      set time to live

---

*ttl\_val*   time to live value

---

## Command Mode

- /exec/configure/if-any-tunnel

## tunnel use-vrf

```
tunnel use-vrf { <vrf-name> | <vrf-known-name> } | no tunnel use-vrf [ { <vrf-name> | <vrf-known-name> } ]
```

### Syntax Description

| Syntax Description    |  |                                      |
|-----------------------|--|--------------------------------------|
| no                    |  | Negate a command or set its defaults |
| tunnel                |  | protocol-over-protocol tunneling     |
| use-vrf               |  | set tunnel vrf membership            |
| <i>vrf-name</i>       |  | VRF name                             |
| <i>vrf-known-name</i> |  | Known VRF name                       |

### Command Mode

- /exec/configure/if-any-tunnel







## U Commands

---

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# udf

```
udf <udf_name> { packet-start | { header { outer | inner } { 13 | 14 } } } <offset> <length> | no udf <udf_name>
[ { packet-start | { header { outer | inner } { 13 | 14 } } } <offset> <length> ]
```

## Syntax Description

### Syntax Description

|                 |  |
|-----------------|--|
| no              | Negate the command                               |
| udf             | Define the User Defined Field (UDF)              |
| <i>udf_name</i> | Name of the UDF to configure                     |
| packet-start    | Offset base from packet-start                    |
| header          | Offset base configuration                        |
| outer           | Offset base: from outer header                   |
| inner           | Offset base: from inner header                   |
| 13              | Offset base: from 13 header                      |
| 14              | Offset base: from 14 header                      |
| <i>offset</i>   | Enter Offset in bytes for UDF (from offset base) |
| <i>length</i>   | Enter Length in bytes for UDF (from offset)      |

## Command Mode

- /exec/configure

# udld aggressive

udld aggressive

## Syntax Description

---

### Syntax Description

---

udld      UDLD protocol

---

aggressive    Enable UDLD aggressive mode on all fiber optic ports

---

## Command Mode

- /exec/configure

# udld aggressive

[no] udld aggressive

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults                 |
| udld               |  | UDLD protocol  |
| aggressive         |  | Enable UDLD aggressive mode on all fiber optic ports |

## Command Mode

- /exec/configure

# udld aggressive

udld aggressive

## Syntax Description

---

### Syntax Description

---

udld      UDLD protocol

---

aggressive    Enable UDLD aggressive mode for interface(s)

---

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-eth-base

# udld aggressive

[no] udld aggressive

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults         |
| udld               |  | UDLD protocol                                |
| aggressive         |  | Enable UDLD aggressive mode for interface(s) |

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-eth-base

# udld continue-on-err

[no] udld continue-on-err

## Syntax Description

| Syntax Description |                 |   |
|--------------------|-----------------|---|
|                    | no              | (Optional) Negate a command or set its defaults |
|                    | udld            | UDLD protocol                                   |
|                    | continue-on-err | Force UDLD continue without disabling the port  |

## Command Mode

- /exec



# udld disable

udld disable

## Syntax Description

---

**Syntax Description**

---

udld UDLD protocol

---

disable Disable UDLD for fiber interface(s)

---

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-eth-base

# udld disable

[no] udld disable

## Syntax Description

---

### Syntax Description

---

no     Negate a command or set its defaults

---

udld   UDLD protocol

---

disable   Disable UDLD for fiber interface(s)

---

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-eth-base

# udld enable

udld enable

## Syntax Description

---

### Syntax Description

---

**udld** UDLD protocol

---

**enable** Enable UDLD for non-fiber interface(s)

---

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-eth-base

# udld enable

[no] udld enable

## Syntax Description

---

### Syntax Description

---

no Negate a command or set its defaults

---

udld UDLD protocol

---

enable Enable UDLD for non-fiber interface(s)

---

## Command Mode

- /exec/configure/if-ethernet-all /exec/configure/if-eth-base

# udld message-time

udld message-time <i>i0</i> | no udld message-time

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults                    |
| udld               |  | UDLD protocol   |
| message-time       |  | Setting the time in seconds between UDLD probe messages |
| <i>i0</i>          |  | Enter the message timer value [default = 15]            |

## Command Mode

- /exec/configure

# udld reset

udld reset

## Syntax Description

---

### Syntax Description

---

**udld** UDLD protocol

---

**reset** Reset all ports shut down by UDLD

---

## Command Mode

- /exec/configure

# udp-echo

```
[no] udp-echo { <hostname> | <ip-address> } <port> { [ control { disable | enable } ] [ source-ip { <source-ip-hostname> | <source-ip-address> } ] [ source-port <source-port-number> ] } +
```

## Syntax Description

### Syntax Description

|                                 |  |
|---------------------------------|--|
| <code>no</code>                 | (Optional)   |
| <code>control</code>            | (Optional) enable  |
| <code>source-ip-address</code>  | (Optional) <source-port-number>                                    |
| <code>udp-echo</code>           | UDP Echo Operation   |
| <code>hostname</code>           | Destination hostname, broadcast disallowed                         |
| <code>ip-address</code>         | Destination IP address, broadcast disallowed                       |
| <code>port</code>               | Port Number (Recommended port range between 1025-65534)            |
| <code>enable</code>             | (Optional) Enable control packets exchange (default)               |
| <code>disable</code>            | (Optional) Disable control packets exchange                        |
| <code>source-ip</code>          | (Optional) Source address  |
| <code>source-ip-hostname</code> | (Optional) source IP hostname, broadcast disallowed                |
| <code>source-port</code>        | (Optional) Source Port   |
| <code>source-port-number</code> | (Optional) Port Number (Recommended port range between 1025-65534) |

## Command Mode

- /exec/configure/ip-sla

# udp-jitter

```
[no] udp-jitter { <hostname> | <ip-address> } <dest-port> { { [ codec { g711alaw | g711ulaw | g729a } { [ advantage-factor <advantage-num> ] [ codec-interval <codec-int> ] [ codec-numpackets <codec-numpack> ] [ codec-size <codec-bytes> ] } } + } [ control { disable | enable } ] [ source-ip { <source-ip-hostname> | <source-ip-address> } ] [ source-port <src-port> ] } + | { [ interval <packet-interval> ] [ num-packets <num-packets> ] [ control { disable | enable } ] [ source-ip { <source-ip-hostname> | <source-ip-address> } ] [ source-port <src-port> ] } + }
```

## Syntax Description

### Syntax Description

|                           |   |
|---------------------------|---|
| no                        | (Optional)  |
| <i>codec</i>              | (Optional) g711alaw                                     |
| <i>codec-numpackets</i>   | (Optional) codec-size                                   |
| <i>source-port</i>        | (Optional) interval                                     |
| <i>codec-numpack</i>      | (Optional) <codec-bytes>                                |
| <i>source-ip-hostname</i> | (Optional) <source-ip-address>                          |
| udp-jitter                | UDP Jitter Operation                                    |
| <i>hostname</i>           | Destination hostname, broadcast disallowed              |
| <i>ip-address</i>         | Destination IP address, broadcast disallowed            |
| <i>dest-port</i>          | Port Number (Recommended port range between 1025-65534) |
| g711alaw                  | (Optional) G.711 A Law 64000 bps                        |
| g711ulaw                  | (Optional) G.711 U Law 64000 bps                        |
| g729a                     | (Optional) G.729 8000 bps                               |
| advantage-factor          | (Optional) Advantage Factor                             |
| codec-interval            | (Optional) Inter Packet Interval                        |
| codec-size                | (Optional) Number of bytes in payload                   |
| <i>advantage-num</i>      | (Optional) Advantage Factor                             |
| <i>codec-int</i>          | (Optional) Delay  |
| <i>codec-bytes</i>        | (Optional) Number of bytes in payload                   |
| <i>packet-interval</i>    | (Optional) Delay (default 20)                           |
| <i>num-packets</i>        | (Optional) Number of Packets (default 10)               |
| interval                  | (Optional) Inter Packet Interval                        |



|                                 |  |
|---------------------------------|--|
| <code>num-packets</code>        | (Optional) Number of Packets to be transmitted                     |
| <code>control</code>            | (Optional) Enable or disable control packets                       |
| <code>enable</code>             | (Optional) Enable control packets exchange (default)               |
| <code>disable</code>            | (Optional) Disable control packets exchange                        |
| <code>source-ip</code>          | (Optional) Source address  |
| <code>source-ip-hostname</code> | (Optional) source IP hostname, broadcast disallowed                |
| <code>source-ip-address</code>  | (Optional) source IP address, broadcast disallowed                 |
| <code>source-port</code>        | (Optional) Source Port   |
| <code>src-port</code>           | (Optional) Port Number (Recommended port range between 1025-65534) |

**Command Mode**

- /exec/configure/ip-sla

# undebug all

`undebug all`

## Syntax Description

---

### Syntax Description

---

`undebug` Disable Debugging functions (See also `debug`)

---

`all` Disable all debugging

---

## Command Mode

- `/exec`

# undebug l2rib

undebug l2rib

## Syntax Description

|                           |  |
|---------------------------|--|
| <b>Syntax Description</b> | undebug Disable Debugging functions (See also debug) |
|                           | l2rib L2RIB debug commands                           |

## Command Mode

- /exec

# uniq

| uniq [ -c | -d | -f <nb-of-fields> | -s <nb-of-chars> | -u | -w <nb-chars-to-compare> | -i ] +

## Syntax Description

### Syntax Description

|                            |   |
|----------------------------|---|
|                            | Pipe command output to filter                         |
| uniq                       | Discard all but one of successive identical lines     |
| -c                         | (Optional) prefix lines by the number of occurrences  |
| -d                         | (Optional) only print duplicate lines                 |
| -f                         | (Optional) avoid comparing the first N fields         |
| -s                         | (Optional) avoid comparing the first N characters     |
| -u                         | (Optional) only print unique lines                    |
| -w                         | (Optional) compare no more than N characters in lines |
| -i                         | (Optional) ignore differences in case when comparing  |
| <i>nb-of-fields</i>        | (Optional) number of initial fields to ignore         |
| <i>nb-of-chars</i>         | (Optional) number of initial chars to ignore          |
| <i>nb-chars-to-compare</i> | (Optional) max number of chars to compare             |

## Command Mode

- /output

# unmount slot0

unmount slot0:

## Syntax Description

---

### Syntax Description

---

unmount unmount expansion flash or USB storage

---

slot0: Unmount expansion flash

---

## Command Mode

- /exec

## unsuppress-map

unsuppress-map <unsupp-rmap-name> | { no | default } unsuppress-map [ <unsupp-rmap-name> ]

### Syntax Description

| Syntax Description      |  |   |
|-------------------------|--|---|
| no                      |  | Negate a command or set its defaults                  |
| default                 |  | Inherit values from a peer template                   |
| unsuppress-map          |  | Route-map to selectively unsuppress suppressed routes |
| <i>unsupp-rmap-name</i> |  | Route-map name  |

### Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-vpnv4
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-vpnv6

# untagged cos

untagged cos <ucos-value> | no untagged cos

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | Negate a command or set its defaults                |
| untagged           | default to use for untagged packets on interface    |
| cos                | IEEE 802.1Q class of service for QoS classification |
| <i>ucos-value</i>  | COS value   |

## Command Mode

- /exec/configure/if-set-qos

# update-rib-always

[no] update-rib-always

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| update-rib-always  | Force updates to rib                            |

## Command Mode

- /exec/configure/otv-isis



# update-source

update-source <interface> | no update-source

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | Negate a command or set its defaults       |
| update-source      | Specify source of BMP session and messages |
| <i>interface</i>   | Interface name                             |

## Command Mode

- /exec/configure/router-bgp/router-bgp-bmp-server

# update-source

update-source <interface> | { no | default } update-source [ <interface> ]

## Syntax Description

| Syntax Description |  |   |
|--------------------|--|---|
| no                 |  | Negate a command or set its defaults      |
| default            |  | Inherit values from a peer template       |
| update-source      |  | Specify source of BGP session and updates |
| <i>interface</i>   |  | Interface name                            |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor-sess

# update adjacency

update adjacency <all>

## Syntax Description

| Syntax    | Description             |
|-----------|-------------------------|
| update    | Update                  |
| adjacency | Display adjacency table |
| all       | Update all adjcencies   |

## Command Mode

- /exec

# update ip route

```
update ip { route | rnh } [ vrf { <vrf-name> | <vrf-known-name> | <vrf-all> } ] <all>
```

## Syntax Description

| Syntax Description | update                | Description                                 |
|--------------------|-----------------------|---|
|                    | update                | Update                                      |
|                    | ip                    | IPv4  |
|                    | route                 | Update routing information                  |
|                    | rnh                   | Update only RNH information                 |
|                    | vrf                   | (Optional) VRF                              |
|                    | <i>vrf-name</i>       | (Optional) VRF name                         |
|                    | <i>vrf-known-name</i> | (Optional) Known VRF name                   |
|                    | vrf-all               | (Optional) Display information for all VRFs |
|                    | all                   | Update all routes                           |

## Command Mode

- /exec

# update ipv6 route

```
update ipv6 route [ vrf { <vrf-name> | <vrf-known-name> | <vrf-all> } ] <all>
```

## Syntax Description

| Syntax Description    |  |   |
|-----------------------|--|---|
| update                |  | Update                                      |
| ipv6                  |  | IPv6  |
| route                 |  | Update routing information                  |
| vrf                   |  | (Optional) VRF                              |
| <i>vrf-name</i>       |  | (Optional) VRF name                         |
| <i>vrf-known-name</i> |  | (Optional) Known VRF name                   |
| vrf-all               |  | (Optional) Display information for all VRFs |
| all                   |  | Update all routes                           |

## Command Mode

- /exec

# update license

```
update license <uri0> { <license-file> [ force ] | <s0> }
```

## Syntax Description

---

**Syntax Description**

|                     |  |
|---------------------|--|
| update              | Update license                                 |
| license             | Update a license file                          |
| <i>uri0</i>         | Specify URL for the new license file           |
| <i>license-file</i> | License file to be updated                     |
| force               | (Optional) Force update license (don't prompt) |
| <i>s0</i>           | License file to be updated                     |

## Command Mode

- /exec

# urib debugs-dump-to-file

urib debugs-dump-to-file

## Syntax Description

|                           |                     |                                  |
|---------------------------|---------------------|----------------------------------|
| <b>Syntax Description</b> | urib                | Unicast Routing Information Base |
|                           | debugs-dump-to-file | Dump all urib debugs to a file   |

## Command Mode

- /exec

# use-vrf

[no] use-vrf { management | default | <vrf\_name> }

## Syntax Description

| Syntax Description |   |  |
|--------------------|---|--|
| no                 | (Optional) Negate a command or set its defaults |  |
| use-vrf            | vrf to be used to contact servers in this group |  |
| management         | management vrf                                  |  |
| default            | default vrf                                     |  |
| <i>vrf_name</i>    | name of the vrf                                 |  |

## Command Mode

- /exec/configure/tacacs+



# use-vrf

[no] use-vrf { <vrf-name> | <vrf-known-name> }

## Syntax Description

| Syntax Description    |   |
|-----------------------|---|
| no                    | (Optional) Negate a command or set its defaults |
| use-vrf               | Display per-VRF information                     |
| <i>vrf-name</i>       | VRF name  |
| <i>vrf-known-name</i> | Known VRF name                                  |

## Command Mode

- /exec/configure/ldap

# use-vrf

[no] use-vrf { management | default | <vrf\_name> }

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| use-vrf            | vrf to be used to contact servers in this group |
| management         | management vrf                                  |
| default            | default vrf                                     |
| <i>vrf_name</i>    | name of the vrf                                 |

## Command Mode

- /exec/configure/radius

# user-jid password

[no] user-jid <jid> password [ 0 <clear> | 7 <encrypted> | <password> ]

## Syntax Description

### Syntax Description

|                  |  |
|------------------|--|
| no               | (Optional) Negate a command or set its defaults              |
| user-jid         | User Jabber ID   |
| <i>jid</i>       | Enter user Jabber ID   |
| password         | Password   |
| 0                | (Optional) Password that follows should be in clear text     |
| <i>clear</i>     | (Optional) Password in clear text                            |
| 7                | (Optional) Password that follows should be in encrypted text |
| <i>encrypted</i> | (Optional) Encrypted password                                |
| <i>password</i>  | (Optional) Enter password in clear text                      |

## Command Mode

- /exec/configure/fabric-db/server-xmpp

# user max-logins

user max-logins <limit>

## Syntax Description

---

### Syntax Description

---

|      |                                     |
|------|-------------------------------------|
| user | Configure system-wide user settings |
|------|-------------------------------------|

---

|            |                             |
|------------|-----------------------------|
| max-logins | maximum simultaneous logins |
|------------|-----------------------------|

---

|              |                       |
|--------------|-----------------------|
| <i>limit</i> | login session maximum |
|--------------|-----------------------|

---

## Command Mode

- /exec/configure

# user max-logins

[no] user max-logins [ <limit> ]

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| user               |  | Configure system-wide user settings  |
| max-logins         |  | maximum simultaneous logins          |
| <i>limit</i>       |  | (Optional) login session maximum     |

## Command Mode

- /exec/configure

## username

```
{ username <s0> [ password { 0 <s2> | 5 <s3> | <s4> } ] [ expire <s5> [ past ] ] [ priv-lvl <p> ] } | { username
<s0> [ password { 0 <s2> | 5 <s3> | <s4> } ] [ priv-lvl <p> ] [ expire <s5> [ past ] ] } | { username <s0> [
expire <s5> [ past ] ] [ password { 0 <s2> | 5 <s3> | <s4> } ] [ priv-lvl <p> ] } | { username <s0> [ expire
<s5> [ past ] ] [ priv-lvl <p> ] [ password { 0 <s2> | 5 <s3> | <s4> } ] } | { username <s0> [ priv-lvl <p> ] [
password { 0 <s2> | 5 <s3> | <s4> } ] [ expire <s5> [ past ] ] } | { username <s0> [ priv-lvl <p> ] [ expire
<s5> [ past ] ] [ password { 0 <s2> | 5 <s3> | <s4> } ] } | { no username <s7> [ priv-lvl <p> ] }
```

### Syntax Description

#### Syntax Description

|          |   |
|----------|---|
| no       | Negate a command or set its defaults  |
| username | Configure user information.   |
| s0       | user name   |
| password | (Optional) Password for the user  |
| 0        | (Optional) Indicates that the password that follows should be in clear text |
| s2       | (Optional) Password for the user (clear text)                               |
| 5        | (Optional) Indicates that the password that follows should be encrypted     |
| s3       | (Optional) strongly encrypted password                                      |
| s4       | (Optional) Password for the user (clear text)                               |
| expire   | (Optional) Expiry date for this user account(in YYYY-MM-DD format)          |
| s5       | (Optional) Expiry in YYYY-MM-DD format                                      |
| past     | (Optional) Expiry date is in past   |
| s7       | user name   |
| priv-lvl | (Optional) privilege level which the user is to be assigned to              |
| p        | (Optional) privilege level  |

### Command Mode

- /exec/configure

# username

```
{ username <s0> [ password { 0 <s2> | 5 <s3> | <s4> } ] [ expire <s5> [ past ] ] [ role <s6> ] } | { username
<s0> [ password { 0 <s2> | 5 <s3> | <s4> } ] [ role <s6> ] [ expire <s5> [ past ] ] } | { username <s0> [ expire
<s5> [ past ] ] [ password { 0 <s2> | 5 <s3> | <s4> } ] [ role <s6> ] } | { username <s0> [ expire <s5> [ past
] ] [ role <s6> ] [ password { 0 <s2> | 5 <s3> | <s4> } ] } | { username <s0> [ role <s6> ] [ password { 0 <s2>
| 5 <s3> | <s4> } ] [ expire <s5> [ past ] ] } | { username <s0> [ role <s6> ] [ expire <s5> [ past ] ] [ password
{ 0 <s2> | 5 <s3> | <s4> } ] } | { no username <s7> [ role <s8> ] }
```

## Syntax Description

### Syntax Description

|          |   |
|----------|---|
| no       | Negate a command or set its defaults  |
| username | Configure user information.   |
| s0       | user name   |
| password | (Optional) Password for the user  |
| 0        | (Optional) Indicates that the password that follows should be in clear text |
| s2       | (Optional) Password for the user (clear text)                               |
| 5        | (Optional) Indicates that the password that follows should be encrypted     |
| s3       | (Optional) strongly encrypted password                                      |
| s4       | (Optional) Password for the user (clear text)                               |
| expire   | (Optional) Expiry date for this user account(in YYYY-MM-DD format)          |
| s5       | (Optional) Expiry in YYYY-MM-DD format                                      |
| past     | (Optional) Expiry date is in past   |
| role     | (Optional) role which the user is to be assigned to                         |
| s6       | (Optional) role name  |
| s7       | user name   |
| s8       | (Optional) role name  |

## Command Mode

- /exec/configure

# username

```
{ username <s0> { shelltype { vsh | bash } } }
```

## Syntax Description

---

**Syntax Description**

---

username Configure user information.

---

*s0* user name

---

shelltype Choose shell type for login

---

vsh use vsh shell

---

bash use bash shell

---

## Command Mode

- /exec/configure



# username

```
[no] username <s0> { sshkey2 { file <uri0> | <line> } }
```

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| <i>no</i>          | (Optional) Negate a command or set its defaults    |
| <i>username</i>    | Configure user information.                        |
| <i>s0</i>          | user name  |
| <i>sshkey2</i>     | Update ssh key for the user for ssh authentication |
| <i>file</i>        | ssh key file                                       |
| <i>uri0</i>        | file containing host public key for the user       |
| <i>line</i>        | ssh key for the user                               |

## Command Mode

- /exec/configure

# username

```
{ [ no ] username <name> }
```

## Syntax Description

---

### Syntax Description

---

|          |      |
|----------|------|
| username | user |
|          | name |

---

|             |      |
|-------------|------|
| <i>name</i> | user |
|             | name |

---

## Command Mode

- /exec/configure/dot1x-cred

# username keypair export dsa

```
{ username <s0> keypair export <s1> { dsa | rsa } [ force ] }
```

## Syntax Description

### Syntax Description

|           |   |
|-----------|---|
| username  | Configure user information.   |
| keypair   | Use existing ssh keypair  |
| export    | Export keypair to Bootflash/Remote directory                                  |
| force     | (Optional) Force the export of keys even if the destination files are present |
| dsa       | Use DSA Keys  |
| rsa       | Use RSA Keys  |
| <i>s0</i> | user name   |
| <i>s1</i> | Enter filename to export to   |

### Command Mode

- /exec/configure

# username keypair generate dsa

```
{ username <s0> keypair generate { dsa [ force ] | rsa [ <i0> | <oldrange> ] [ force ] } | no username <s0>
keypair generate [ { dsa [ force ] | rsa [ <i0> | <oldrange> ] [ force ] } ] }
```

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | Negate a command or set its defaults                                      |
| username           | Configure user information.   |
| <i>s0</i>          | user name   |
| generate           | Generate ssh key pairs  |
| keypair            | Generate SSH User Keys  |
| dsa                | Generate DSA keys   |
| force              | (Optional) Force the generation of keys even if previous ones are present |
| rsa                | Generate RSA keys   |
| <i>i0</i>          | (Optional) Enter number of bits (in multiples of 8)                       |
| <i>oldrange</i>    | (Optional) Enter number of bits   |

## Command Mode

- /exec/configure

# username keypair import dsa

```
{ username <s0> keypair import <s1> { dsa | rsa } [ force ] }
```

## Syntax Description

### Syntax Description

|           |   |
|-----------|---|
| username  | Configure user information.   |
| keypair   | Use existing ssh keypair  |
| import    | Import keypair from Bootflash/Remote directory                            |
| force     | (Optional) Force the generation of keys even if previous ones are present |
| dsa       | Use DSA Keys  |
| rsa       | Use RSA Keys  |
| <i>s0</i> | user name   |
| <i>s1</i> | Enter filename to import  |

### Command Mode

- /exec/configure

# username password

```
[no] username <user> password { 0 <pass1> | 5 <pass2> | <pass3> }
```

## Syntax Description

### Syntax Description

|                       |  |
|-----------------------|--|
| <code>no</code>       | (Optional) Negate a command or set its defaults                  |
| <code>username</code> | Configure user name  |
| <code>user</code>     | Username   |
| <code>password</code> | Password for user  |
| <code>0</code>        | Indicates that the password that follows should be in clear text |
| <code>pass1</code>    | Password for the user (clear text)                               |
| <code>5</code>        | Indicates that the password that follows should be encrypted     |
| <code>pass2</code>    | strongly encrypted password                                      |
| <code>pass3</code>    | Password for the user (clear text)                               |

## Command Mode

- /exec/configure/vmt-conn

## username ssh-cert-dn dsa

```
[no] username <s1> ssh-cert-dn <s2> { dsa | rsa }
```

### Syntax Description

|                           |                    |   |
|---------------------------|--------------------|---|
| <b>Syntax Description</b> | <b>no</b>          | (Optional) Negate a command or set its defaults |
|                           | <b>username</b>    | Configure user information.                     |
|                           | <i>s1</i>          | user name                                       |
|                           | <b>ssh-cert-dn</b> | Update cert dn                                  |
|                           | <i>s2</i>          | distinguished name to be used                   |
|                           | <b>dsa</b>         | Use dsa algorithm                               |
|                           | <b>rsa</b>         | Use rsa algorithm                               |

### Command Mode

- /exec/configure

# username sshkey

```
{ username <s0> sshkey { file <uri0> | <line> } | no username <s0> sshkey }
```

## Syntax Description

### Syntax Description

**username** Configure user information.

*s0* user name

**sshkey** Update ssh key for the user for ssh authentication

**file** ssh key file

*uri0* file containing host public key for the user

*line* ssh key for the user

**no** Negate a command or set its defaults

## Command Mode

- /exec/configure



# userpassphrase

[no] userpassphrase { min-length | max-length | length }

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 |            | Negate a command or set its defaults |
| userpassphrase     | user       | passphrase                           |
| min-length         | passphrase | minimum length                       |
| max-length         | passphrase | maximum length                       |
| length             | passphrase | min and max length                   |

## Command Mode

- /exec/configure

# userpassphrase min

userpassphrase { min-length <min-len> | max-length <max-len> } +

## Syntax Description

| Syntax Description |                              |
|--------------------|------------------------------|
| userpassphrase     | user passphrase              |
| min-length         | passphrase minimum length    |
| max-length         | passphrase maximum length    |
| <i>min-len</i>     | minimum length of passphrase |
| <i>max-len</i>     | maximum length of passphrase |

## Command Mode

- /exec/configure

# userprofile trustedCert CRLLookup user-switch-bind user-certdn-match user-pubkey-match attribute-name search-filter base-DN

{ userprofile | trustedCert | CRLLookup | user-switch-bind | user-certdn-match | user-pubkey-match }  
attribute-name <s0> search-filter <s1> base-DN <s2>

## Syntax Description

| Syntax Description |  |                              |
|--------------------|--|------------------------------|
| userprofile        |  | Set the userprofile          |
| trustedCert        |  | Set the trustedCert          |
| CRLLookup          |  | Set the CRLLookup            |
| user-switch-bind   |  | Set the user-switch-bind     |
| user-certdn-match  |  | Set the certificate matching |
| user-pubkey-match  |  | Set the pubkey matching      |
| attribute-name     |  | LDAP attribute-name          |
| <i>s0</i>          |  | Search Map attribute-name    |
| search-filter      |  | LDAP search-filter           |
| <i>s1</i>          |  | Search Map search-filter     |
| base-DN            |  | LDAP base-DN                 |
| <i>s2</i>          |  | Search Map base-DN<br>Name   |

## Command Mode

- /exec/configure/ldap/search





## V Commands

---

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# validate-xml

| validate-xml

## Syntax Description

---

### Syntax Description

---

| Pipe command output to filter

---

validate-xml validate an xml output according to .xsd definitions

---

## Command Mode

- /output



# validate-xml

| validate-xml

## Syntax Description

---

### Syntax Description

| Pipe command output to filter

---

validate-xml validate an xml output according to .xsd definitions

---

## Command Mode

- /output

# variance

```
{ { variance <variance> } | { no variance [ <variance> ] } }
```

## Syntax Description

|                           |                 |                                      |
|---------------------------|-----------------|--------------------------------------|
| <b>Syntax Description</b> | <b>no</b>       | Negate a command or set its defaults |
|                           | <b>variance</b> | Control load balancing variance      |
|                           | <i>variance</i> | Metric variance multiplier           |

## Command Mode

- /exec/configure/router-igrp/router-igrp-vrf-common /exec/configure/router-igrp/router-igrp-af-common

# vdc

vdc <e-vdc> [ id <new\_id> ] [ type <vtype> ]

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| vdc                | Manage Virtual Device Context                        |
| <i>e-vdc</i>       | Enter Virtual Device Context <vdc-id>                |
| id                 | (Optional) force this vdc into a specific id         |
| <i>new_id</i>      | (Optional) force this vdc into a specific id         |
| type               | (Optional) Create vdc with a special set of services |
| <i>vtype</i>       | (Optional) type of vdc                               |

## Command Mode

- /exec/configure

# vdc

[no] vdc <e-vdc> [ force ]

## Syntax Description

---

**Syntax Description**

no Negate a command or set its defaults

vdc Manage Virtual Device Context

*e-vdc* Enter Virtual Device Context <vdc-id>

force (Optional) Force ungraceful cleanup

---

## Command Mode

- /exec/configure

# vdc combined-hostname

[no] vdc combined-hostname

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | (Optional) Negate a command or set its defaults                                    |
| vdc                | Manage Virtual Device Context  |
| combined-hostname  | The hostname of non-default vdc's will be <default vdc name>-<nondefault vdc name> |

## Command Mode

- /exec/configure

# vdc\_id

[no] vdc\_id <id>

## Syntax Description

---

### Syntax Description

---

no Negate a command or set its defaults

---

vdc\_id Manage Virtual Device Context

---

id Enter Virtual Device Context <vdc-id>

---

## Command Mode

- /exec/configure

# vdc resource template

[no] vdc resource template { <name> | <res-mgr-template-known-name> }

## Syntax Description

| Syntax Description                 |  |   |
|------------------------------------|--|---|
| no                                 |  | (Optional) Negate a command or set its defaults |
| vdc                                |  | Manage Virtual Device Context                   |
| resource                           |  | Configure resource template                     |
| template                           |  | Configure resource template                     |
| <i>name</i>                        |  | Resource template name                          |
| <i>res-mgr-template-known-name</i> |  | Resource template name                          |

## Command Mode

- /exec/configure

# vdc suspend

vdc <en-vdc> suspend

## Syntax Description

---

### Syntax Description

---

vdc    Manage Virtual Device Context

---

*en-vdc*    Enter Virtual Device Context <vdc-id>

---

suspend    Put the vdc in a paused state. When resumed vdc will come up with its startup config

---

## Command Mode

- /exec/configure



# vdc suspend

[no] vdc <en-vdc> suspend

## Syntax Description

---

### Syntax Description

---

*vdc* Manage Virtual Device Context

---

*en-vdc* Enter Virtual Device Context <vdc-id>

---

*suspend* Put the vdc in a paused stated. When resumed vdc will use its startup config

---

## Command Mode

- /exec/configure

## vdp dot1q default static

```
{ vdp dot1q default { static <profile-name> | dynamic } } | { no vdp dot1q default }
```

### Syntax Description

| Syntax Description |                     |  |
|--------------------|---------------------|--|
| no                 |                     | Negate a command or set its defaults   |
| vdp                |                     | VDP protocol triggers  |
| static             |                     | Static Profile Map: Configure profile name via CLI                                     |
|                    | <i>profile-name</i> |  |
| dynamic            |                     | Dynamic Profile Map: Retrieve profile name from the external server                    |
| dot1q              |                     | Dot1Q Encapsulation  |
| default            |                     | Default (wildcard). Match any dot1q when there is no specific dot1q mapping configured |

### Command Mode

- /exec/configure/profile-map /exec/configure/profile-map-global

# vdp dot1q static

```
{ vdp dot1q <vlan-id> { static <profile-name> | dynamic } } | { no vdp dot1q <vlan-id> }
```

## Syntax Description

| Syntax Description |                     |   |
|--------------------|---------------------|---|
| no                 |                     | Negate a command or set its defaults                                |
| vdp                |                     | VDP protocol triggers   |
| static             |                     | Static Profile Map: Configure profile name via CLI                  |
|                    | <i>profile-name</i> |   |
| dynamic            |                     | Dynamic Profile Map: Retrieve profile name from the external server |
| dot1q              |                     | Dot1Q Encapsulation   |
|                    | <i>vlan-id</i>      |   |

## Command Mode

- /exec/configure/profile-map /exec/configure/profile-map-global

## vdp vni default static

```
{ vdp vni default { static <profile-name> | dynamic } } | { no vdp vni default }
```

### Syntax Description

| Syntax Description |                     |  |
|--------------------|---------------------|--|
| no                 |                     | Negate a command or set its defaults   |
| vdp                |                     | VDP protocol triggers  |
| vni                |                     | Virtual Network Identifier   |
| static             |                     | Static Profile Map: Configure profile name via CLI                                 |
| dynamic            |                     | Dynamic Profile Map: Retrieve profile name from the external server                |
|                    | <i>profile-name</i> |  |
| default            |                     | Default (wildcard). Match any vni when there is no specific vni mapping configured |

### Command Mode

- /exec/configure/profile-map /exec/configure/profile-map-global

# vdp vni static

```
{ vdp vni <vni-id> { static <profile-name> | dynamic } } | { no vdp vni <vni-id> }
```

## Syntax Description

| Syntax Description  |  |   |
|---------------------|--|---|
| no                  |  | Negate a command or set its defaults                                |
| vdp                 |  | VDP protocol triggers   |
| vni                 |  | Virtual Network Identifier  |
| <i>vni-id</i>       |  |   |
| static              |  | Static Profile Map: Configure profile name via CLI                  |
| dynamic             |  | Dynamic Profile Map: Retrieve profile name from the external server |
| <i>profile-name</i> |  |   |

## Command Mode

- /exec/configure/profile-map /exec/configure/profile-map-global

# vendor controller interop

[no] vendor controller interop

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| vendor             | vendor  |
| controller         | controller                                      |
| interop            | interop   |

## Command Mode

- /exec/configure

# verify-data

{ { no | default } verify-data | verify-data }

## Syntax Description

| Syntax Description |                               |
|--------------------|-------------------------------|
| no                 |                               |
| default            | Set a command to its defaults |
| verify-data        | Verify data                   |

## Command Mode

- /exec/configure/ip-sla/udp /exec/configure/ip-sla/jitter /exec/configure/ip-sla/icmpEcho

# verify

verify

## Syntax Description

---

### Syntax Description

---

verify Verify the current configuration session

---

## Command Mode

- /exec/configure



# verify profile

```
verify profile <all_conf_profile_name> [ __readonly__ TABLE_profile_name <missing_param> ]
```

## Syntax Description

| Syntax Description           |  |  |
|------------------------------|--|--|
| verify                       |  | Verify the instance with a configuration profile |
| profile                      |  | Name of the configuration profile                |
| <i>all_conf_profile_name</i> |  | Enter the name of configuration profile          |
| <i>__readonly__</i>          |  | (Optional)                                       |
| <i>TABLE_profile_name</i>    |  | (Optional)                                       |
| <i>missing_param</i>         |  | (Optional)                                       |

## Command Mode

- /exec/configure/param-inst

# verify verbose

verify verbose

## Syntax Description

---

### Syntax Description

---

verify Verify the current configuration session

---

verbose Verify the current configuration session with more details

---

## Command Mode

- /exec/configure

# version

[no] version <s0>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| version            | Version info                                    |
| s0                 | Version   |

## Command Mode

- /exec/configure

# version 5

[no] version 5

## Syntax Description

---

### Syntax Description

---

version Specify the export  
version

---

5 Version 5 Export

---

## Command Mode

- /exec/configure/nfm-exporter

# version 9

[no] version 9

## Syntax Description

---

### Syntax Description

---

version Specify the export  
version

---

9 Version 9 Export

---

## Command Mode

- /exec/configure/nfm-exporter

# virtual-service

[no] virtual-service

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| virtual-service    | Virtual service global settings                 |

## Command Mode

- /exec/configure

# virtual-service

[no] virtual-service <virt\_serv\_name>

## Syntax Description

|                           |                       |   |
|---------------------------|-----------------------|---|
| <b>Syntax Description</b> | no                    | (Optional) Negate a command or set its defaults |
|                           | virtual-service       | Configure a virtual service                     |
|                           | <i>virt_serv_name</i> | Virtual service name                            |

## Command Mode

- /exec/configure

# virtual-service

```
virtual-service { { install name <virt_serv_name> package <file_uri> [ media <target_media> ] } | { upgrade
name <virt_serv_name> package <file_uri> } | { uninstall name <virt_serv_name> } }
```

## Syntax Description

### Syntax Description

|                       |   |
|-----------------------|---|
| virtual-service       | Virtualization manager actions  |
| install               | Add a virtual service to install database                             |
| upgrade               | Upgrade a virtual service package to a different version              |
| name                  | Name of the virtual service   |
| <i>virt_serv_name</i> | Virtual service name  |
| package               | Package location  |
| <i>file_uri</i>       | File name (with .ova extension) for the virtual service               |
| media                 | (Optional) Target media to use to explode the virtual service package |
| <i>target_media</i>   | (Optional) Target media   |
| uninstall             | Remove a virtual service from the install database                    |

## Command Mode

- /exec



# virtual-service connect name console

```
virtual-service connect name <virt_serv_name> { console | aux }
```

## Syntax Description

| Syntax Description    |   |
|-----------------------|---|
| virtual-service       | Virtualization service actions                    |
| connect               | Request a virtual service shell                   |
| name                  | Name of the virtual service                       |
| <i>virt_serv_name</i> | Name of existing virtual service                  |
| console               | Request a virtual service console shell           |
| aux                   | Request a virtual service auxiliary console shell |

## Command Mode

- /exec

## virtual-service move name log to

virtual-service move name <virt\_serv\_name> { log | core } to <dir\_uri>

### Syntax Description

| Syntax Description    |  |
|-----------------------|--|
| virtual-service       | Virtualization service actions                     |
| move                  | Move a virtual service log or core files           |
| name                  | Name of the virtual service                        |
| <i>virt_serv_name</i> | Name of existing virtual service                   |
| log                   | Move log files                                     |
| core                  | Move core files                                    |
| to                    | Destination directory to move log or core files to |
| <i>dir_uri</i>        | Destination directory name                         |

### Command Mode

- /exec

# virtual-service reset force

virtual-service reset force

## Syntax Description

|                           |                 |   |
|---------------------------|-----------------|---|
| <b>Syntax Description</b> | virtual-service | Virtualization service actions                            |
|                           | reset           | Virtualization reset commands                             |
|                           | force           | Force a non-recoverable reset of all virtualization files |

## Command Mode

- /exec

## virtual IPv6

```
[no] virtual IPv6 { <ip-addr> { <prefix> | <netmask> } } [ ip | { { udp | tcp } { <port_num> | any } } ] [ { arp
| advertise } { enable | disable } ]
```

### Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| virtual            | ITD        | virtual ip configuration             |
| IPv6               | ITD        | virtual IPv6                         |
| <i>prefix</i>      | IPv6       | prefix length                        |
| ip                 | (Optional) | IP Protocol                          |
| udp                | (Optional) | UDP Protocol                         |
| tcp                | (Optional) | TCP Protocol                         |
| <i>port_num</i>    | (Optional) | Port Number                          |
| any                | (Optional) | Any Port Number                      |
| arp                | (Optional) | ARP                                  |
| advertise          | (Optional) | advertise                            |
| enable             | (Optional) | Enable                               |
| disable            | (Optional) | Disable                              |

### Command Mode

- /exec/configure/itd

## virtual IPv6

```
[no] virtual IPv6 { <ip-addr> { <prefix> | <netmask> } } [ ip | { { udp | tcp } { <port_num> | any } } ] [ { arp
| advertise } { enable | disable } ] [ device-group <dgrp_name> ]
```

### Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| virtual            |            | ITD virtual ip configuration         |
| IPv6               |            | ITD virtual IPv6                     |
| <i>prefix</i>      |            | IPv6 prefix length                   |
| ip                 | (Optional) | IP Protocol                          |
| udp                | (Optional) | UDP Protocol                         |
| tcp                | (Optional) | TCP Protocol                         |
| <i>port_num</i>    | (Optional) | Port Number                          |
| any                | (Optional) | Any Port Number                      |
| arp                | (Optional) | ARP                                  |
| advertise          | (Optional) | advertise                            |
| enable             | (Optional) | Enable                               |
| disable            | (Optional) | Disable                              |
| device-group       | (Optional) | device-group                         |
| <i>dgrp_name</i>   | (Optional) | VIP device-group name                |

### Command Mode

- /exec/configure/itd

# virtual IPv6

```
[no] virtual IPv6 { <ip-addr> { <prefix> | <netmask> } } [ ip | { { udp | tcp } { <port_num> | any } } ] [ { arp
| advertise } { enable | disable } ] [ device-group <dgrp_name> ]
```

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| virtual            |            | PLB virtual ip configuration         |
| IPv6               |            | PLB virtual IPv6                     |
| <i>prefix</i>      |            | IPv6 prefix length                   |
| ip                 | (Optional) | IP Protocol                          |
| udp                | (Optional) | UDP Protocol                         |
| tcp                | (Optional) | TCP Protocol                         |
| <i>port_num</i>    | (Optional) | Port Number                          |
| any                | (Optional) | Any Port Number                      |
| arp                | (Optional) | ARP                                  |
| advertise          | (Optional) | advertise                            |
| enable             | (Optional) | Enable                               |
| disable            | (Optional) | Disable                              |
| device-group       | (Optional) | device-group                         |
| <i>dgrp_name</i>   | (Optional) | VIP device-group name                |

## Command Mode

- /exec/configure/plb

# virtual ip

```
[no] virtual ip { <ip-addr> <ip-mask> } [ ip | { { udp | tcp } { <port_num> | any } } ] [ { arp | advertise } { enable | disable } ]
```

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| virtual            | ITD virtual ip configuration                    |
| ip                 | ITD virtual ip                                  |
| <i>ip-addr</i>     | IP address in format i.i.i.i                    |
| <i>ip-mask</i>     | IP network mask in format m.m.m.m               |
| ip                 | (Optional) IP Protocol                          |
| udp                | (Optional) UDP Protocol                         |
| tcp                | (Optional) TCP Protocol                         |
| <i>port_num</i>    | (Optional) Port Number                          |
| any                | (Optional) Any Port Number                      |
| arp                | (Optional) ARP                                  |
| advertise          | (Optional) advertise                            |
| enable             | (Optional) Enable                               |
| disable            | (Optional) Disable                              |

## Command Mode

- /exec/configure/itd

# virtual ip

```
[no] virtual ip { <ip-addr> <ip-mask> } [ ip | { { udp | tcp } { <port_num> | any } } ] [ { arp | advertise } { enable | disable } ] [ device-group <dgrp_name> ]
```

## Syntax Description

### Syntax Description

|                  |   |
|------------------|---|
| no               | (Optional) Negate a command or set its defaults |
| virtual          | ITD virtual ip configuration                    |
| ip               | ITD virtual ip                                  |
| <i>ip-addr</i>   | IP address in format i.i.i.i                    |
| <i>ip-mask</i>   | IP network mask in format m.m.m.m               |
| ip               | (Optional) IP Protocol                          |
| udp              | (Optional) UDP Protocol                         |
| tcp              | (Optional) TCP Protocol                         |
| <i>port_num</i>  | (Optional) Port Number                          |
| any              | (Optional) Any Port Number                      |
| arp              | (Optional) ARP                                  |
| advertise        | (Optional) advertise                            |
| enable           | (Optional) Enable                               |
| disable          | (Optional) Disable                              |
| device-group     | (Optional) device-group                         |
| <i>dgrp_name</i> | (Optional) VIP device-group name                |

## Command Mode

- /exec/configure/itd



# virtual ip

```
[no] virtual ip { <ip-addr> <ip-mask> } [ ip | { { udp | tcp } { <port_num> | any } } ] [ { arp | advertise } { enable | disable } ] [ device-group <dgrp_name> ]
```

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| virtual            | PLB virtual ip configuration                    |
| ip                 | PLB virtual ip                                  |
| <i>ip-addr</i>     | IP address in format i.i.i.i                    |
| <i>ip-mask</i>     | IP network mask in format m.m.m.m               |
| ip                 | (Optional) IP Protocol                          |
| udp                | (Optional) UDP Protocol                         |
| tcp                | (Optional) TCP Protocol                         |
| <i>port_num</i>    | (Optional) Port Number                          |
| any                | (Optional) Any Port Number                      |
| arp                | (Optional) ARP                                  |
| advertise          | (Optional) advertise                            |
| enable             | (Optional) Enable                               |
| disable            | (Optional) Disable                              |
| device-group       | (Optional) device-group                         |
| <i>dgrp_name</i>   | (Optional) VIP device-group name                |

## Command Mode

- /exec/configure/plb

# vlan-consistency-check

[no] vlan-consistency-check

## Syntax Description

|                           |                        |   |
|---------------------------|------------------------|---|
| <b>Syntax Description</b> | no                     | (Optional) Negate a command or set its defaults |
|                           | vlan-consistency-check | Enable vlan consistency check                   |

## Command Mode

- /exec/configure/evpn-esi-mh

# vlan

vlan <vlans> | no vlan

## Syntax Description

---

### Syntax Description

---

no Negate a command or set its defaults

---

vlan Set allowed fabricpath VLANs for a given anycast bundle

---

*vlans* VLAN IDs of the allowed fabricpath VLANs in the anycast bundle

---

## Command Mode

- /exec/configure/anycast

# vlan

[no] vlan <vlan-range>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| vlan               | add vlan to vlan group                          |
| <i>vlan-range</i>  | range of vlans                                  |

## Command Mode

- /exec/configure/itd-vlan-grp

# vlan

[no] vlan <vlan-range>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| vlan               | vlan  |
| <i>vlan-range</i>  | range of vlans                                  |

## Command Mode

- /exec/configure/smartc /exec/configure/smartc

# vlan access-map

[no] vlan access-map <name> [ <seqno> ]

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| vlan               | Vlan commands                                   |
| <i>name</i>        | List name                                       |
| access-map         | Configure a VLAN access map                     |
| <i>seqno</i>       | (Optional) Sequence number                      |

## Command Mode

- /exec/configure

## vlan designated priority

{ vlan <vlan-id> | bridge-domain <bd-id> } designated priority <prio> | no { vlan <vlan-id> | bridge-domain <bd-id> } designated priority [ <prio> ]

### Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults                     |
| vlan               |  | VLAN Switch Spanning Trees                               |
| bridge-domain      |  | Bridge-Domain Switch Spanning Trees                      |
| <i>vlan-id</i>     |  | vlan range, Example: 1,3-5,7,9-11                        |
| <i>bd-id</i>       |  | Bridge-Domain range, Example: 2,4-5,7,9-11               |
| designated         |  | Set the designated bridge priority for the spanning tree |
| priority           |  | Set the bridge priority for the spanning tree            |
| <i>prio</i>        |  | bridge priority in increments of 4096                    |

### Command Mode

- /exec/configure/spanning-tree/pseudo

## vlan filter vlan

[no] vlan filter <name> { vlan-list <vlans> | vlan-list-include-reserved <vlans-include-reserved> }

### Syntax Description

| Syntax Description            |   |  |
|-------------------------------|---|--|
| no                            | (Optional) Negate a command or set its defaults |  |
| vlan                          | Vlan commands                                   |  |
| filter                        | Specify access control for packets              |  |
| <i>name</i>                   | List name                                       |  |
| vlan-list                     | Specify list of VLANs to apply access control   |  |
| <i>vlans</i>                  | List of VLANs                                   |  |
| vlan-list-include-reserved    | Specify list of VLANs to apply access control   |  |
| <i>vlans-include-reserved</i> | List of VLANs                                   |  |

### Command Mode

- /exec/configure



# vlan root priority

```
{ vlan <vlan-id> | bridge-domain <bd-id> } root priority <prio> | no { vlan <vlan-id> | bridge-domain <bd-id> } root priority [ <prio> ]
```

## Syntax Description

| Syntax Description |  |  |
|--------------------|--|--|
| no                 |  | Negate a command or set its defaults               |
| vlan               |  | VLAN Switch Spanning Trees                         |
| bridge-domain      |  | Bridge-Domain Switch Spanning Trees                |
| <i>vlan-id</i>     |  | vlan range, Example: 1,3-5,7,9-11                  |
| <i>bd-id</i>       |  | Bridge-Domain range, Example: 2,4-5,7,9-11         |
| root               |  | Set the root bridge priority for the spanning tree |
| priority           |  | Set the bridge priority for the spanning tree      |
| <i>prio</i>        |  | bridge priority in increments of 4096              |

## Command Mode

- /exec/configure/spanning-tree/pseudo

# vmtracker connection

[no] vmtracker connection <connection-name>

## Syntax Description

| Syntax Description     |            |                                      |
|------------------------|------------|--------------------------------------|
| no                     | (Optional) | Negate a command or set its defaults |
| vmtracker              |            | Configure vmtracker parameters       |
| connection             |            | Specify a host to connect            |
| <i>connection-name</i> |            | VM host name                         |

## Command Mode

- /exec/configure

# vmtracker connection refresh

[no] vmtracker connection <connection-name> refresh

## Syntax Description

| Syntax Description     |            |                                      |
|------------------------|------------|--------------------------------------|
| no                     | (Optional) | Negate a command or set its defaults |
| vmtracker              |            | Configure vmtracker parameters       |
| connection             |            | Specify a host to connect            |
| <i>connection-name</i> |            | VM host name                         |
| refresh                |            | Refresh all host related information |

## Command Mode

- /exec/configure

# vmtracker enable

[no] vmtracker enable

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| vmtracker          | Configure vmtracker feature                     |
| enable             | Enable vmtracker feature on interface           |

## Command Mode

- /exec/configure/if-switching

# vmtracker fabric auto-config

[no] vmtracker fabric auto-config

## Syntax Description

|                           |             |   |
|---------------------------|-------------|---|
| <b>Syntax Description</b> | no          | (Optional) Negate a command or set its defaults |
|                           | vmtracker   | Configure vmtracker parameters                  |
|                           | fabric      | Enable VM Tracker Fabric paramters              |
|                           | auto-config | Enable VM Tracker Fabric AutoConfiguration      |

## Command Mode

- /exec/configure

# vmtracker set device-id

[no] vmtracker set device-id <dev-id>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| vmtracker          | Configure vmtracker parameters                  |
| set                | Set vmtracker options                           |
| device-id          | Set the device-id                               |
| <i>dev-id</i>      | Device id                                       |

## Command Mode

- /exec/configure

# vn-segment

vn-segment { <segment-id> | <zero-segment-id> } | no vn-segment

## Syntax Description

| Syntax Description     |  |                                      |
|------------------------|--|--------------------------------------|
| no                     |  | Negate a command or set its defaults |
| vn-segment             |  | VN Segment id of the VLAN            |
| <i>segment-id</i>      |  | segment-id                           |
| <i>zero-segment-id</i> |  | segment-id                           |

## Command Mode

- /exec/configure/vlan

# vni

{ vni <id> } | { no vni [ <id> ] }

## Syntax Description

---

### Syntax Description

---

**no** Negate a command or set its defaults

---

**vi** Virtual Network Identifier

---

*id* vni, Example: 4096,6099

---

## Command Mode

- /exec/configure/vrf



# vni default dynamic

{ vni default dynamic } | { no vni default }

## Syntax Description

---

**Syntax Description**

no Negate a command or set its defaults

---

dynamic Dynamic Profile Map: Retrieve profile name from the external server

---

vni Virtual Network Identifier

---

default Default (wildcard). Match any vni when there is no specific vni mapping configured

---

## Command Mode

- /exec/configure/profile-map /exec/configure/profile-map-global

# vni l2

[no] vni <vni\_id> l2

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| vni                | Configure Ethernet VPN ID                       |
| <i>vni_id</i>      | Specify VNI ID                                  |
| l2                 | Layer-2 VNI                                     |

## Command Mode

- /exec/configure/evpn

# vpc

vpc [ <vpc\_num> ] | no vpc [ <vpc\_num> ]

## Syntax Description

| Syntax Description |  |
|--------------------|--|
| no                 | Negate a command or set its defaults             |
| vpc                | Virtual Port Channel configuration               |
| <i>vpc_num</i>     | (Optional) specify a Virtual Port Channel number |

## Command Mode

- /exec/configure/if-eth-port-channel-switch

# vpc domain

vpc domain <domain\_id> | no vpc domain <domain\_id>

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| vpc                |  | Virtual Port Channel configuration   |
| domain             |  | Specify domain                       |
| <i>domain_id</i>   |  | domain id                            |

## Command Mode

- /exec/configure

# vpc orphan-port suspend

[no] vpc orphan-port suspend

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| vpc                | Virtual Port Channel configuration              |
| orphan-port        | orphan-port (non-vpc port)                      |
| suspend            | suspend - when vPC secondary peerlink goes down |

## Command Mode

- /exec/configure/if-eth-phy /exec/configure/if-eth-port-channel-switch /exec/configure/if-eth-port-channel

# vpc peer-link

vpc peer-link | no vpc peer-link

## Syntax Description

---

**Syntax Description**

---

|           |   |
|-----------|---|
| no        | Negate a command or set its defaults                |
| vpc       | Virtual Port Channel configuration                  |
| peer-link | specify if this link is used for peer communication |

---

## Command Mode

- /exec/configure/if-eth-port-channel-switch

# vpc suspend

vpc suspend [ <n-secs> ]

## Syntax Description

|                           |               |   |
|---------------------------|---------------|---|
| <b>Syntax Description</b> | vpc           | Virtual Port Channel configuration        |
|                           | suspend       | Suspend the vPC on primary                |
|                           | <i>n-secs</i> | (Optional) Suspension duration in seconds |

## Command Mode

- /exec/configure/vpc-domain

# vpc upgrade-done

vpc upgrade-done

## Syntax Description

| Syntax Description |                                      |
|--------------------|--------------------------------------|
| vpc                | Virtual Port Channel configuration   |
| upgrade-done       | Unlock the cli and remove ISSU state |

## Command Mode

- /exec



# vpn

[no] vpn <otv-isis-vpn-name>

## Syntax Description

|                           |                          |   |
|---------------------------|--------------------------|---|
| <b>Syntax Description</b> | no                       | (Optional) Negate a command or set its defaults |
|                           | vpn                      | Configure IS-IS VPN name eg: Overlay<x>         |
|                           | <i>otv-isis-vpn-name</i> | Overlay name                                    |

## Command Mode

- /exec/configure/otv-isis

# vpn id

vpn id <vpn-id> | no vpn id [ <vpn-id> ]

## Syntax Description

---

**Syntax Description**

---

no     Negate a command or set its defaults

---

vpn    Configure VPN ID in rfc2685 format

---

id     Configure VPN ID in rfc2685 format

---

*vpn-id* OUI:VPN-Index, format (hex) <3 bytes OUI:4 bytes VPN-Index>

---

## Command Mode

- /exec/configure/vrf

# vrf

[no] vrf <vrf-name>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| vrf                | Configure RIP VRF information                   |
| <i>vrf-name</i>    | VRF name  |

## Command Mode

- /exec/configure/router-rip

# vrf

[no] vrf <vrf-name>

## Syntax Description

---

### Syntax Description

---

*vrf-name* VRF name

---

vrf Virtual Router Context

---

no (Optional) Negate a command or set its defaults

---

## Command Mode

- /exec/configure/router-bgp/router-bgp-bmp-server

# vrf

[no] vrf <vrf-name>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| vrf                | Virtual Router Context                          |
| <i>vrf-name</i>    | VRF name  |

## Command Mode

- /exec/configure/router-bgp

# vrf

[no] vrf <vrf-name>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| vrf                | Display per-VRF information                     |
| <i>vrf-name</i>    | VRF name  |

## Command Mode

- /exec/configure/router-ospf

# vrf

{ vrf <name> } | { no vrf <name> }

## Syntax Description

---

|                           |    |                                      |
|---------------------------|----|--------------------------------------|
| <b>Syntax Description</b> | no | Negate a command or set its defaults |
|---------------------------|----|--------------------------------------|

---

|     |                 |
|-----|-----------------|
| vrf | ITD service vrf |
|-----|-----------------|

---

|             |                      |
|-------------|----------------------|
| <i>name</i> | ITD Service VRF name |
|-------------|----------------------|

---

## Command Mode

- /exec/configure/itd

# vrf

{ vrf <name> } | { no vrf <name> }

## Syntax Description

---

|                           |    |                                      |
|---------------------------|----|--------------------------------------|
| <b>Syntax Description</b> | no | Negate a command or set its defaults |
|---------------------------|----|--------------------------------------|

---

|     |                 |
|-----|-----------------|
| vrf | ITD service vrf |
|-----|-----------------|

---

|             |                      |
|-------------|----------------------|
| <i>name</i> | ITD Service VRF name |
|-------------|----------------------|

---

## Command Mode

- /exec/configure/itd



# vrf

[no] vrf <vrf-name>

## Syntax Description

---

### Syntax Description

---

no (Optional) Negate a command or set its defaults

---

vrf Configure ISIS VRF information

---

*vrf-name* VRF name

---

## Command Mode

- /exec/configure/router-isis

# vrf

[no] vrf <vrf-name>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| vrf                | Display per-VRF information                     |
| <i>vrf-name</i>    | VRF name  |

## Command Mode

- /exec/configure/router-ospf3

# vrf

{ vrf <name> } | { no vrf <name> }

## Syntax Description

---

|                           |    |                                      |
|---------------------------|----|--------------------------------------|
| <b>Syntax Description</b> | no | Negate a command or set its defaults |
|---------------------------|----|--------------------------------------|

---

|     |                 |
|-----|-----------------|
| vrf | PLB service vrf |
|-----|-----------------|

---

|             |                      |
|-------------|----------------------|
| <i>name</i> | PLB Service VRF name |
|-------------|----------------------|

---

## Command Mode

- /exec/configure/plb

# vrf

[no] vrf <vrf-name>

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| vrf                | Configure VRF information                       |
| <i>vrf-name</i>    | VRF name  |

## Command Mode

- /exec/configure/router-eigrp

# vrf

{ { no | default } vrf |

## Syntax Description

---

### Syntax Description

---

no

---

default Set a command to its defaults

---

vrf Configure IP SLAs for a VPN Routing/Forwarding instance

---

## Command Mode

- /exec/configure/ip-sla/udp /exec/configure/ip-sla/jitter /exec/configure/ip-sla/tcp /exec/configure/ip-sla/icmpEcho /exec/configure/ip-sla/dns /exec/configure/ip-sla/http

# vrf context

vrf context <vrf-name> | no vrf context { <vrf-name> | <vrf-name> }

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 |  | Negate a command or set its defaults |
| vrf                |  | Configure VRF parameters             |
| context            |  | Create VRF and enter VRF mode        |
| <i>vrf-name</i>    |  | VRF name                             |
| <i>vrf-name</i>    |  | VRF name                             |
| <i>vrf-name</i>    |  | VRF name                             |

## Command Mode

- /exec/configure

# vrf default static

```
{ vrf default { static <profile-name> | dynamic } } | { no vrf default }
```

## Syntax Description

| Syntax Description |                     |  |
|--------------------|---------------------|--|
| no                 |                     | Negate a command or set its defaults   |
| vrf                |                     | VRF name   |
| default            |                     | Default (wildcard). Match any vrf when there is no specific vrf mapping configured |
| static             |                     | Static Profile Map: Configure profile name via CLI                                 |
|                    | <i>profile-name</i> |  |
| dynamic            |                     | Dynamic Profile Map: Retrieve profile name from the external server                |

## Command Mode

- /exec/configure/profile-map-global

# vrf member

vrf member { <vrf\_name> | <vrf-known-name> } | no vrf member [ <vrf\_name> | <vrf-known-name> ]

## Syntax Description

### Syntax Description

|                       |  |
|-----------------------|--|
| no                    | Negate a command or set its defaults   |
| vrf                   | Configure VPN Routing/Forwarding table |
| member                | Set route's VRF membership             |
| <i>vrf_name</i>       | VRF name                               |
| <i>vrf-known-name</i> | Known VRF name                         |

## Command Mode

- /exec/configure/track



# vrf member

vrf member <vrf-name> | no vrf member [ <vrf-name> ]

## Syntax Description

| Syntax Description |                                      |
|--------------------|--------------------------------------|
| no                 | Negate a command or set its defaults |
| vrf                | Configure VRF parameters             |
| member             | Set interface's VRF membership       |
| <i>vrf-name</i>    | VRF name                             |

## Command Mode

- /exec/configure/if-igp /exec/configure/if-mgmt-ether

# vrf static

```
{ vrf <vrf-name> { static <profile-name> | dynamic } } | { no vrf <vrf-name> }
```

## Syntax Description

| Syntax Description  |  |   |
|---------------------|--|---|
| no                  |  | Negate a command or set its defaults                                |
| vrf                 |  | VRF name  |
| <i>vrf-name</i>     |  | VRF name  |
| static              |  | Static Profile Map: Configure profile name via CLI                  |
| <i>profile-name</i> |  |   |
| dynamic             |  | Dynamic Profile Map: Retrieve profile name from the external server |

## Command Mode

- /exec/configure/profile-map-global

# vrrp

[no] vrrp <vr\_id>

## Syntax Description

---

**Syntax Description**

no (Optional) Negate a command or set its defaults

---

vrrp VRRP configuration commands

---

vr\_id IPv4 VR group number

---

## Command Mode

- /exec/configure/if-legacy-eth /exec/configure/if-ethernet /exec/configure/if-port-channel /exec/configure/if-vlan-common /exec/configure/if-eth-any

# vrrp bfd

```
{ vrrp bfd <peer_intf_ip> | no vrrp bfd [ <peer_intf_ip> ] }
```

## Syntax Description

| Syntax Description  |                                      |
|---------------------|--------------------------------------|
| vrrp                | VRRP configuration commands          |
| bfd                 | BFD protocol                         |
| <i>peer_intf_ip</i> | Neighbor IP address                  |
| no                  | Negate a command or set its defaults |

## Command Mode

- /exec/configure/if-eth-any/vrrp

# vrrpv2

[no] vrrpv2

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| vrrpv2             | Enable VRRPv2 compatibility mode                |

## Command Mode

- /exec/configure/if-eth-any/vrrpv3

# vrrpv3

[no] vrrpv3

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| vrrpv3             | VRRPv3 configuration commands                   |

## Command Mode

- /exec/configure

## vrrpv3 address-family

[no] vrrpv3 <group\_id> address-family <opt\_v4>

### Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| vrrpv3             | Configure VRRPv3 group parameters               |
| address-family     | IPV4 address family                             |
| opt_v4             | Enter ipv4                                      |
| group_id           | VRRP Group ID                                   |

### Command Mode

- /exec/configure/if-eth-any /exec/configure/if-vlan

## vrrpv3 address-family

[no] vrrpv3 <group\_id> address-family <opt\_v6>

### Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| vrrpv3             |            | Configure VRRPv3 group parameters    |
| address-family     | IPV6       | address family                       |
| <i>opt_v6</i>      | Enter      | ipv6                                 |
| <i>group_id</i>    | VRRP       | Group ID                             |

### Command Mode

- /exec/configure/if-eth-any /exec/configure/if-vlan



# vrrs leader

[no] vrrs leader <tag>

## Syntax Description

---

**Syntax Description**

---

**no** (Optional) Negate a command or set its defaults

---

**vrrs** VRRS-related commands

---

**leader** Name of VRRS tag for which this group is the leader

---

**tag** VRRS tag to lead

---

## Command Mode

- /exec/configure/if-eth-any/vrrpv3

## vrrs pathway

[no] vrrs pathway <name>

### Syntax Description

|                           |             |   |
|---------------------------|-------------|---|
| <b>Syntax Description</b> | no          | (Optional) Negate a command or set its defaults |
|                           | vrrs        | VRRS Interface configuration commands           |
|                           | pathway     | Configure a VRRS pathway                        |
|                           | <i>name</i> | Name of the VRRS tag to associate with pathway  |

### Command Mode

- /exec/configure/if-eth-any /exec/configure/if-vlan

# vsh

| vsh

## Syntax Description

---

### Syntax Description

---

| Pipe command output to filter

---

❖ the shell that understands cli command

---

## Command Mode

- /output





## W Commands

---

- [wait-igp-convergence](#), on page 4434
- [watch](#), on page 4435
- [watch service action apply-acl](#), on page 4436
- [wc](#), on page 4437
- [weight](#), on page 4438
- [weight](#), on page 4439
- [weight](#), on page 4440
- [weight](#), on page 4441
- [weight](#), on page 4442
- [weighting](#), on page 4443
- [where](#), on page 4444
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- [which](#), on page 4446
- [wide-metric-only](#), on page 4447
- [window-size](#), on page 4448
- [wred-queue qos-group-map queue-only](#), on page 4449
- [write erase](#), on page 4450
- [write erase boot](#), on page 4451
- [write erase debug](#), on page 4452
- [wrr-queue qos-group-map](#), on page 4453
- [wrr unicast-bandwidth](#), on page 4454

# wait-igp-convergence

[no] wait-igp-convergence

## Syntax Description

|                           |                      |  |
|---------------------------|----------------------|--|
| <b>Syntax Description</b> | no                   | (Optional) Negate a command or set its defaults                |
|                           | wait-igp-convergence | Delay initial bestpath until redistributed IGPs have converged |

## Command Mode

- /exec/configure/router-bgp/router-bgp-af-ipv4 /exec/configure/router-bgp/router-bgp-vrf-af-ipv4 /exec/configure/router-bgp/router-bgp-af-ipv6 /exec/configure/router-bgp/router-bgp-vrf-af-ipv6

# watch

watch [ differences ] [ interval <time> ] <watch\_cmd>

## Syntax Description

---

### Syntax Description

---

|                    |                                      |
|--------------------|--------------------------------------|
| <i>watch</i>       | execute a program periodically       |
| <i>differences</i> | (Optional) highlight the differences |
| <i>interval</i>    | (Optional) watch interval            |
| <i>time</i>        | (Optional) interval in seconds       |
| <i>watch_cmd</i>   | enter the command you want to watch  |

---

## Command Mode

- /exec

# watch service action apply-acl

[no] watch service <service-name> action apply-acl <acl-name> | no watch service

## Syntax Description

| Syntax Description  |   |  |
|---------------------|---|--|
| no                  | (Optional) Negate a command or set its defaults |  |
| watch               | Watch a pod/service                             |  |
| service             | The pod or service to watch                     |  |
| <i>service-name</i> | Name of the service/pod to watch                |  |
| action              | Action to be applied                            |  |
| apply-acl           | Change ACL config                               |  |
| <i>acl-name</i>     | Name of the acl to apply                        |  |

## Command Mode

- /exec/configure/kubernetes



# WC

| wc [ -c | -l | -w ]

## Syntax Description

---

### Syntax Description

---

| Pipe command output to filter

---

**w** Count words, lines, characters

---

**c** (Optional) Output character count

---

**-l** (Optional) Output line count

---

**w** (Optional) Output word count

---

## Command Mode

- /output

# weight

```
{ weight <weight> } | { { no | default } weight [ <weight> ] }
```

## Syntax Description

### Syntax Description

|               |  |
|---------------|--|
| no            | Negate a command or set its defaults             |
| default       | Inherit values from a peer template              |
| weight        | Set default weight for routes from this neighbor |
| <i>weight</i> | Default weight                                   |

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af  
/exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-vpnv4  
/exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-vpnv6  
/exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv4-label  
/exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv6-label

# weight

```
{ weight <weight> } | { { no | default } weight [ <weight> ] }
```

## Syntax Description

---

**Syntax Description**

---

`no` Negate a command or set its defaults

---

`default` Inherit values from a peer template

---

`weight` Set default weight for routes from this neighbor

---

*weight* Default weight

---

## Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv4-mdt

# weight

[no] weight <weight-value>

## Syntax Description

|                           |                     |   |
|---------------------------|---------------------|---|
| <b>Syntax Description</b> | no                  | (Optional) Negate a command or set its defaults |
|                           | weight              | weight for traffic distribution                 |
|                           | <i>weight-value</i> | weight value                                    |

## Command Mode

- /exec/configure/itd-dg-node

# weight

[no] weight <weight-value>

## Syntax Description

| Syntax Description  |   |
|---------------------|---|
| no                  | (Optional) Negate a command or set its defaults |
| weight              | weight for traffic distribution                 |
| <i>weight-value</i> | weight value                                    |

## Command Mode

- /exec/configure/itd-dg-node

# weight

[no] weight <weight-value>

## Syntax Description

| Syntax Description  |   |
|---------------------|---|
| no                  | (Optional) Negate a command or set its defaults |
| weight              | weight for traffic distribution                 |
| <i>weight-value</i> | weight value                                    |

## Command Mode

- /exec/configure/plb-dg-node

# weighting

```
weighting { <weight-max-val> [ lower <low-thresh> [ upper <upper-thresh> ] | upper <upper-thresh> ] | track
<track-obj> [ decrement <dec-val> ] } | no weighting [ { <weight-max-val> [ lower <low-thresh> [ upper
<upper-thresh> ] | upper <upper-thresh> ] | track <track-obj> [ decrement <dec-val> ] } ]
```

## Syntax Description

### Syntax Description

|                       |  |
|-----------------------|--|
| no                    | Negate a command or set its defaults       |
| weighting             | Gateway weighting and tracking             |
| <i>weight-max-val</i> | Weighting maximum value                    |
| lower                 | (Optional) Weighting lower threshold       |
| <i>low-thresh</i>     | (Optional) Weighting lower threshold value |
| upper                 | (Optional) Weighting upper threshold       |
| <i>upper-thresh</i>   | (Optional) Weighting upper threshold value |
| track                 | Interface tracking                         |
| <i>track-obj</i>      | Tracked object                             |
| decrement             | (Optional) Weighting decrement             |
| <i>dec-val</i>        | (Optional) Decrement value 1 255           |

## Command Mode

- /exec/configure/if-eth-any/glbp

# where

where

## Syntax Description

---

### Syntax Description

---

`where` shows the cli context you are in

---

## Command Mode

- /global



# where detail

where detail

## Syntax Description

---

### Syntax Description

---

`where` shows the cli context you are in

---

`detail` shows each entry on separate line

---

## Command Mode

- /global

# which

which

## Syntax Description

---

### Syntax Description

**which** shows which cli commands are available in current mode (see also 'show cli syntax' which has more options)

---

## Command Mode

- /global

# wide-metric-only

[no] wide-metric-only

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| wide-metric-only   | Advertise only wide metric                      |

## Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

# window-size

[no] window-size <size>

## Syntax Description

---

### Syntax Description

---

|             |                       |
|-------------|-----------------------|
| window-size | Configure Window size |
|-------------|-----------------------|

---

|             |                   |
|-------------|-------------------|
| <i>size</i> | window size value |
|-------------|-------------------|

---

## Command Mode

- /exec/configure/masec-policy

# wred-queue qos-group-map queue-only

[no] wred-queue qos-group-map queue-only { <qid> }

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate the command                         |
| wred-queue         | Enable queue based ECN marking for specific qos-group |
| queue-only         | Enable queue based ECN marking                        |
| qos-group-map      | Qid value   |
| <i>qid</i>         | Provide qos-group value                               |

## Command Mode

- /exec/configure

# write erase

write erase

## Syntax Description

|       |  |
|-------|--|
| write | Write current configuration                    |
| erase | Destroys the configuration on persistent media |

## Command Mode

- /exec

## Usage Guidelines

You can erase the configuration on your device to return to the configuration defaults. In this context, **configuration** refers to the startup configuration as displayed by the **show startup** command. No other internal application or process states are cleared. To remove all application persistency files such as patch rpms, third party rpms, and application configuration in the /etc directory other than configuration, use the **install reset** command.

# write erase boot

write erase boot

## Syntax Description

---

### Syntax Description

---

`write` Write current configuration

---

`erase` Destroys the configuration on persistent media

---

`boot` Destroys boot configuration on persistent media

---

## Command Mode

- /exec

# write erase debug

write erase debug

## Syntax Description

---

### Syntax Description

---

write Write current configuration

---

erase Destroys the configuration on persistent media

---

debug Destroys debug configuration on persistent media

---

## Command Mode

- /exec



## wrr-queue qos-group-map

[no] wrr-queue qos-group-map <qid> { <cos> } +

### Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate the command                           |
| wrr-queue          | Map traffic priority (QG) values to L3 Multicast Queues |
| qos-group-map      | Qid value   |
| <i>qid</i>         | Provide qid value                                       |
| <i>cos</i>         | Provide qos-group-map value                             |

### Command Mode

- /exec/configure

# wrr unicast-bandwidth

[no] wrr unicast-bandwidth <bw>

## Syntax Description

| Syntax Description |            |   |
|--------------------|------------|---|
| no                 | (Optional) | Negate the command                                |
| wrr                |            | Configure Unicast Traffic Bandwidth Percentage    |
| unicast-bandwidth  |            | Specify rate as percentage of interface data-rate |
| <i>bw</i>          |            | Value in percentage (Default is set to 50)        |

## Command Mode

- /exec/configure



## X Commands

---

- [xml](#), on page 4456
- [xml](#), on page 4457
- [xml server max-session](#), on page 4458
- [xml server terminate session](#), on page 4459
- [xml server timeout](#), on page 4460
- [xml server validate](#), on page 4461
- [xml server xml-debug](#), on page 4462
- [xmlin](#), on page 4463
- [xmlin](#), on page 4464
- [xmlin](#), on page 4465
- [xmlin](#), on page 4466
- [xmlout](#), on page 4467

# xml

| xml

## Syntax Description

---

### Syntax Description

| Pipe command output to filter

---

**xml** output in xml format (according to .xsd definitions)

---

## Command Mode

- /output

# xml

| xml

## Syntax Description

---

### Syntax Description

| Pipe command output to filter

---

**xml** output in xml format (according to .xsd definitions)

---

## Command Mode

- /output

# xml server max-session

[no] xml server max-session <number>

## Syntax Description

| Syntax Description |  |                                      |
|--------------------|--|--------------------------------------|
| no                 | (Optional)                                       | Negate a command or set its defaults |
| xml                | xml agent  |                                      |
| server             | xml agent server                                 |                                      |
| max-session        | configure maximum number of xml sessions allowed |                                      |
| <i>number</i>      | number of the sessions                           |                                      |

## Command Mode

- /exec/configure

# xml server terminate session

xml server terminate session <session\_id>

## Syntax Description

|                           |                   |                                     |
|---------------------------|-------------------|-------------------------------------|
| <b>Syntax Description</b> | xml               | xml agent                           |
|                           | server            | xml agent server                    |
|                           | terminate         | command to terminate an XML session |
|                           | session           | terminate an XML session            |
|                           | <i>session_id</i> | sessions number                     |

## Command Mode

- /exec

# xml server timeout

[no] xml server timeout <value> [ <session\_id> ]

## Syntax Description

| Syntax Description |            |                                      |
|--------------------|------------|--------------------------------------|
| no                 | (Optional) | Negate a command or set its defaults |
| xml                |            | xml agent                            |
| server             |            | xml agent server                     |
| timeout            |            | configure xml agent session timeout  |
| <i>value</i>       |            | timeout in seconds                   |
| <i>session_id</i>  | (Optional) | xml agent session id                 |

## Command Mode

- /exec/configure



# xml server validate

[no] xml server validate { all | <session\_id> }

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| xml                | xml agent                                       |
| server             | xml agent server                                |
| validate           | command to validate an XML session              |
| all                | all sessions                                    |
| <i>session_id</i>  | session number                                  |

## Command Mode

- /exec/configure

# xml server xml-debug

[no] xml server xml-debug

## Syntax Description

| Syntax Description |   |
|--------------------|---|
| no                 | (Optional) Negate a command or set its defaults |
| xml                | xml agent                                       |
| server             | xml server                                      |
| xml-debug          | xml server xml-debug                            |

## Command Mode

- /exec/configure

# xmlin

xmlin

## Syntax Description

---

### Syntax Description

---

xmlin Convert CLI commands to their XML formats

---

## Command Mode

- /exec

# xmlin

| xmlin

## Syntax Description

---

### Syntax Description

| Pipe command output to filter

---

**xmlin** Convert CLI show commands to their XML formats

---

## Command Mode

- /output

# xmlin

xmlin

## Syntax Description

---

### Syntax Description

---

xmlin Convert CLI commands to their XML formats

---

## Command Mode

- /exec

# xmlin

| xmlin

## Syntax Description

---

### Syntax Description

| Pipe command output to filter

---

**xmlin** Convert CLI show commands to their XML formats

---

## Command Mode

- /output

# xmlout

| xmlout

## Syntax Description

---

### Syntax Description

| Pipe command output to filter

---

xmlout output in xml format (according to the latest .xsd version)

---

## Command Mode

- /output

