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## CHAPTER **2**

# Cisco Virtual Security Gateway Commands

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This chapter provides information about Cisco Virtual Security Gateway (VSG) commands.

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## action

To specify the actions to be executed when traffic characteristics match with an associated rule, use the **action** command. To remove the binding of the action with the given rule, use the **no** version of this command.

```
action { drop | permit | log | inspection protocol-type }
```

Syntax Description		
<b>drop</b>		Drops the incoming packets.
<b>permit</b>		Permits the incoming packets.
<b>log</b>		Logs the policy evaluation event.
<b>inspection</b>		Specifies the protocol be inspected.
<i>protocol-type</i>		Specific protocol type to be inspected. FTP, RSH, and TFTP are supported.

Command Default	
	None

Command Modes	
	Policy configuration (config-policy)

Supported User Roles	
	network-admin

Command History	Release	Modification
	4.2(1)VSG1(2)	This command was introduced.

Usage Guidelines	
	Use the <b>action</b> command to specify the actions to be executed when traffic characteristics match with the associated rule. The command can be entered multiple times until the upper bound limit is reached.

Examples	
	This example shows how to specify that the policy is to drop packets.

```
vsm(config-policy)# action drop
```

Related Commands	Command	Description
	<b>rule</b>	Enters the rule configuration submode.

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## attach

To access a module or the console of a module, use the **attach** command.

```
attach { console module module-number | module module-number }
```

Syntax Description	console module	Specifies the console.
	<i>module-number</i>	Module number. The range is from 1 to 66.
	<b>module</b>	Specifies a module.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to attach to a module:

```
VSG# attach module 1
Attaching to module 1 ...
To exit type 'exit', to abort type '$.'
Cisco Nexus Operating System (NX-OS) Software
TAC support: http://www.cisco.com/tac
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such license is available at
http://www.opensource.org/licenses/gpl-2.0.php and
http://www.opensource.org/licenses/lgpl-2.1.php
vsg#
```

Related Commands	Command	Description
	<b>show terminal</b>	Displays information about the terminal.

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## attribute

To specify the particular attribute characteristics of a policy that is to be tested, use the **attribute** command.

**attribute** *attr-seq-num attr-name value attr-value*

Syntax Description		
	<i>attr-seq-num</i>	Attribute input sequence number.
	<i>attr-name</i>	Name of a VM or network attribute (for example, src.vm.name).
	<b>value</b>	Designates the use of the following attribute value.
	<i>attr-value</i>	Value of a VM or network attribute (for example, engg).

Command Default	None
-----------------	------

Command Modes	Test policy-engine (test-policy-engine)
---------------	---

SupportedUserRoles	network-admin
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Command History	Release	Modification
	4.2(1)VSG1(2)	This command was introduced.

Examples	This example shows how to specify an attribute for a policy.
----------	--

```
vsg(test-policy-engine)# attribute 1 src.vm.name value engg
vsg(test-policy-engine)# attribute 2 src.net.ip-address value 10.10.10.1
vsg(test-policy-engine)# exit
```

Result: DROP, Policy: p1, Rule: r1

Related Commands	Command	Description
	<b>test policy-engine</b>	Enters the test policy-engine submode.
	<b>simulate-pe-req policy</b>	

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## banner motd

To configure a message of the day (MOTD) banner, use the **banner motd** command.

**banner motd** [*delimiting-character message delimiting-character*]

**no banner motd** [*delimiting-character message delimiting-character*]

### Syntax Description

<i>delimiting-character</i>	(Optional) Character used to signal the beginning and end of the message text. For example, in the following message, the delimiting character is #:  #Testing the MOTD#
<i>message</i>	(Optional) Banner message. Up to 40 lines with a maximum of 80 characters in each line.

### Defaults

“User Access Verification” is the default message of the day.

### Command Modes

Global configuration (config)

### SupportedUserRoles

network-admin  
network-operator

### Command History

Release	Modification
4.2(1)VSG1(1)	This command was introduced.

### Usage Guidelines

The MOTD banner is displayed on the terminal before the login prompt whenever you log in.

The message is restricted to 40 lines and 80 characters per line.

To create a multiple-line MOTD banner, press Enter before typing the delimiting character to start a new line. You can enter up to 40 lines of text.

Follow these guidelines when choosing your delimiting character:

- Do not use the *delimiting-character* in the *message* string.
- Do not use " and % as delimiters.

### Examples

This example shows how to configure and then display a banner message with the text, “Testing the MOTD:”

```
vsg# configure
vsg(config)# banner motd #Testing the MOTD#
vsg(config)# show banner motd
Testing the MOTD
```

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This example shows how to configure and then display a multiple-line MOTD banner:

```
vsg(config)# banner motd #Welcome to authorized users.
> Unauthorized access prohibited.#
vsg(config)# show banner motd
Welcome to authorized users.
Unauthorized access prohibited.
```

This example shows how to revert to the default MOTD banner:

```
vsg# configure
vsg(config)# no banner motd
vsg(config)# show banner motd
User Access Verification
```

**Related Commands**

<b>Command</b>	<b>Description</b>
<b>show banner motd</b>	Displays the MOTD banner.

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## boot

To configure boot images, use the **boot** command. To revert to default settings, use the **no** form of this command.

```
boot {asm-sfn | auto-copy | kickstart bootflash | ssi | system bootflash}
```

```
no boot {asm-sfn | auto-copy | kickstart bootflash | ssi | system bootflash}
```

### Syntax Description

<b>asm-sfn</b>	Specifies a boot variable.
<b>auto-copy</b>	Enables or disables automatic copying of boot images to the standby Cisco VSG.
<b>kickstart bootflash</b>	Specifies the boot variable URI for the kickstart image.
<b>ssi</b>	Specifies a boot variable.
<b>system bootflash</b>	Specifies the boot variable URI for the system image.

### Defaults

None

### Command Modes

Global configuration (config)

### Supported User Roles

network-admin  
network-operator

### Command History

Release	Modification
4.2(1)VSG1(1)	This command was introduced.

### Examples

This example shows how to configure a boot variable:

```
vsg# configure
vsg(config)# boot asm-sfn bootflash module 6
```

### Related Commands

Command	Description
<b>show boot</b>	Displays the current boot variables.

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## cd

To change to a different directory, use the **cd** command.

```
cd {bootflash: | volatile:}
```

### Syntax Description

<b>bootflash:</b>	Specifies the bootflash directory.
<b>volatile:</b>	Specifies the volatile directory.

### Defaults

bootflash:

### Command Modes

EXEC  
Global configuration (config)

### Supported User Roles

network-admin  
network-operator

### Command History

Release	Modification
4.2(1)VSG1(1)	This command was introduced.

### Usage Guidelines

Use the **pwd** command to verify the name of the directory you are currently working in.

### Examples

This example shows how to change to the volatile directory:

```
vsg# cd volatile
vsg#
```

### Related Commands

Command	Description
<b>pwd</b>	Displays the name of the directory you are currently working in.



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## cdp

To configure the Cisco Discovery Protocol (CDP), use the **cdp** command. To remove the CDP configuration, use the **no** form of this command.

```
cdp {advertise {v1 | v2} | enable | format device-id | holdtime seconds | timer seconds}
```

```
no cdp {advertise | enable | format device-id | holdtime seconds | timer seconds}
```

Syntax Description		
<b>advertise</b>		Specifies the CDP version to advertise.
<b>v1</b>		CDP Version 1.
<b>v2</b>		CDP Version 2.
<b>enable</b>		Enables CDP globally on all interfaces and port channels.
<b>format device-id</b>		Specifies the device ID format for CDP.
<b>holdtime seconds</b>		Sets the maximum amount of time that CDP holds onto neighbor information before discarding it. The range is from 10 to 255.
<b>timer seconds</b>		Sets the refresh time for CDP to send advertisements to neighbors. The range is from 5 to 254.

Defaults	
	None

Command Modes	
	Global configuration (config)

SupportedUserRoles	
	network-admin network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

Examples	
	This example shows how to set CDP Version 1 as the version to advertise: vsg(config)# <b>cdp advertise v1</b>
	This example shows how to remove CDP Version 1 as the version to advertise: vsg(config)# <b>no cdp advertise v1</b>

Related Commands	Command	Description
	<b>show cdp global</b>	Displays the CDP configuration.

■ clear ac-driver

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## clear ac-driver

To clear Application Container (AC) driver statistics, use the **clear ac-driver** command.

**clear ac-driver statistics**

Syntax Description	statistics	Clears AC driver statistics.
--------------------	------------	------------------------------

Defaults	None
----------	------

Command Modes	EXEC Global configuration (config)
---------------	---------------------------------------

SupportedUserRoles	network-admin network-operator
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Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

Examples	This example shows how to clear AC driver statistics: <pre>vsg# clear ac-driver statistics</pre>
----------	---

Related Commands	Command	Description
	<b>show ac-driver statistics</b>	Displays AC driver statistics.

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## clear accounting

To clear the accounting log, use the **clear accounting** command.

### clear accounting log

<b>Syntax Description</b>	<b>log</b> Clears the accounting log.				
<b>Defaults</b>	None				
<b>Command Modes</b>	EXEC Global configuration (config)				
<b>Supported User Roles</b>	network-admin network-operator				
<b>Command History</b>	<table border="1"> <thead> <tr> <th>Release</th> <th>Modification</th> </tr> </thead> <tbody> <tr> <td>4.2(1)VSG1(1)</td> <td>This command was introduced.</td> </tr> </tbody> </table>	Release	Modification	4.2(1)VSG1(1)	This command was introduced.
Release	Modification				
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<b>Examples</b>	<p>This example shows how to clear the accounting log:</p> <pre>vsg# clear accounting log</pre>				
<b>Related Commands</b>	<table border="1"> <thead> <tr> <th>Command</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td><b>show accounting log</b></td> <td>Displays the accounting log.</td> </tr> </tbody> </table>	Command	Description	<b>show accounting log</b>	Displays the accounting log.
Command	Description				
<b>show accounting log</b>	Displays the accounting log.				

■ clear bootvar

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## clear bootvar

To clear the boot variables log, use the **clear bootvar** command.

**clear bootvar log**

Syntax Description	log	Clears the boot variables log.
--------------------	-----	--------------------------------

Defaults	None
----------	------

Command Modes	EXEC Global configuration (config)
---------------	---------------------------------------

SupportedUserRoles	network-admin network-operator
--------------------	-----------------------------------

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

Examples	This example shows how to clear the boot variables log: <pre>vsg# clear bootvar log</pre>
----------	--

Related Commands	Command	Description
	<b>show bootvar log</b>	Displays the accounting log.

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## clear cdp

To clear Cisco Discovery Protocol (CDP) information, use the **clear cdp** command.

```
clear cdp {counters [interface {ethernet slot-number / port-number [. subinterface-number]}]} |
mgmt 0} | table [interface {ethernet slot-number / port-number [. subinterface-number]}]}
```

### Syntax Description

<b>counters</b>	Clears the CDP counters.
<b>interface</b>	(Optional) Clears interfaces.
<b>ethernet</b>	Clears ethernet interfaces.
<i>slot</i>	Slot. The range is from 1 to 66.
<i>port-number</i>	Port number. The range is from 1 to 128.
<i>. sub-interface</i>	(Optional) Sub-interface number. The range of values is from 1 to 4094.
<b>mgmt 0</b>	Clears the management 0 interface.
<b>table</b>	Clears the CDP statistics table.

### Defaults

None

### Command Modes

EXEC  
Global configuration (config)

### Supported User Roles

network-admin  
network-operator

### Command History

Release	Modification
4.2(1)VSG1(1)	This command was introduced.

### Examples

This example shows how to clear CDP counters on all interfaces:

```
vsg# clear cdp counters
```

### Related Commands

Command	Description
<b>show cdp all</b>	Displays all interfaces that are CDP enabled.
<b>show cdp entry</b>	Displays CDP information.

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## clear cli

To clear command line interface (CLI) command history, use the **clear cli** command.

**clear cli history**

Syntax	Description
<b>history</b>	Clears the CLI command history.

Defaults	None
----------	------

Command Modes	EXEC Global configuration (config)
---------------	---------------------------------------

Supported User Roles	network-admin network-operator
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Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

Examples	This example shows how to clear the CLI command history: vsg# <b>clear cli history</b>
----------	---

Related Commands	Command	Description
	<b>show cli history</b>	Displays the CLI command history.

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## clear cores

To clear the core files, use the **clear cores** command.

```
clear cores [archive file file-name]
```

<b>Syntax Description</b>	<b>archive file</b>	(Optional) Clears the archived core files.
	<i>file-name</i>	Core filename.
<b>Defaults</b>	None	
<b>Command Modes</b>	EXEC	
	Global configuration (config)	
<b>SupportedUserRoles</b>	network-admin network-operator	
<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	4.2(1)VSG1(1)	This command was introduced.
<b>Examples</b>	This example shows how to clear all core files: vsg# <b>clear cores</b>	
<b>Related Commands</b>	<b>Command</b>	<b>Description</b>
	<b>show cores</b>	Displays the core filename.

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## clear counters

To clear interface loopback counters, use the **clear counters** command.

```
clear counters [interface {all | data | ethernet slot / port [.{sub-interface}]} | loopback
virtual-interface-number | mgmt 0 | port-channel port-channel-number]
```

### Syntax Description

<b>interface</b>	(Optional) Interface counters.
<b>all</b>	Clears all interface counters.
<b>ethernet</b>	Clears Ethernet interface counters.
<i>slot</i>	Slot. The range is 1 to 66.
<i>port</i>	Port. The range is from 1 to 128.
<i>sub-interface</i>	(Optional) Sub-interface number. The range of values is from 1 to 4094.
<b>loopback</b>	Clears loopback interface counters.
<i>virtual-interface-number</i>	The range is 0 to 1023.
<b>mgmt 0</b>	Clears the management interface.
<b>port-channel</b>	Clears port-channel interfaces.
<i>port-channel-number</i>	The range is 1 to 4096.

### Defaults

None

### Command Modes

EXEC  
Global configuration (config)

### Supported User Roles

network-admin  
network-operator

### Command History

Release	Modification
4.2(1)VSG1(1)	This command was introduced.

### Examples

This example shows how to clear a counter on a specific Ethernet interface:

```
vsg# clear counters ethernet 2/1
```

### Related Commands

Command	Description
<b>show interface counters</b>	Displays the interface status, which includes the counters.



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## clear debug-logfile

To clear the contents of the debug log, use the **clear debug-logfile** command.

**clear debug-logfile** *log-name*

<b>Syntax Description</b>	<i>log-name</i>	Name of the debug log.
<b>Defaults</b>	None	
<b>Command Modes</b>	EXEC Global configuration (config)	
<b>Supported User Roles</b>	network-admin network-operator	
<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	4.2(1)VSG1(1)	This command was introduced.
<b>Examples</b>	This example shows how to clear the debug log: vsg# <b>clear debug-logfile syslog_debug</b>	
<b>Related Commands</b>	<b>Command</b>	<b>Description</b>
	<b>show debug logfile</b>	Displays the contents of the debug logfile.

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## clear frame

To clear Layer 2 traffic statistics, use the **clear frame** command.

**clear frame statistics**

Syntax Description	statistics	Clears Layer 2 traffic statistics.
--------------------	------------	------------------------------------

Defaults	None
----------	------

Command Modes	EXEC Global configuration (config)
---------------	---------------------------------------

SupportedUserRoles	network-admin network-operator
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Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

Examples	This example shows how to clear the Layer 2 traffic statistics: <pre>vsg# clear frame traffic</pre>
----------	--

Related Commands	Command	Description
	<b>show vlan</b>	Displays VLAN information.

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## clear fs-daemon

To clear the file sharing (FS) daemon log, use the **clear fs-daemon** command.

```
clear fs-daemon log
```

<b>Syntax Description</b>	<b>log</b>	Clears the FS daemon log.
<b>Defaults</b>	None	
<b>Command Modes</b>	EXEC Global configuration (config)	
<b>Supported User Roles</b>	network-admin network-operator	
<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	4.2(1)VSG1(1)	This command was introduced.
<b>Examples</b>	This example shows how to clear the FS daemon log: vsg# <b>clear fs-daemon log</b>	
<b>Related Commands</b>	<b>Command</b>	<b>Description</b>
	<b>show logging</b>	Displays the logging configuration and the contents of the log file.

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## clear inspect

To clear the File Transfer Protocol (FTP) inspection statistics, use the **clear inspect** command.

```
clear inspect ftp statistics [svs-domain-id domain-id module module-number]
```

Syntax Description		
	<b>ftp statistics</b>	Clears FTP statistics.
	<b>svs-domain-id</b>	(Optional) Clears FTP statistics in the SVS domain.
	<i>domain-id</i>	SVS domain ID.
	<b>module</b>	(Optional) Clears FTP statistics on a specific module.
	<i>module-number</i>	Module number.

Defaults	
	None

Command Modes	
	EXEC Global configuration (config)

Supported User Roles	
	network-admin network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

Examples	
	This example shows how to clear the FTP inspection statistics: vsg# <b>clear inspect ftp statistics svs-domain-id 2 module 63</b>

Related Commands	Command	Description
	<b>show vsg</b>	Displays Cisco VSG information.

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## clear install

To clear the installation log, use the **clear install** command.

```
clear install { all failed-standby | failure-reason | status }
```

Syntax Description		
	<b>all failed-standby</b>	Clears all the installation logs.
	<b>failure-reason</b>	Clears the installation failure reason log.
	<b>status</b>	Clear the installation status log.

Defaults	None
----------	------

Command Modes	EXEC Global configuration (config)
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Supported User Roles	network-admin network-operator
----------------------	-----------------------------------

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

Examples	This example shows how to clear all the installation logs: vsg# <b>clear install all failed-standby</b>
----------	--

Related Commands	Command	Description
	<b>show install all status</b>	Displays the status of the current or last installation.

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## clear ip adjacency statistics

To clear IP address adjacency statistics, use the **clear ip adjacency statistics** command.

**clear ip adjacency statistics**

**Syntax Description** This command has no arguments or keywords.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to clear IP adjacency statistics:

```
vsg# clear ip adjacency statistics
```

Related Commands	Command	Description
	show ipv6 adjacency	Displays IP information.

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## clear ip arp

To clear specific Address Resolution Protocol (ARP) IP address statistics, use the **clear ip arp** command.

```
clear ip arp ip-address [vrf {vrf-name | all | default | management}]
```

Syntax Description		
<i>ip-address</i>		IP address. The format is A.B.C.D.
<b>vrf</b>		Clears all Virtual Routing and Forwarding (VRF) ARP IP address statistics.
<i>vrf-name</i>		VRF name. The range is from 1 to 32.
<b>all</b>		Clears all ARP IP address statistics.
<b>default</b>		Clears default VRF ARP IP address statistics.
<b>management</b>		Clears management VRF ARP IP address statistics.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to clear a specific ARP IP address in EXEC mode:

```
vsg# clear ip arp 209.165.200.229
```

This example shows how to clear a specific ARP IP address in configuration mode:

```
vsg# configure
vsg#(config) clear ip arp 209.165.200.229
```

Related Commands	Command	Description
	<b>show ip arp</b>	Displays IP ARP information.

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## clear ip arp data

To clear Address Resolution Protocol (ARP) IP address statistics on the data 0 interface, use the **clear ip arp data** command.

```
clear ip arp data 0 [vrf {vrf-name | all | default | management}]
```

Syntax	Description
<b>0</b>	Clears data 0 interface ARP IP address statistics.
<b>vrf</b>	(Optional) Clears Virtual Routing and Forwarding (VRF) ARP IP address statistics.
<i>vrf-name</i>	VRF name. The range is from 1 to 32.
<b>all</b>	Clears all ARP IP address statistics.
<b>default</b>	Clears default ARP IP address statistics.
<b>management</b>	Clears management interface ARP IP address statistics.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to clear all ARP IP address statistics on data 0 interface:

```
vsg# clear ip arp data 0 all
```

Related Commands	Command	Description
	<b>show ip arp</b>	Displays IP ARP information.



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## clear ip arp ethernet

To clear ARP IP address statistics on Ethernet interfaces, use the **clear ip arp ethernet** command.

```
clear ip arp ethernet slot-number / port-number [. | vrf vrf-name]
```

Syntax	Description
<i>slot-number</i>	Slot number.
<i>port-number</i>	Port number.
<b>vrf</b>	(Optional) Clears VRF ARP IP address statistics.
<i>vrf-name</i>	VRF name. The range is from 1 to 32.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to clear ARP IP address statistics on an Ethernet interface:  

```
vsg# clear ip arp ethernet 1 / 1
```

Related Commands	Command	Description
	<b>show ip arp</b>	Displays IP ARP information.

***Send document comments to [vsg-docfeedback@cisco.com](mailto:vsg-docfeedback@cisco.com).***

## clear ip arp loopback

To clear Address Resolution Protocol (ARP) IP address statistics on loopbacks, use the **clear ip arp loopback** command.

**clear ip arp loopback** *loopback-number* [**vrf** *vrf-name*]

Syntax	Description
<i>loopback-number</i>	Loopback number.
<b>vrf</b>	(Optional) Clears VRF ARP IP address statistics.
<i>vrf-name</i>	VRF name. The range is from 1 to 32.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to clear ARP IP address statistics on a loopback:  
vsg# **clear ip arp loopback 10**

Related Commands	Command	Description
	<b>show ip arp</b>	Displays ARP IP address information.

*Send document comments to [vsg-docfeedback@cisco.com](mailto:vsg-docfeedback@cisco.com).*

## clear ip arp mgmt

To clear Address Resolution Protocol (ARP) IP address statistics on the management interface, use the `clear ip arp mgmt` command.

```
clear ip arp mgmt 0 [vrf {vrf-name} | all | default | management]}
```

Syntax	Description
<b>0</b>	Clears management 0 interface ARP IP address statistics.
<b>vrf</b>	(Optional) Clears Virtual Routing and Forwarding (VRF) ARP IP address statistics.
<i>vrf-name</i>	VRF name. The range is from 1 to 32.
<b>all</b>	Clears all ARP IP address statistics.
<b>default</b>	Clears default ARP IP address statistics.
<b>management</b>	Clears management interface ARP IP address statistics.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to clear ARP IP address statistics on the management interface:

```
vsg# clear ip arp mgmt all
```

Related Commands	Command	Description
	<code>show ip arp</code>	Displays IP ARP information.

■ clear ip arp port-channel

**Send document comments to [vsg-docfeedback@cisco.com](mailto:vsg-docfeedback@cisco.com).**

## clear ip arp port-channel

To clear Address Resolution Protocol (ARP) IP address statistics on port channels, use the **clear ip arp port-channel** command.

```
clear ip arp port-channel port-channel-number [. sub-interface | vrf vrf-name]
```

Syntax	Description
<i>port-channel-number</i>	Port channel number.
<i>sub-interface</i>	(Optional) Sub-interface number.
<b>vrf</b>	(Optional) Clears Virtual Routing and Forwarding (VRF) ARP IP address statistics.
<i>vrf-name</i>	VRF name. The range is from 1 to 32.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to clear ARP IP address statistics on a port channel:

```
vsg# clear ip arp port-channel 2
```

Related Commands	Command	Description
	<b>show port-channel</b>	Displays port-channel information.

*Send document comments to [vsg-docfeedback@cisco.com](mailto:vsg-docfeedback@cisco.com).*

## clear ip arp statistics

To clear Address Resolution Protocol (ARP) IP address statistics, use the **clear ip arp statistics** command.

```
clear ip arp statistics {data 0 | ethernet | loopback | mgmt | port-channel | vrf}
```

Syntax	Description
<b>data 0</b>	Clears the data 0 interface.
<b>ethernet</b>	Clears the Ethernet interface.
<b>loopback</b>	Clears the loopback interface.
<b>mgmt</b>	Clears the management interface.
<b>port-channel</b>	Clears the port channel interface.
<b>vrf</b>	Clears the Virtual Routing and Forwarding (VRF) interface.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to clear ARP IP address statistics on data 0:

```
vsg# clear ip arp statistics data 0
```

Related Commands	Command	Description
	<b>show ip</b>	Displays IP information.

***Send document comments to [vsg-docfeedback@cisco.com](mailto:vsg-docfeedback@cisco.com).***

## clear ip arp vrf

To clear Address Resolution Protocol (ARP) Virtual Routing and Forwarding (VRF) IP address statistics, use the **clear ip arp vrf** command.

```
clear ip arp vrf {vrf-name | all | default | management}
```

Syntax	Description
<i>vrf-name</i>	VRF name. The range is from 1 to 32.
<b>all</b>	Clears all ARP IP address statistics.
<b>default</b>	Clears default ARP IP address statistics.
<b>management</b>	Clears management interface ARP IP address statistics.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to clear IP ARP VRF IP address statistics:  
vsg# **clear ip arp vrf vrf1**

Related Commands	Command	Description
	<b>show vrf</b>	Displays VRF information.

*Send document comments to [vsg-docfeedback@cisco.com](mailto:vsg-docfeedback@cisco.com).*

## clear ip igmp event-history

To clear Internet Group Management Protocol (IGMP) IP address event history entries, use the **clear ip igmp event-history** command.

```
clear ip igmp event-history {cli | debugs | events | ha | igmp-internal | mtrace | policy | vrf}
```

Syntax	Description
<b>cli</b>	Clears the command line interface (CLI) IGMP IP address event history entries.
<b>debugs</b>	Clears debug IGMP IP address event history entries.
<b>events</b>	Clears events IGMP IP address event history entries.
<b>ha</b>	Clears high-availability (HA) IGMP IP address event history entries.
<b>igmp-internal</b>	Clears internal IGMP IP address event history entries.
<b>mtrace</b>	Clears Mtrace IGMP IP address event history entries.
<b>policy</b>	Clears policy IGMP IP address event history entries.
<b>vrf</b>	Clears virtual routing and forwarding (VRF) IGMP IP address event history entries.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to clear HA IGMP IP address event history entries:

```
vsg# clear ip igmp event-history ha
```

Related Commands	Command	Description
	<b>show ip igmp</b>	Displays the IGMP status and the IGMP configuration.

**Send document comments to [vsg-docfeedback@cisco.com](mailto:vsg-docfeedback@cisco.com).**

## clear ip igmp snooping

To clear Internet Group Management Protocol (IGMP) IP address snooping entries, use the **clear ip igmp snooping** command.

```
clear ip igmp snooping { event-history [VPC | igmp-snoop-internal | mfdm | mfdm-sum | vlan | vlan-events] | explicit-tracking vlan vlan-id | statistics vlan [vlan-id | all] }
```

Syntax Description		
<b>event-history</b>		Clears event history IGMP IP address snooping entries.
<b>VPC</b>		(Optional) Clears virtual port channel (vPC) IGMP IP address snooping entries.
<b>igmp-snoop-internal</b>		(Optional) Clears internal IGMP IP address snooping entries.
<b>mfdm</b>		(Optional) Clears MFDM IGMP IP address snooping entries.
<b>mfdm-sum</b>		(Optional) Clears MFDM-sum IGMP IP address snooping entries.
<b>vlan</b>		(Optional) Clears VLAN IGMP IP address snooping entries.
<b>vlan-events</b>		(Optional) Clears VLAN event IGMP IP address snooping entries.
<b>explicit-tracking</b>		Clears explicit tracking IGMP IP address snooping entries.
<b>statistics</b> <b>vlan</b>		Clears VLAN statistical IGMP IP address snooping entries.
<i>vlan-id</i>		(Optional) VLAN identification number. The range is from 1 to 3967 or 4048 to 4093.
<b>all</b>		(Optional) Clears all IGMP IP address snooping entries.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to clear all IGMP IP address snooping entries:  
vsg# **clear ip igmp snooping all**

**Related Commands**



***Send document comments to [vsg-docfeedback@cisco.com](mailto:vsg-docfeedback@cisco.com).***

Command	Description
show ip igmp	Displays IGMP status and configuration.

**Send document comments to [vsg-docfeedback@cisco.com](mailto:vsg-docfeedback@cisco.com).**

## clear ip interface

To clear IP address statistics on interfaces, use the **clear ip interface** command.

```
clear ip interface statistics [data 0 | ethernet slot-number / port-number [. sub-interface-number]
| loopback loopback-number | mgmt | port-channel port-channel-number
[. sub-interface-number]]
```

### Syntax Description

<b>statistics</b>	Clears IP address statistics on interfaces.
<b>data 0</b>	(Optional) Clears IP address statistics on the data 0 interface.
<b>ethernet</b>	(Optional) Clears IP address statistics on Ethernet interfaces.
<i>slot-number</i>	Slot number. The range is from 1 to 66.
<i>port-number</i>	Port number. The range is from 1 to 128.
<i>subinterface-number</i>	Subinterface number. The range is 1 to 4094.
<b>loopback</b>	(Optional) Clears IP address statistics on the loopback interface.
<i>loopback-number</i>	Loopback number. The range is from 0 to 123.
<b>mgmt 0</b>	(Optional) Clears IP address statistics on the management 0 interface.
<b>port-channel</b>	(Optional) Clears IP address statistics on the port-channel interface.
<i>port-channel-number</i>	Port-channel number. The range is from 1 to 4096.

### Defaults

None

### Command Modes

EXEC  
Global configuration (config)

### Supported User Roles

network-admin  
network-operator

### Command History

Release	Modification
4.2(1)VSG1(1)	This command was introduced.

### Examples

This example shows how to clear IP address statistics on an Ethernet interface:

```
vsg# clear ip interface statistics ethernet 1 / 2
```

### Related Commands

Command	Description
<b>show ip interface</b>	Displays IP interface information.

[Send document comments to vsg-docfeedback@cisco.com.](mailto:vsg-docfeedback@cisco.com)

## clear ip route

To clear IP routing information, use the **clear ip route** command.

```
clear ip route {* | A.B.C.D [A.B.C.D {data 0 | ethernet slot / port | loopback loopback-number |
port-channel portchannel-number}] | A.B.C.D/LEN [A.B.C.D {data 0 | ethernet slot / port |
loopback loopback-number | port-channel portchannel-number}] | vrf {vrf-name | default |
management 0}}
```

Syntax Description		
*		Clears all IP routing information.
A.B.C.D		Clears IP routing information at a specific IP address.
data 0		Clears IP routing information on the management 0 interface.
ethernet slot / port		Clears IP routing information on a specific Ethernet interface.
loopback		Clears IP routing information on the loopback interface.
loopback-number		Loopback number. The range is from 0 to 1023.
port-channel		Clears IP routing information on the port channel.
portchannel-number		Port-channel number. The range is from 1 to 4096.
A.B.C.D/LEN		Clears IP routing information at a specific IP address.
vrf		Clears IP routing information for a VRF.
vrf-name		Virtual forwarding and routing (VRF) name. The range is from 1 to 32.
default		Clears default IP routing information.
management 0		Clears IP routing information on the management 0 interface.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to clear all IP routing information:

```
vsg# clear ip route *
```

■ clear ip route

***Send document comments to [vsg-docfeedback@cisco.com](mailto:vsg-docfeedback@cisco.com).***

Related Commands

Command	Description
show routing	Displays routes.

*Send document comments to [vsg-docfeedback@cisco.com](mailto:vsg-docfeedback@cisco.com).*

## clear ip traffic

To clear global IP statistics, use the **clear ip traffic** command.

```
clear ip traffic [vrf {vrf-name | default | management}]
```

Syntax Description		
<b>vrf</b>		Clears Virtual Routing and Forwarding (VRF) global IP address statistics.
<i>vrf-name</i>		VRF name. The range is from 1 to 32.
<b>default</b>		Clears default global IP address statistics.
<b>management</b>		Clears management global IP address statistics.

Defaults	
	None

Command Modes	
	EXEC Global configuration (config)

Supported User Roles	
	network-admin network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

Examples	
	This example shows how to clear global IP statistics: <pre>vsg# <b>clear ip traffic</b></pre>

Related Commands	Command	Description
	<b>show ip traffic</b>	Displays IP traffic information.

■ clear ipv6 adjacency statistics

*Send document comments to [vsg-docfeedback@cisco.com](mailto:vsg-docfeedback@cisco.com).*

## clear ipv6 adjacency statistics

To clear IPv6 address adjacency statistics, use the **clear ipv6 adjacency statistics** command.

**clear ipv6 adjacency statistics**

**Syntax Description** This command has no arguments or keywords.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to clear IPv6 address adjacency statistics:

```
vsg# clear ipv6 adjacency statistics
```

Related Commands	Command	Description
	show ipv6 adjacency	Displays IPv6 statistics.

[Send document comments to vsg-docfeedback@cisco.com.](mailto:vsg-docfeedback@cisco.com)

## clear ipv6 icmp interface statistics

To clear Internet Control Management Protocol (ICMP) IPv6 interface statistics, use the **clear ipv6 icmp interface statistics** command.

```
clear ipv6 icmp interface statistics [data 0 | ethernet slot-number / port-number
[. sub-interface-number] | loopback virtual-interface-number | port-channel
port-channel-number [. sub-interface-number] ]
```

Syntax Description		
<b>data 0</b>	(Optional)	Clears the data 0 interface.
<b>ethernet</b>	(Optional)	Clears the Ethernet interface.
<i>slot-number</i>		Ethernet slot number. The range is from 1 to 66.
<i>/</i>		Slot number port number separator.
<i>port-number</i>		Ethernet port number. The range is from 1 to 128.
<b>.</b>		Port number subinterface number separator.
<i>sub-interface-number</i>	(Optional)	Subinterface number. The range is from 1 to 4094.
<b>loopback</b>	(Optional)	Clears the loopback interface.
<i>virtual-interface-number</i>		Virtual interface number. The range is from 0 to 1023.
<b>port-channel</b>	(Optional)	Clears the port-channel interface.
<i>port-channel-number</i>		Port-channel number. The range is from 1 to 4096.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to clear ICMP IPv6 Ethernet interface statistics:

```
vsg# clear ipv6 icmp interface statistics ethernet 1 / 2 . 3
```

**Related Commands**

■ clear ipv6 icmp interface statistics

***Send document comments to [vsg-docfeedback@cisco.com](mailto:vsg-docfeedback@cisco.com).***

Command	Description
show ipv6 icmp	Displays ICMPv6 information.



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## clear ipv6 icmp mld groups

To clear Internet Control Message Protocol (ICMP) Multicast Listener Discovery (MLD) group IPv6 statistics, use the **clear ipv6 icmp mld groups** command.

```
clear ipv6 icmp mld groups [* [vrf {vrf-name | all | default | management}] | A:B::C:D |
A:B::C:D/LEN]
```

Syntax Description		
*		Clears all routes.
vrf		(Optional) Clears ICMP MLD virtual routing and forwarding (VRF) IPv6 routes.
vrf-name		VRF name. The range is from 1 to 32.
all		Clears all routing information.
default		Clears default routing information.
management		Clears management routing information.
A:B::C:D		Clears a specific IPv6 address.
A:B::C:D/LEN		Clears a specific IPv6 address.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to clear all ICMP MLD group IPv6 statistics:  
vsg# **clear ipv6 icmp mld groups \***

Related Commands	Command	Description
	<b>show ipv6 icmp</b>	Displays ICMPv6 information.

■ `clear ipv6 icmp mld route`

***Send document comments to [vsg-docfeedback@cisco.com](mailto:vsg-docfeedback@cisco.com).***

## clear ipv6 icmp mld route

To clear Internet Control Message Protocol (ICMP) Multicast Listener Discovery (MLD) routes, use the `clear ipv6 icmp mld route` command.

```
clear ipv6 icmp mld route [* [vrf {vrf-name | all | default | management}] | A:B::C:D |
A:B::C:D/LEN]
```

Syntax	Description
<code>*</code>	Clears all routes.
<code>vrf</code>	(Optional) Clears ICMP MLD virtual routing and forwarding (VRF) IPv6 routes.
<code>vrf-name</code>	VRF name. The range is from 1 to 32.
<code>all</code>	Clears all routing information.
<code>default</code>	Clears default routing information.
<code>management</code>	Clears management routing information.
<code>A:B::C:D</code>	Clears a specific ICMP MLD IPv6 route.
<code>A:B::C:D/LEN</code>	Clears a specific ICMP MLD IPv6 route.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to clear all IPv6 ICMP MLD routes:

```
vsg# clear ipv6 icmp mld route *
```

Related Commands	Command	Description
	<code>show ipv6 icmp</code>	Displays ICMPv6 information.

[Send document comments to vsg-docfeedback@cisco.com.](mailto:vsg-docfeedback@cisco.com)

## clear ipv6 nd interface statistics

To clear Neighbor Discovery (ND) IPv6 interface statistics, use the **clear ipv6 nd interface statistics** command.

```
clear ipv6 nd interface statistics [data 0 | ethernet slot-number / port-number
[. sub-interface-number] | loopback virtual-interface-number | port-channel
port-channel-number [. sub-interface-number] ]
```

Syntax Description		
<b>data 0</b>	(Optional)	Clears the data 0 interface.
<b>ethernet</b>	(Optional)	Clears the Ethernet interface.
<i>slot-number</i>		Ethernet slot number. The range is from 1 to 66.
<i>/</i>		Slot number port number separator.
<i>port-number</i>		Ethernet port number. The range is from 1 to 128.
<b>.</b>		Port number sub-interface number separator.
<i>sub-interface-number</i>	(Optional)	Subinterface number. The range is from 1 to 4094.
<b>loopback</b>	(Optional)	Clears the loopback interface.
<i>virtual-interface-number</i>		Virtual interface number. The range is from 0 to 1023.
<b>port-channel</b>	(Optional)	Clears the port-channel interface.
<i>port-channel-number</i>		Port-channel number. The range is from 1 to 4096.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to clear IPv6 ND interface statistics:

```
vsg# clear ipv6 nd interface statistics ethernet 2 / 3 . 4
```

**Related Commands**

■ clear ipv6 nd interface statistics

***Send document comments to [vsg-docfeedback@cisco.com](mailto:vsg-docfeedback@cisco.com).***

Command	Description
show ipv6 nd	Displays Neighbor Discovery interface statistics.

***Send document comments to [vsg-docfeedback@cisco.com](mailto:vsg-docfeedback@cisco.com).***

## clear pktmgr client

To clear packet manager client counters, use the **clear pktmgr client** command.

```
clear pktmgr client [client-counter-uuid]
```

<b>Syntax Description</b>	<i>client-counter-uuid</i> (Optional) Client counter user identification. The range is from 0 to 4294967295.				
<b>Defaults</b>	None				
<b>Command Modes</b>	EXEC Global configuration (config)				
<b>Supported User Roles</b>	network-admin network-operator				
<b>Command History</b>	<table border="1"> <thead> <tr> <th>Release</th> <th>Modification</th> </tr> </thead> <tbody> <tr> <td>4.2(1)VSG1(1)</td> <td>This command was introduced.</td> </tr> </tbody> </table>	Release	Modification	4.2(1)VSG1(1)	This command was introduced.
Release	Modification				
4.2(1)VSG1(1)	This command was introduced.				
<b>Examples</b>	<p>This example shows how to clear a packet manager client counter:</p> <pre>vsg# <b>clear pktmgr client 100</b></pre>				
<b>Related Commands</b>	<table border="1"> <thead> <tr> <th>Command</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td><b>clear routing</b></td> <td>Clears routing information.</td> </tr> </tbody> </table>	Command	Description	<b>clear routing</b>	Clears routing information.
Command	Description				
<b>clear routing</b>	Clears routing information.				

**Send document comments to [vsg-docfeedback@cisco.com](mailto:vsg-docfeedback@cisco.com).**

## clear pktmgr interface

To clear packet manager interface information, use the **clear pktmgr interface** command.

```
clear pktmgr interface [data 0 | ethernet slot-number / port-number [. sub-interface-number] |
loopback virtual-interface-number | mgmt 0 | port-channel [. sub-interface-number]]
```

### Syntax Description

<b>data 0</b>	(Optional) Clears the data 0 interface.
<b>ethernet</b>	(Optional) Clears the Ethernet interface.
<i>slot-number</i>	Ethernet slot number. The range is from 1 to 66.
<i>/</i>	Slot-number port-number separator.
<i>port-number</i>	Ethernet port number. The range is from 1 to 128.
<i>.</i>	Port-number subinterface number separator.
<i>sub-interface-number</i>	Subinterface number. The range is from 1 to 4094.
<b>loopback</b>	(Optional) Clears the loopback interface.
<i>virtual-interface-number</i>	Virtual interface number. The range is from 0 to 1023.
<b>port-channel</b>	(Optional) Clears the port-channel interface.
<i>port-channel-number</i>	Port-channel number. The range is from 1 to 4096.

### Defaults

None

### Command Modes

EXEC  
Global configuration (config)

### Supported User Roles

network-admin  
network-operator

### Command History

Release	Modification
4.2(1)VSG1(1)	This command was introduced.

### Examples

This example shows how to clear packet manager interface information:

```
vsg# clear pktmgr interface ethernet 10 / 11 . 12
```

### Related Commands

Command	Description
<b>clear pktmgr client</b>	Clears the packet manager client.

***Send document comments to [vsg-docfeedback@cisco.com](mailto:vsg-docfeedback@cisco.com).***

## clear line

To end a session on a specified Virtual Teletype (VTY), use the **clear line** command.

**clear line** *vtv-name*

<b>Syntax Description</b>	<i>vtv-name</i> VTY name. The range is from 1 to 64.				
<b>Defaults</b>	None				
<b>Command Modes</b>	EXEC Global configuration (config)				
<b>Supported User Roles</b>	network-admin network-operator				
<b>Command History</b>	<table border="1"> <thead> <tr> <th>Release</th> <th>Modification</th> </tr> </thead> <tbody> <tr> <td>4.2(1)VSG1(1)</td> <td>This command was introduced.</td> </tr> </tbody> </table>	Release	Modification	4.2(1)VSG1(1)	This command was introduced.
Release	Modification				
4.2(1)VSG1(1)	This command was introduced.				
<b>Examples</b>	<p>This example shows how to end a session on a specified VTY:</p> <pre>vsg# clear line VTY100</pre>				
<b>Related Commands</b>	<table border="1"> <thead> <tr> <th>Command</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>show users</td> <td>Displays active user sessions.</td> </tr> </tbody> </table>	Command	Description	show users	Displays active user sessions.
Command	Description				
show users	Displays active user sessions.				

*Send document comments to [vsg-docfeedback@cisco.com](mailto:vsg-docfeedback@cisco.com).*

## clear logging

To clear logfile messages and logging sessions, use the **clear logging** command.

```
clear logging {logfile | session}
```

Syntax	Description
<b>logfile</b>	Clears log file messages.
<b>session</b>	Clears logging sessions.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to clear messages from the logging file:

```
vsg# clear logging logfile
```

Related Commands	Command	Description
	<b>show logging logfile</b>	Displays the contents of the log file.



*Send document comments to [vsg-docfeedback@cisco.com](mailto:vsg-docfeedback@cisco.com).*

## clear ntp

To clear the Network Time Protocol (NTP) sessions and statistics, use the **clear ntp** command.

```
clear ntp {session | statistics {all-peers | io | local | memory}}
```

Syntax Description		
	<b>session</b>	Clears NTP sessions.
	<b>statistics</b>	Clears NTP statistics.
	<b>all-peers</b>	Clears all statistics.
	<b>io</b>	Clears IO statistics.
	<b>local</b>	Clears local statistics.
	<b>memory</b>	Clears memory statistics.

Defaults	
	None

Command Modes	
	EXEC Global configuration (config)

SupportedUserRoles	
	network-admin network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

Examples	
	This example shows how to clear all NTP statistics: vsg# <b>clear ntp statistics all-peers</b>

Related Commands	Command	Description
	<b>show ntp peers</b>	Displays information about NTP peers.

*Send document comments to [vsg-docfeedback@cisco.com](mailto:vsg-docfeedback@cisco.com).*

## clear nvram

To clear the nonvolatile RAM (NVRAM), use the **clear nvram** command.

**clear nvram**

---

**Syntax Description** This command has no arguments or keywords.

---

**Defaults** None

---

**Command Modes** EXEC  
Global configuration (config)

---

**Supported User Roles** network-admin  
network-operator

---

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

---



---

**Examples** This example shows how to clear the NVRAM:

```
vsg# clear nvram
```

---

Related Commands	Command	Description
	show system resources	Displays system resources.

---

*Send document comments to [vsg-docfeedback@cisco.com](mailto:vsg-docfeedback@cisco.com).*

## clear policy-engine

To clear policy engine statistics, use the **clear policy-engine** command.

```
clear policy-engine {policy-name stats | stats}
```

Syntax	Description
<i>policy-name</i>	Policy engine name.
<b>stats</b>	Clears policy engine statistics.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to clear policy engine statistics:  
vsg# **clear policy-engine stats**

Related Commands	Command	Description
	<b>show policy-engine</b>	Displays the policy engine.

**Send document comments to [vsg-docfeedback@cisco.com](mailto:vsg-docfeedback@cisco.com).**

## clear processes

To clear process logs, use the **clear processes** command.

```
clear processes {log {all | archive [archive-name] | pid pid-number} | vdc vdc-name {all | pid
pid-number}}
```

Syntax Description		
<b>log</b>		Clears process logs.
<b>all</b>		Clears all process logs.
<b>archive</b>		Clears archived process logs.
<i>archive-name</i>		(Optional) Archive name.
<b>pid</b>		Clears the process log for a specific process.
<i>pid-number</i>		PID number.
<b>vdc</b>		Clears process logs for a specific Cisco VSG.
<i>vdc-name</i>		VDC name.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to clear all process logs:  
vsg# **clear processes log all**

Related Commands	Command	Description
	<b>show processes</b>	Displays all processes.

*Send document comments to [vsg-docfeedback@cisco.com](mailto:vsg-docfeedback@cisco.com).*

## clear rmon

To clear Remote Monitoring (RMON) logs, use the **clear rmon** command.

```
clear rmon {alarms | all-alarms | events | hcalarms}
```

Syntax Description	alarms	Clears RMON alarms.
	<b>all-alarms</b>	Clears all RMON alarms.
	<b>events</b>	Clears RMON events.
	<b>hcalarms</b>	Clears HC RMON alarms.

Defaults	None
----------	------

Command Modes	EXEC Global configuration (config)
---------------	---------------------------------------

SupportedUserRoles	network-admin network-operator
--------------------	-----------------------------------

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

Examples	This example shows how to clear RMON alarms: vsg# <b>clear rmon alarms</b>
----------	---

Related Commands	Command	Description
	<b>show rmon</b>	Displays RMON information.

*Send document comments to [vsg-docfeedback@cisco.com](mailto:vsg-docfeedback@cisco.com).*

## clear role

To clear role session information, use the **clear role** command.

**clear role session**

Syntax	Description
<b>session</b>	Clears the role session information.

Defaults	None
----------	------

Command Modes	EXEC Global configuration (config)
---------------	---------------------------------------

Supported User Roles	network-admin network-operator
----------------------	-----------------------------------

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

Examples	This example shows how to clear role session information: vsg# <b>clear role session</b>
----------	---

Related Commands	Command	Description
	<b>show role</b>	Displays role information.

*Send document comments to [vsg-docfeedback@cisco.com](mailto:vsg-docfeedback@cisco.com).*

## clear routing \*

To clear all routes, use the **clear routing \*** command.

**clear routing \***

**Syntax Description** This command has no arguments or keywords.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to clear all routes:

```
vsg# clear routing *
Clearing ALL routes
vsg#
```

Related Commands	Command	Description
	show routing	Displays the IP route table.

**Send document comments to [vsg-docfeedback@cisco.com](mailto:vsg-docfeedback@cisco.com).**

## clear routing A.B.C.D

To clear specific routes, use the **clear routing A.B.C.D** command.

```
clear routing ip-address [ip-address {data 0 | ethernet slot-number / port-number
[.sub-interface-number]}] | loopback virtual-interface-number | port-channel
port-channel-number}]
```

Syntax	Description
<i>ip-address</i>	IP address. The format is A.B.C.D.
<b>data 0</b>	(Optional) Clears routing on the data 0 interface.
<b>ethernet</b>	(Optional) Clears routing on Ethernet interfaces.
<i>slot-number</i>	Slot number. The range is from 1 to 66.
/	Slot and port number separator.
<i>port-number</i>	Port number. The range is from 1 to 128.
.	Subinterface separator.
<i>subinterface-number</i>	(Optional) Subinterface number. The range is from 1 to 4094.
<b>loopback</b>	(Optional) Clears routing on the loopback interface.
<i>virtual-interface-number</i>	Loopback number. The range is from 0 to 123.
<b>port-channel</b>	(Optional) Clears routing on the port-channel interface.
<i>port-channel-number</i>	Port-channel number. The range is from 1 to 4096.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to clear routes on the data 0 interface:

```
vsg# clear routing 209.165.200.228 data 0
```

**Related Commands**



***Send document comments to [vsg-docfeedback@cisco.com](mailto:vsg-docfeedback@cisco.com).***

Command	Description
show routing	Displays the IP route table.

**Send document comments to [vsg-docfeedback@cisco.com](mailto:vsg-docfeedback@cisco.com).**

## clear routing A.B.C.D/LEN

To clear specific routes, use the **clear routing A.B.C.D** command.

```
clear routing ip-address [ip-address {data 0 | ethernet slot-number / port-number
[.sub-interface-number]}] | loopback virtual-interface-number | port-channel
port-channel-number}]
```

Syntax	Description
<i>ip-address</i>	IP address. The format is A.B.C.D.
<b>data 0</b>	(Optional) Clears routing on the data 0 interface.
<b>ethernet</b>	(Optional) Clears routing on Ethernet interfaces.
<i>slot-number</i>	Slot number. The range is from 1 to 66.
/	Slot and port number separator.
<i>port-number</i>	Port number. The range is from 1 to 128.
.	Subinterface separator.
<i>subinterface-number</i>	(Optional) Subinterface number. The range is from 1 to 4094.
<b>loopback</b>	(Optional) Clears routing on the loopback interface.
<i>virtual-interface-number</i>	Loopback number. The range is from 0 to 123.
<b>port-channel</b>	(Optional) Clears routing on the port-channel interface.
<i>port-channel-number</i>	Port-channel number. The range is from 1 to 4096.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to clear routes on the data 0 interface:

```
vsg# clear routing 209.165.200.228 data 0
```

**Related Commands**

***Send document comments to [vsg-docfeedback@cisco.com](mailto:vsg-docfeedback@cisco.com).***

Command	Description
show routing	Displays the IP route table.

*Send document comments to [vsg-docfeedback@cisco.com](mailto:vsg-docfeedback@cisco.com).*

## clear routing event-history

To clear routing event histories, use the **clear routing event-history** command.

```
clear routing event-history {add-route | cli | delete-route | errors | general | loop-detection |
                             modify-route | notifications | recursive-next-hop | summary | udfm | udfm-summary }
```

Syntax	Description
<b>add-route</b>	Clears the added routes event history.
<b>cli</b>	Clears the command line interface (CLI) routing event history.
<b>delete-route</b>	Clears the deleted routes event history.
<b>errors</b>	Clears the error routes event history.
<b>general</b>	Clears the general routes event history.
<b>loop-detection</b>	Clears the loop-detection routes event history.
<b>modify-route</b>	Clears the modified routes event history.
<b>notifications</b>	Clears the notification routes event history.
<b>recursive-next-hop</b>	Clears the recursive-next-hop routing event history.
<b>summary</b>	Clears the summary routing event history.
<b>udfm</b>	Clears the UDFM routing event history.
<b>udfm-summary</b>	Clears the UDFM summary routing event history.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to clear the loop-detection routes event history:

```
vsg# clear routing event-history loop-detection
```

Related Commands	Command	Description
	<b>show routing</b>	Displays the IP route table.

*Send document comments to [vsg-docfeedback@cisco.com](mailto:vsg-docfeedback@cisco.com).*

## clear routing ip \*

To clear all IP routes, use the **clear routing ip \*** command.

```
clear routing ip *
```

<b>Syntax Description</b>	This command has no arguments or keywords.
---------------------------	--

<b>Defaults</b>	None
-----------------	------

<b>Command Modes</b>	EXEC Global configuration (config)
----------------------	---------------------------------------

<b>Supported User Roles</b>	network-admin network-operator
-----------------------------	-----------------------------------

<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	4.2(1)VSG1(1)	This command was introduced.

<b>Examples</b>	This example shows how to clear all IP routes: <pre>vsg# clear routing ip *</pre>
-----------------	--

<b>Related Commands</b>	<b>Command</b>	<b>Description</b>
	<b>show routing</b>	Displays the IP route table.

**Send document comments to [vsg-docfeedback@cisco.com](mailto:vsg-docfeedback@cisco.com).**

## clear routing ip A.B.C.D

To clear IP routing statistics, use the **clear routing ip** command.

```
clear routing ip ip-address [data 0 | ethernet slot-number / port-number [. sub-interface-number]
| loopback virtual-interface-number | mgmt 0 | port-channel [. sub-interface-number]]
```

Syntax	Description
<b>data 0</b>	Clears the data 0 interface.
<b>ethernet</b>	Clears the Ethernet interface.
<i>slot-number</i>	Ethernet slot number. The range is from 1 to 66.
<i>/</i>	Slot number port number separator.
<i>port-number</i>	Ethernet port number. The range is from 1 to 128.
<i>.</i>	Port number sub-interface number separator.
<i>sub-interface-number</i>	Sub-interface number. The range is from 1 to 4094.
<b>loopback</b>	Clears the loopback interface.
<i>virtual-interface-number</i>	Virtual interface number. The range is from 0 to 1023.
<b>port-channel</b>	Clears the port channel interface.
<i>port-channel-number</i>	Port Channel number. The range is from 1 to 4096.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to clear IP routes on slot 2, port 3:  
vsg# **clear routing ip ethernet 2 / 3**

Related Commands	Command	Description
	<b>show routing</b>	Displays the IP route table.

[Send document comments to vsg-docfeedback@cisco.com.](mailto:vsg-docfeedback@cisco.com)

## clear routing ip A.B.C.D/LEN

To clear routing, use the **clear routing ip A.B.C.D/LEN** command.

```
clear routing ip ip-address [ip-address {data 0 | ethernet slot-number / port-number
[. {sub-interface-number}] | loopback virtual-interface-number | port-channel
port-channel-number}]
```

Syntax	Description
<b>data 0</b>	Clears the data 0 interface.
<b>ethernet</b>	Clears the Ethernet interface.
<i>slot-number</i>	Ethernet slot number. The range is from 1 to 66.
<i>/</i>	Slot number port number separator.
<i>port-number</i>	Ethernet port number. The range is from 1 to 128.
<i>.</i>	Port number sub-interface number separator.
<i>sub-interface-number</i>	Sub-interface number. The range is from 1 to 4094.
<b>loopback</b>	Clears the loopback interface.
<i>virtual-interface-number</i>	Virtual interface number. The range is from 0 to 1023.
<b>port-channel</b>	Clears the port channel interface.
<i>port-channel-number</i>	Port Channel number. The range is from 1 to 4096.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to clear IP routes:  
vsg# **clear routing ip 209.165.200.228**

Related Commands	Command	Description
	<b>show routing</b>	Displays the IP route table.

*Send document comments to [vsg-docfeedback@cisco.com](mailto:vsg-docfeedback@cisco.com).*

## clear routing ip event-history

To clear routing event histories, use the **clear routing ip event-history** command.

```
clear routing ip event-history {add-route | cli | delete-route | errors | general | loop-detection |
modify-route | notifications | recursive-next-hop | summary | udfm | udfm-summary}
```

Syntax	Description
<b>add-route</b>	Clears the added routes event history.
<b>cli</b>	Clears the command line interface (CLI) routing event history.
<b>delete-route</b>	Clears the deleted routes event history.
<b>errors</b>	Clears the error routes event history.
<b>general</b>	Clears the general routes event history.
<b>loop-detection</b>	Clears the loop-detection routes event history.
<b>modify-route</b>	Clears the modified routes event history.
<b>notifications</b>	Clears the notification routes event history.
<b>recursive-next-hop</b>	Clears the recursive-next-hop routing event history.
<b>summary</b>	Clears the summary routing event history.
<b>udfm</b>	Clears the UDFM routing event history.
<b>udfm-summary</b>	Clears the UDFM summary routing event history.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to clear the notifications routes event history:

```
vsg# clear routing ip event-history notifications
```

Related Commands	Command	Description
	<b>show routing</b>	Displays the IP route table.



*Send document comments to [vsg-docfeedback@cisco.com](mailto:vsg-docfeedback@cisco.com).*

## clear routing ip unicast

To clear unicast routing entries, use the **clear routing ip unicast** command.

```
clear routing ip unicast { * | A.B.C.D | A.B.C.D/LEN | event-history }
```

Syntax	Description
*	Clears all IP unicast routes.
A.B.C.D	Clears a specific IP unicast route.
A.B.C.D/LEN	Clears a specific IP unicast route.
event-history	Clears the IP unicast event history.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to clear all IP unicast routes:  
vsg# **clear routing ip unicast \***

Related Commands	Command	Description
	show routing	Displays the IP route table.

*Send document comments to [vsg-docfeedback@cisco.com](mailto:vsg-docfeedback@cisco.com).*

## clear routing ipv4

To clear IPv4 route entries, use the **clear routing ipv4** command.

```
clear routing ipv4 { * | A.B.C.D | A.B.C.D/LEN | event-history | unicast }
```

Syntax	Description
<b>*</b>	Clears all IPv4 routes.
<b>A.B.C.D</b>	Clears a specific IPv4 route.
<b>A.B.C.D/LEN</b>	Clears a specific IPv4 route.
<b>event-history</b>	Clears the IPv4 routing event history.
<b>unicast</b>	Clears IPv4 unicast routes.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to clear all IPv4 routes:

```
vsg# clear routing ipv4 *
```

Related Commands	Command	Description
	<b>show routing</b>	Displays the IP route table.

*Send document comments to [vsg-docfeedback@cisco.com](mailto:vsg-docfeedback@cisco.com).*

## clear routing ipv6

To clear IPv6 route entries, use the **clear routing ipv6** command.

```
clear routing ipv6 { * | A:B::C:D | A:B::C:D/LEN | event-history | unicast }
```

Syntax	Description
<b>*</b>	Clears all IPv6 routes.
<b>A:B::C:D</b>	Clears a specific IPv6 route.
<b>A:B::C:D/LEN</b>	Clears a specific IPv6 route.
<b>event-history</b>	Clears the IPv6 routing event history.
<b>unicast</b>	Clears IPv6 unicast routes.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to clear all IPv6 routes:

```
vsg# clear routing ipv6 *
```

Related Commands	Command	Description
	<b>show routing</b>	Displays the IP route table.

***Send document comments to [vsg-docfeedback@cisco.com](mailto:vsg-docfeedback@cisco.com).***

## clear routing vrf

To clear virtual routing and forwarding (VRF) routes, use the **clear routing vrf** command.

**clear routing vrf** *vrf-name*

<b>Syntax Description</b>	<i>vrf-name</i>	VRF name. The range is from 1 to 32.
---------------------------	-----------------	--------------------------------------

<b>Defaults</b>	None	
-----------------	------	--

<b>Command Modes</b>	EXEC Global configuration (config)	
----------------------	---------------------------------------	--

<b>SupportedUserRoles</b>	network-admin network-operator	
---------------------------	-----------------------------------	--

<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	4.2(1)VSG1(1)	This command was introduced.

<b>Examples</b>	This example shows how to clear VRF routes: <pre>vsg# clear routing vrf vrfTest</pre>	
-----------------	--	--

<b>Related Commands</b>	<b>Command</b>	<b>Description</b>
	<b>show routing</b>	Displays the IP route table.

*Send document comments to [vsg-docfeedback@cisco.com](mailto:vsg-docfeedback@cisco.com).*

## clear routing vrf default

To clear virtual routing and forwarding (VRF) routes, use the **clear routing vrf default** command.

```
clear routing vrf default { * | A.B.C.D | A.B.C.D/LEN | ip | ipv4 | ipv6 | unicast }
```

### Syntax Description

<b>*</b>	Clears all VRF routes.
<b>A.B.C.D</b>	Clears a specific VRF route.
<b>A.B.C.D/LEN</b>	Clears a specific VRF route.
<b>ip</b>	Clears IP VRF routes.
<b>ipv4</b>	Clears IPv4 VRF routes.
<b>ipv6</b>	Clears IPv6 VRF routes.
<b>unicast</b>	Clears unicast VRF routes.

### Defaults

None

### Command Modes

EXEC  
Global configuration (config)

### Supported User Roles

network-admin  
network-operator

### Command History

Release	Modification
4.2(1)VSG1(1)	This command was introduced.

### Examples

This example shows how to clear VRF routes:

```
vsg# clear routing vrf default *
```

### Related Commands

Command	Description
<b>show routing</b>	Displays the IP route table.

*Send document comments to [vsg-docfeedback@cisco.com](mailto:vsg-docfeedback@cisco.com).*

## clear routing vrf management \*

To clear all virtual routing and forwarding (VRF) management routes, use the **clear routing vrf management \*** command.

**clear routing vrf management \***

**Syntax Description** This command has no arguments or keywords.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to clear all VRF management routes:

```
vsg# clear routing vrf management *
```

Related Commands	Command	Description
	show routing	Displays the IP route table.

[Send document comments to vsg-docfeedback@cisco.com.](mailto:vsg-docfeedback@cisco.com)

## clear routing vrf management

To clear specific virtual routing and forwarding (VRF) management routes, use the **clear routing vrf management** command.

```
clear routing vrf management ethernet-address [ethernet-address {data 0 | ethernet slot-number /
port-number [. sub-interface] | loopback loopback-number | port-channel port-number [.
sub-interface]}]
```

### Syntax Description

<i>ethernet-address</i>	Ethernet address.
<b>data 0</b>	Clears VRF management routes.
<b>ethernet</b>	Clears VRF management routes on Ethernet ports.
<i>slot-number</i>	Ethernet port slot number.
/	Slot and port separator.
<i>port-number</i>	Ethernet port number.
. <i>sub-interface</i>	(Optional) Ethernet subinterface.
<b>loopback</b>	Clears VRF management routes on a loopback.
<i>loopback-number</i>	Loopback number.
<b>port-channel</b>	Clears VRF management routes on a port channel.
<i>port-number</i>	Port-channel number.
<b>unicast</b>	Clears unicast IP routes.

### Defaults

None

### Command Modes

EXEC  
Global configuration (config)

### Supported User Roles

network-admin  
network-operator

### Command History

Release	Modification
4.2(1)VSG1(1)	This command was introduced.

### Examples

This example shows how to clear a specific set of Ethernet routes:

```
vsg# clear routing vrf management 209.165.200.226 209.165.200.236 ethernet 2 / 4
```

### Related Commands

■ clear routing vrf management

***Send document comments to [vsg-docfeedback@cisco.com](mailto:vsg-docfeedback@cisco.com).***

Command	Description
show routing	Displays the IP route table.



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## clear routing vrf management

To clear specific virtual routing and forwarding (VRF) management routes, use the **clear routing vrf management** command.

```
clear routing vrf management ethernet-address [ethernet-address {data 0 | ethernet slot-number /
port-number [. sub-interface] | loopback loopback-number | port-channel port-number [.
sub-interface]}]
```

Syntax Description		
<i>ethernet-address</i>		Ethernet address.
<b>data 0</b>		Clears VRF management routes.
<b>ethernet</b>		Clears VRF management routes on Ethernet ports.
<i>slot-number</i>		Ethernet port slot number.
<i>port-number</i>		Ethernet port number.
. <i>sub-interface</i>		Ethernet subinterface.
<b>loopback</b>		Clears VRF management routes on a loopback.
<i>loopback-number</i>		Loopback number.
<b>port-channel</b>		Clears VRF management routes on a port channel.
<i>port-number</i>		Port-channel number.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to clear a specific set of Ethernet routes:

```
vsg# clear routing vrf management 209.165.200.226 209.165.200.236 ethernet 2 / 4
```

Related Commands	Command	Description
	<b>show routing</b>	Displays the IP route table.

**Send document comments to [vsg-docfeedback@cisco.com](mailto:vsg-docfeedback@cisco.com).**

## clear routing vrf management ip

To clear virtual routing and forwarding (VRF) IP management routes, use the **clear routing vrf management ip** command.

```
clear routing vrf management ip [* | A.B.C.D [A.B.C.D {data 0 | ethernet slot-number /
port-number [. sub-interface] | loopback loopback-number | port-channel port-number [.
sub-interface]} | A.B.C.D/LEN [A.B.C.D {data 0 | ethernet slot-number / port-number [.
sub-interface] | loopback loopback-number | port-channel port-number [. sub-interface]} |
unicast [A.B.C.D {data 0 | ethernet slot-number / port-number [. sub-interface] | loopback
loopback-number | port-channel port-number [. sub-interface]}]}
```

Syntax	Description
<b>*</b>	Clears all IP routes.
<b>A.B.C.D</b>	(Optional) Clears a specific VRF management IP route.
<b>data 0</b>	Clears VRF management IP routes.
<b>ethernet</b>	Clears VRF management IP routes on Ethernet ports.
<i>slot-number</i>	Ethernet port slot number.
<i>/</i>	Slot number and port number separator.
<i>port-number</i>	Ethernet port number.
<i>.</i>	Subinterface separator.
<i>sub-interface</i>	(Optional) Ethernet subinterface.
<b>loopback</b>	Clears VRF management IP routes on a loopback.
<i>loopback-number</i>	Loopback number.
<b>port-channel</b>	Clears VRF management IP routes on a port channel.
<i>port-number</i>	Port-channel number.
<b>unicast</b>	Clears unicast IP routes.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

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---

**Examples**

This example shows how to clear all IP unicast routes:

```
vsg# clear routing vrf management ip unicast *
```

---

**Related Commands**

Command	Description
<code>show routing</code>	Displays the IP route table.

---

**Send document comments to [vsg-docfeedback@cisco.com](mailto:vsg-docfeedback@cisco.com).**

## clear routing vrf management ipv4

To clear IPv4 virtual routing and forwarding (VRF) management routes, use the **clear routing vrf management ipv4** command.

```
clear routing vrf management ipv4 [* | A.B.C.D [A.B.C.D {data 0 | ethernet slot-number / port-number [. sub-interface] | loopback loopback-number | port-channel port-number [. sub-interface]} | A.B.C.D/LEN [A.B.C.D {data 0 | ethernet slot-number / port-number [. sub-interface] | loopback loopback-number | port-channel port-number [. sub-interface]} | unicast [A.B.C.D {data 0 | ethernet slot-number / port-number [. sub-interface] | loopback loopback-number | port-channel port-number [. sub-interface]}]}
```

Syntax	Description
<b>*</b>	Clears all IPv4 routes.
<b>A.B.C.D</b>	Clears a specific VRF management IPv4 route.
<b>data 0</b>	Clears VRF management IPv4 routes.
<b>ethernet</b>	Clears VRF management IPv4 routes on Ethernet ports.
<i>slot-number</i>	Ethernet port slot number.
<b>/</b>	Slot number and port number separator.
<i>port-number</i>	Ethernet port number.
<b>.</b>	Subinterface separator.
<i>sub-interface</i>	Ethernet subinterface.
<b>loopback</b>	Clears VRF management IPv4 routes on a loopback.
<i>loopback-number</i>	Loopback number.
<b>port-channel</b>	Clears VRF management IPv4 routes on a port channel.
<i>port-number</i>	Port-channel number.
<b>unicast</b>	Clears unicast IP routes.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

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---

**Examples**

This example shows how to clear an IPv4 VRF management route:

```
vsg# clear routing vrf management ipv4 209:165::200:229
```

---

**Related Commands**

Command	Description
<code>show routing</code>	Displays the IP route table.

---

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## clear routing vrf management ipv6

To clear IPv6 virtual routing and forwarding (VRF) management routes, use the **clear routing vrf management ipv6** command.

```
clear routing vrf management ipv6 [* | A.B.C.D [A.B.C.D {data 0 | ethernet slot-number / port-number [. sub-interface] | loopback loopback-number | port-channel port-number [. sub-interface]} | A.B.C.D/LEN [A.B.C.D {data 0 | ethernet slot-number / port-number [. sub-interface] | loopback loopback-number | port-channel port-number [. sub-interface]} | unicast [A.B.C.D {data 0 | ethernet slot-number / port-number [. sub-interface] | loopback loopback-number | port-channel port-number [. sub-interface]}]}
```

Syntax	Description
<b>*</b>	Clears all IPv6 routes.
<b>A.B.C.D</b>	Clears a specific IPv6 route.
<b>data 0</b>	Clears VRF management IPv6 routes.
<b>ethernet</b>	Clears VRF management IPv6 routes on Ethernet ports.
<i>slot-number</i>	Ethernet port slot number.
<b>/</b>	Slot number and port number separator.
<i>port-number</i>	Ethernet port number.
<b>.</b>	Subinterface separator.
<i>sub-interface</i>	Ethernet subinterface.
<b>loopback</b>	Clears VRF management IPv6 routes on a loopback.
<i>loopback-number</i>	Loopback number.
<b>port-channel</b>	Clears VRF management IPv6 routes on a port channel.
<i>port-number</i>	Port-channel number.
<b>unicast</b>	Clears unicast IP routes.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

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---

**Examples**

This example shows how to clear an IPv6 VRF management route:

```
vsg# clear routing vrf management ipv6 209:165::200:225
```

---

**Related Commands**

Command	Description
<code>show routing</code>	Displays the IP route table.

---

[Send document comments to vsg-docfeedback@cisco.com.](mailto:vsg-docfeedback@cisco.com)

## clear routing vrf management unicast

To clear unicast virtual routing and forwarding (VRF) management routes, use the **clear routing vrf management unicast** command.

```
clear routing vrf management unicast [* | A.B.C.D [A.B.C.D {data 0 | ethernet slot-number /
port-number [. sub-interface] | loopback loopback-number | port-channel port-number [.
sub-interface}} | A.B.C.D/LEN [A.B.C.D {data 0 | ethernet slot-number / port-number [.
sub-interface} | loopback loopback-number | port-channel port-number [. sub-interface}}}}
```

### Syntax Description

<b>*</b>	Clears all unicast routes.
<b>A.B.C.D</b>	Clears a specific VRF management unicast route.
<b>data 0</b>	Clears VRF management unicast routes.
<b>ethernet</b>	Clears VRF management unicast routes on Ethernet ports.
<i>slot-number</i>	Ethernet port slot number.
<i>/</i>	Slot number and port number separator.
<i>port-number</i>	Ethernet port number.
<i>.</i>	Subinterface separator.
<i>sub-interface</i>	Ethernet subinterface.
<b>loopback</b>	Clears VRF management unicast routes on a loopback.
<i>loopback-number</i>	Loopback number.
<b>port-channel</b>	Clears VRF management unicast routes on a port channel.
<i>port-number</i>	Port-channel number.

### Defaults

None

### Command Modes

EXEC  
Global configuration (config)

### Supported User Roles

network-admin  
network-operator

### Command History

Release	Modification
4.2(1)VSG1(1)	This command was introduced.

### Examples

This example shows how to clear a specific unicast route:

```
vsg# clear routing vrf management unicast 209.165.200.225
```



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Related Commands	Command	Description
	show routing	Displays the IP route table.

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## clear scheduler

To clear the scheduler log, use the **clear scheduler** command.

**clear scheduler logfile**

Syntax	Description
<b>logfile</b>	Clears the scheduler log.

Defaults	None
----------	------

Command Modes	EXEC Global configuration (config)
---------------	---------------------------------------

Supported User Roles	network-admin network-operator
----------------------	-----------------------------------

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

Examples	This example shows how to clear the scheduler log file: vsg# <b>clear scheduler logfile</b>
----------	--

Related Commands	Command	Description
	<b>show scheduler logfile</b>	Displays the scheduler log file.

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## clear screen

To clear the screen, use the **clear screen** command.

**clear screen**

**Syntax Description** This command has no key words or arguments.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to clear the screen:

```
vsg# clear screen
```

Related Commands	Command	Description
	show terminal	Displays terminal configuration parameters.

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## clear service-path

To clear service path information, use the **clear service-path** command.

```
clear service-path {connection | statistics [svs-domain-id id module module-number]}
```

Syntax	Description
<b>connection</b>	Clears all the connection entries in the flow table.
<b>statistics</b>	Clears service path statistics.
<b>svs-domain-id</b>	(Optional) Clears the SVS domain identification number.
<i>id</i>	DVS domain identification number.
<b>module</b>	(Optional) Clears module information.
<i>module-number</i>	Module number.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to clear service path statistics:  
vsg# **clear service-path statistics**

Related Commands	Command	Description
	<b>show service-path statistics</b>	Displays service path statistics.

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## clear snmp

To clear Simple Network Management Protocol (SNMP) information, use the **clear snmp** command.

```
clear snmp {counters | hostconfig}
```

Syntax	Description
<b>counters</b>	Clears the SNMP counters.
<b>hostconfig</b>	Clears the SNMP host list.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to clear SNMP counters:

```
vsg# clear snmp counters
```

Related Commands	Command	Description
	<b>show snmp community</b>	Displays SNMP community strings.

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## clear sockets

To clear socket statistics, use the **clear sockets** command.

```
clear sockets {all | raw | raw6 | tcp | tcp6 | udp | udp6}
```

Syntax	Description
<b>all</b>	Clears all socket statistics.
<b>raw</b>	Clears RAW v4 statistics.
<b>raw6</b>	Clears RAW v6 statistics.
<b>tcp</b>	Clears TCP v4 statistics.
<b>tcp6</b>	Clears TCP v6 statistics.
<b>udp</b>	Clears UDP v4 statistics.
<b>udp6</b>	Clears UDP v6 statistics.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to clear socket statistics:  
vsg# **clear sockets all**

Related Commands	Command	Description
	<b>show sockets statistics</b>	Displays TCP socket statistics.

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## clear ssh

To clear the Secure Shell (SSH) host session, use the **clear ssh** command.

**clear ssh hosts**

Syntax	Description
<b>hosts</b>	Clears the SSH host session.

Defaults	None
----------	------

Command Modes	EXEC Global configuration (config)
---------------	---------------------------------------

Supported User Roles	network-admin network-operator
----------------------	-----------------------------------

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

Examples	This example shows how to clear all SSH host sessions: vsg# <b>clear ssh hosts</b>
----------	---

Related Commands	Command	Description
	<b>show ssh</b>	Displays SSH information.

■ clear system internal ac application

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## clear system internal ac application

To clear application containers, use the **clear system internal ac application** command.

**clear system internal ac application** *application-name* **instance** *instance-number* [**fe** *fe-name*]

Syntax Description	
<i>application-name</i>	Application container name.
<b>instance</b>	Clears the application container instance.
<i>instance-number</i>	Application container instance number.
<b>fe</b>	(Optional) Clears the functional element.
<i>fe-name</i>	Functional element name.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to clear an application container:  
vsg# **clear system internal ac application core instance 1**

Related Commands	Command	Description
	<b>show system internal ac application</b>	Displays application container information.



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## clear system internal ac ipc-stats

To clear application container Instructions per Cycle (IPC) statistics, use the **clear system internal ac ipc-stats** command.

```
clear system internal ac ipc-stats fe {attribute-manager | inspection-ftp | inspection-rsh |
inspection-tftp | service-path }
```

Syntax Description	fe	Clears the functional element.
	<b>attribute-manager</b>	Clears the attribute manager FE.
	<b>inspection-ftp</b>	Clears the inspection FTP FE.
	<b>inspection-rsh</b>	Clears the inspection RSH FE.
	<b>inspection-tftp</b>	Clears the inspection TFTP FE.
	<b>service-path</b>	Clears the service path FE.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to clear application container IPC statistics:

```
vsg# clear system internal ac ipc-stats
vsg#
```

Related Commands	Command	Description
	<b>show system internal ac application</b>	Displays application container information.

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## clear user

To clear a user session, use the **clear user** command.

```
clear user user-id
```

<b>Syntax Description</b>	<i>user-id</i>	User identification number.
---------------------------	----------------	-----------------------------

<b>Defaults</b>	None	
-----------------	------	--

<b>Command Modes</b>	EXEC Global configuration (config)	
----------------------	---------------------------------------	--

<b>SupportedUserRoles</b>	network-admin network-operator	
---------------------------	-----------------------------------	--

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

<b>Examples</b>	This example shows how to clear a user session: vsg# <b>clear user user1</b>	
-----------------	---	--

Related Commands	Command	Description
	<b>show users</b>	Displays user session information.

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## cli

To define a command line interface (CLI) variable for a terminal session, use the **cli** command. To remove the CLI variable, use the **no** form of this command.

**cli var name** *variable-name variable-text*

**cli no var name** *variable-name*

Syntax Description		
	<i>variable-name</i>	Variable name. The name is alphanumeric, case sensitive, and has a maximum of 31 characters.
	<i>variable-text</i>	Variable text. The text is alphanumeric, can contain spaces, and has a maximum of 200 characters.

**Defaults** None

**Command Modes** EXEC

**SupportedUserRoles** network-admin

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Usage Guidelines** You can reference a CLI variable using the following syntax:

`$(variable-name)`

Instances where you can use variables are as follows:

- Command scripts
- Filenames

You cannot reference a variable in the definition of another variable.

You can use the predefined variable, `TIMESTAMP`, to insert the time of day. You cannot change or remove the `TIMESTAMP` CLI variable.

You must remove a CLI variable before you can change its definition.

**Examples** This example shows how to define a CLI variable:

```
vsg# cli var name testinterface interface 2/3
vsg#
```

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This example shows how to reference the `TIMESTAMP` variable:

```
vsg# copy running-config > bootflash:run-config-$(TIMESTAMP).cnfg
vsg#
```

This example shows how to remove a CLI variable:

```
vsg# cli no var name testinterface interface 2/3
vsg#
```

---

 Related Commands

Command	Description
<code>show cli variables</code>	Displays the CLI variables.

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## clock set

To manually set the clock, use the **clock set** command.

**clock set** *time day month year*

Syntax Description		
<i>time</i>		Time of the day. The format is <i>HH:MM:SS</i> .
<i>day</i>		Day of the month. The range is from 1 to 31.
<i>month</i>		Month of the year. The values are <b>January, February, March, April, May, June, July, August, September, October, November, and December</b> .
<i>year</i>		Year. The range is from 2000 to 2030.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Usage Guidelines** Use the **clock set** command when you cannot synchronize your device with an outside clock source, such as a Network Time Protocol (NTP) server.

**Examples** This example shows how to manually set the clock:

```
vsg# clock set 9:00:00 29 January 2011
vsg#
```

Related Commands	Command	Description
	<b>show clock</b>	Displays the clock time.

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## condition

To specify a condition statement used in a rule or zone, use the **condition** command. To remove the condition statement for a rule or zone, use the **no** form of this command

```
condition attribute-name {eq | neq | gt | lt | prefix | contains | in-range | member-of | not-in-range
| not-member-of} attribute-value1 [attribute-value2]
```

Syntax Description		
<i>attribute-name</i>		Name of the attribute for the rule object.
<b>eq</b>		Equal to a number or exactly matched with a string.
<b>neq</b>		Not equal to a number or not exactly matched with a string.
<b>gt</b>		Greater than.
<b>lt</b>		Less than.
<b>prefix</b>		Specifies a prefix of a string or an IP address.
<b>contains</b>		Contains a substring.
<b>in-range</b>		A range of two integers, dates, times, or IP addresses.
<b>member-of</b>		A member of an object-group.
<b>not-in-range</b>		Negation of the <b>in-range</b> operator.
<b>not-member-of</b>		Negation of the member.
<i>attribute-value1</i>		Value of an attribute (for example, 10.10.10.1) or name of an object-group (for example, "ipaddr-group").
<i>attribute-value2</i>		(Optional) Value of an attribute or the netmask of a network address.

**Command Default** None

**Command Modes** Policy configuration (config-policy)  
Zone configuration (config-zone)

**SupportedUserRoles** network-admin

Command History	Release	Modification
	4.2(1)VSG1(2)	This command was introduced.

**Usage Guidelines** Use the **condition** command to specify a condition statement that is used in a rule. Each condition statement supports one of the virtual machine (VM), zone, network, or environment attributes. When multiple condition statements are used in a rule, all conditions are considered to be AND'd during a policy evaluation.

The following operators must have at least two attribute values:

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- **prefix**—When applied against an IP address (for example, **prefix** 10.10.10.1 255.255.255.0)
- **in-range**—For all types of attribute values (for example, **range** 10.10.10.1 10.10.10.200)
- **not-in-range**—For all types of attribute values (for example, **not-in-range** 10.10.10.1 10.10.10.200)

Attribute values can be any of the following:

- Integer
- Integer range
- IP address and a netmask
- IP address range
- String
- Name of an object-group



### Note

- Attributes used in rule conditions are mostly directional attributes.
- Attributes used in zone conditions are all neutral attributes.

### Examples

This example shows the command **condition** used to set up conditions for a web server zone:

```
VSG(config)# zone web_servers
VSG(config-zone)# condition 1 net.ip-address range 10.10.1.1 10.10.1.20
VSG(config-zone)# exit
```

This example shows the command **condition** used to set up conditions for an app server zone:

```
VSG(config)# zone app_servers
VSG(config-zone)# condition 1 net.ip-address range 10.10.1.21 10.10.1.40
VSG(config-zone)# exit
```

This example shows the command **condition** used to set up conditions for a database server zone:

```
VSG(config)# zone db_servers
VSG(config-zone)# condition 1 net.ip-address range 10.10.1.41 10.10.1.60
VSG(config-zone)# exit
```

### Related Commands

Command	Description
<b>rule</b>	Enters the rule configuration submenu.
<b>zone</b>	Enters the zone configuration submenu.

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# configure

To enter configuration mode, use the **configure** command.

**configure**

---

**Syntax Description** This command has no arguments or keywords.

---

**Defaults** None

---

**Command Modes** EXEC

---

**SupportedUserRoles** network-admin  
network operator

---

CommandHistory	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

---



---

**Examples** This example shows how to enter configuration mode:

```
vsg# configure
Enter configuration commands, one per line. End with CNTL/Z.
vsg(config)#
```

---

Related Commands	Command	Description
	<b>interface data 0</b>	Enters interface configuration mode.

---



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## copy bootflash:

To copy files from the bootflash directory, use the **copy bootflash:** command.

**copy bootflash:***//file-address destination-address*

Syntax Description		
	<i>//file-address</i>	Address of the files to copy.
	<i>destination-address</i>	Address of the destination directory.
		Use one of the following directories in the destination address:
		<ul style="list-style-type: none"> <li>• <b>bootflash:</b></li> <li>• <b>debug:</b></li> <li>• <b>ftp:</b></li> <li>• <b>log:</b></li> <li>• <b>modflash:</b></li> <li>• <b>nvram:</b></li> <li>• <b>scp:</b></li> <li>• <b>sftp:</b></li> <li>• <b>system:</b></li> <li>• <b>tftp:</b></li> <li>• <b>volatile:</b></li> </ul>

<b>Defaults</b>	None
-----------------	------

<b>Command Modes</b>	EXEC Global configuration (config)
----------------------	---------------------------------------

<b>SupportedUserRoles</b>	network-admin network-operator
---------------------------	-----------------------------------

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

<b>Examples</b>	<p>This example shows how to copy a file from a remote bootflash directory to a local bootflash directory:</p> <pre>vsg# copy bootflash://jsmith@209.193.10.10/ws/jsmith-sjc/vsg-dplug.bin bootflash:/</pre>
-----------------	--

■ copy bootflash:

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Related Commands	Command	Description
	copy volatile:	Copies files from the volatile: directory.

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## copy core:

To copy files from the core directory, use the **copy core:** command.

**copy core:** *//file-address destination-address*

Syntax Description	<i>//file-address</i>	Address of the files to copy.
	<i>destination-address</i>	Address of the destination directory.
		Use one of the following directories in the destination address:
		<ul style="list-style-type: none"> <li>• <b>bootflash:</b></li> <li>• <b>ftp:</b></li> <li>• <b>scp:</b></li> <li>• <b>sftp:</b></li> <li>• <b>tftp:</b></li> </ul>

Defaults	None
----------	------

Command Modes	EXEC Global configuration (config)
---------------	---------------------------------------

SupportedUserRoles	network-admin network-operator
--------------------	-----------------------------------

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

Usage Guidelines	None
------------------	------

Examples	This example shows how to copy a file from a remote core directory to a local volatile directory: vsg# <b>copy core://user@209.193.10.11/ps/user-rtg/vsgLog.txt volatile:/</b>
----------	---

Related Commandsv	Command	Description
	<b>copy log:</b>	Copies files from the log directory.

## ■ copy debug:

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## copy debug:

To copy files from the debug directory, use the **copy debug:** command.

**copy debug:** *//file-address destination-address*

Syntax Description	
<i>//file-address</i>	Address of the files to copy.
<i>destination-address</i>	Address of the destination directory.
	Use one of the following directories in the destination address:
	<ul style="list-style-type: none"> <li>• <b>bootflash:</b></li> <li>• <b>debug:</b></li> <li>• <b>ftp:</b></li> <li>• <b>log:</b></li> <li>• <b>modflash:</b></li> <li>• <b>nvr:</b></li> <li>• <b>nvram:</b></li> <li>• <b>scp:</b></li> <li>• <b>sftp:</b></li> <li>• <b>system:</b></li> <li>• <b>tftp:</b></li> <li>• <b>volatile:</b></li> </ul>

<b>Defaults</b>	None
-----------------	------

<b>Command Modes</b>	EXEC Global configuration (config)
----------------------	---------------------------------------

<b>SupportedUserRoles</b>	network-admin network-operator
---------------------------	-----------------------------------

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

<b>Examples</b>	<p>This example shows how to copy a file from a remote debug directory to a local volatile directory:</p> <pre>vsg# copy debug://user@209.193.10.11/ps/user-rtg/vsgLog.txt volatile:/</pre>
-----------------	---

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Related Commands	Command	Description
	copy bootflash:	Copies files from the bootflash directory.

■ **copy ftp:**

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## copy ftp:

To copy files from the file transfer protocol (FTP) directory, use the **copy ftp:** command.

**copy ftp:***//file-address destination-address*

Syntax Description		
	<i>//file-address</i>	Address of the files to copy.
	<i>destination-address</i>	Address of the destination directory.
		Use one of the following directories in the destination address:
		<ul style="list-style-type: none"> <li>• <b>bootflash:</b></li> <li>• <b>debug:</b></li> <li>• <b>log:</b></li> <li>• <b>modflash:</b></li> <li>• <b>nvr:</b></li> <li>• <b>nvram:</b></li> <li>• <b>system:</b></li> <li>• <b>volatile:</b></li> </ul>

Defaults	
	None

Command Modes	
	EXEC
	Global configuration (config)

Supported User Roles	
	network-admin
	network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

Examples	
	This example shows how to transfer a file from a remote FTP directory to a local bootflash directory:
	<pre>vsg# copy ftp://user@209.193.10.11/ps/user-rtg/vsg-dplug.bin bootflash:/</pre>

Related Commands	Command	Description
	<b>copy sftp:</b>	Copies the files from the SFTP directory.

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## copy log:

To copy files from the log directory, use the **copy log:** command.

**copy log:***//file-address destination-address*

Syntax Description	
<i>//file-address</i>	Address of the files to copy.
<i>destination-address</i>	Address of the destination directory.
	Use one of the following directories in the destination address:
	<ul style="list-style-type: none"> <li>• <b>bootflash:</b></li> <li>• <b>debug:</b></li> <li>• <b>ftp:</b></li> <li>• <b>log:</b></li> <li>• <b>modflash:</b></li> <li>• <b>nvr:</b></li> <li>• <b>nvram:</b></li> <li>• <b>scp:</b></li> <li>• <b>sftp:</b></li> <li>• <b>system:</b></li> <li>• <b>tftp:</b></li> <li>• <b>volatile:</b></li> </ul>

<b>Defaults</b>	None
-----------------	------

<b>Command Modes</b>	EXEC Global configuration (config)
----------------------	---------------------------------------

<b>SupportedUserRoles</b>	network-admin network-operator
---------------------------	-----------------------------------

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

<b>Examples</b>	This example shows how to copy files from a remote log directory to a local volatile directory: vsg# <b>copy log://user@209.193.10.11/ps/user-rtg/vsgLog.txt volatile:/</b>
-----------------	--

■ **copy log:**

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Related Commands	Command	Description
	<b>copy debug:</b>	Copies files from the debug directory.



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## copy modflash:

To copy files from the modflash directory, use the **copy modflash:** command.

**copy modflash:** *//file-address destination-address*

Syntax Description	
<i>//file-address</i>	Address of the files to copy.
<i>destination-address</i>	Address of the destination directory.
	Use one of the following directories in the destination address:
	<ul style="list-style-type: none"> <li>• <b>bootflash:</b></li> <li>• <b>debug:</b></li> <li>• <b>ftp:</b></li> <li>• <b>log:</b></li> <li>• <b>modflash:</b></li> <li>• <b>nvram:</b></li> <li>• <b>scp:</b></li> <li>• <b>sftp:</b></li> <li>• <b>system:</b></li> <li>• <b>tftp:</b></li> <li>• <b>volatile:</b></li> </ul>

<b>Defaults</b>	None
-----------------	------

<b>Command Modes</b>	EXEC Global configuration (config)
----------------------	---------------------------------------

<b>SupportedUserRoles</b>	network-admin network-operator
---------------------------	-----------------------------------

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

<b>Examples</b>	<p>This example shows how to copy files from a remote modflash directory to a local volatile directory:</p> <pre>vsg# copy modflash://user@209.193.10.10/ws/user-sjc/vsg-mod.bin volatile:/</pre>
-----------------	---

■ copy modflash:

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Related Commands	Command	Description
	copy nvram:	Copies files from the NVRAM directory.

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## copy nvram:

To copy files from the nonvolatile RAM (NVRAM) directory, use the **copy nvram:** command.

**copy nvram:***//file-address destination-address*

Syntax Description		
<i>//file-address</i>	Address of the NVRAM files to copy.	
<i>destination-address</i>	Address of the destination directory.	
	Use one of the following directories in the destination address:	
	<ul style="list-style-type: none"> <li>• <b>bootflash:</b></li> <li>• <b>debug:</b></li> <li>• <b>ftp:</b></li> <li>• <b>log:</b></li> <li>• <b>modflash:</b></li> <li>• <b>nvram:</b></li> <li>• <b>scp:</b></li> <li>• <b>sftp:</b></li> <li>• <b>system:</b></li> <li>• <b>tftp:</b></li> <li>• <b>volatile:</b></li> </ul>	

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to copy files from a remote NVRAM directory to a local volatile directory:

```
vsg# copy nvram://user@209.193.10.10/ws/user-sjc/vsg-ram.bin volatile:/
```

■ copy nvram:

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Related Commands

Command	Description
copy modflash:	Copies files from a modflash directory.

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## copy running-config

To copy the running configuration, use the **copy running-config** command.

**copy running-config** *destination-address* [**all-vdc**]

Syntax	Description
<i>destination-address</i>	Address of the destination directory. Use one of the following directories in the destination address: <ul style="list-style-type: none"> <li>• <b>bootflash:</b></li> <li>• <b>ftp:</b></li> <li>• <b>nvr:</b></li> <li>• <b>scp:</b></li> <li>• <b>sftp:</b></li> <li>• <b>tftp:</b></li> <li>• <b>volatile:</b></li> </ul>
<b>all-vdc</b>	(Optional) Copies to all virtual device contexts (VDC).

**Defaults** None

**Command Modes** EXEC  
Global configuration

**Supported User Roles** network-admin

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to copy the running configuration to the bootflash directory:  
vsg# **copy running-config bootflash:**

Related Commands	Command	Description
	<b>copy startup-config</b>	Copies a startup configuration to a specified destination.

■ **copy scp:**

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## copy scp:

To copy files from the Secure Control Protocol (SCP) directory, use the **copy scp:** command.

**copy scp:***//file-address destination-address*

### Syntax Description

<i>//file-address</i>	Address of the files to copy.
<i>destination-address</i>	Address of the destination directory.
	Use one of the following directories in the destination address:
	<ul style="list-style-type: none"> <li>• <b>bootflash:</b></li> <li>• <b>debug:</b></li> <li>• <b>log:</b></li> <li>• <b>modflash:</b></li> <li>• <b>nvr:</b></li> <li>• <b>running-config</b></li> <li>• <b>startup-config</b></li> <li>• <b>system:</b></li> <li>• <b>volatile:</b></li> </ul>

### Defaults

None

### Command Modes

EXEC  
Global configuration (config)

### Supported User Roles

network-admin  
network-operator

### Command History

Release	Modification
4.2(1)VSG1(1)	This command was introduced.

### Examples

This example shows how to copy files from a remote SCP directory to a local volatile directory:

```
vsg# copy scp://user@209.193.10.11/ps/user-rtg/vsg-dplug.bin volatile:/
```

### Related Commands

Command	Description
<b>copy sftp:</b>	Copies files from the SFTP directory.

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## copy sftp:

To copy files from the Secure File Transfer Protocol (SFTP) directory, use the **copy sftp:** command.

**copy sftp:***//file-address destination-address*

Syntax Description		
	<i>//file-address</i>	Address of the files to copy.
	<i>destination-address</i>	Address of the destination directory.
		Use one of the following directories in the destination address:
		<ul style="list-style-type: none"> <li>• <b>bootflash:</b></li> <li>• <b>debug:</b></li> <li>• <b>log:</b></li> <li>• <b>modflash:</b></li> <li>• <b>nvr:</b></li> <li>• <b>nvram:</b></li> <li>• <b>system:</b></li> <li>• <b>volatile:</b></li> </ul>

Defaults	
	None

Command Modes	
	EXEC
	Global configuration (config)

Supported User Roles	
	network-admin
	network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

Examples	
	This example shows how to transfer a file from a remote SFTP directory to a local bootflash directory:
	<code>vsg# copy sftp://jjones@209.193.10.11/ps/jjones-rtg/vsg-dplug.bin bootflash:/</code>

Related Commands	Command	Description
	<b>copy tftp:</b>	Copies files from the Trivial File Transfer Protocol (TFTP) directory.

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## copy startup-config

To copy the startup configuration, use the **copy startup-config** command.

**copy startup-config** *destination-address* [**all-vdc**]

Syntax	Description
<i>destination-address</i>	Address of the destination directory. Use one of the following directories in the destination address: <ul style="list-style-type: none"> <li>• <b>bootflash:</b></li> <li>• <b>ftp:</b></li> <li>• <b>nvr:</b></li> <li>• <b>scp:</b></li> <li>• <b>sftp:</b></li> <li>• <b>tftp:</b></li> <li>• <b>volatile:</b></li> </ul>
<b>all-vdc</b>	(Optional) Copies to all virtual device contexts (VDC).

Defaults	Description
None	

Command Modes	Description
EXEC	Global configuration

Supported User Roles	Description
network-admin	

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

Examples	Description
This example shows how to copy the startup configuration to the bootflash directory:	

```
vsg# copy startup-config bootflash:
```

Related Commands	Command	Description
	<b>copy running-config</b>	Copies a running configuration to a specified destination.



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## copy system:

To copy files from the file directory, use the **copy system:** command.

**copy system:** *//file-address destination-address*

Syntax Description		
<i>//file-address</i>		Address of the files to copy.
<i>destination-address</i>		Address of the destination directory.
		You use one of the following directories in the destination address:
		<ul style="list-style-type: none"> <li>• <b>bootflash:</b></li> <li>• <b>debug:</b></li> <li>• <b>ftp:</b></li> <li>• <b>log:</b></li> <li>• <b>modflash:</b></li> <li>• <b>nvram:</b></li> <li>• <b>scp:</b></li> <li>• <b>sftp:</b></li> <li>• <b>system:</b></li> <li>• <b>tftp:</b></li> <li>• <b>volatile:</b></li> </ul>

<b>Defaults</b>	None
-----------------	------

<b>Command Modes</b>	EXEC Global configuration (config)
----------------------	---------------------------------------

<b>SupportedUserRoles</b>	network-admin network-operator
---------------------------	-----------------------------------

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

<b>Examples</b>	<p>This example shows how to copy files from a remote file directory to a local bootflash directory:</p> <pre>vsg# copy system://pkim@209.193.10.12/ps/pkim-rich/vsg-dplug.bin bootflash:/</pre>
-----------------	--

■ copy system:

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---

**Related Commands**

<b>Command</b>	<b>Description</b>
<b>copy bootflash:</b>	Copies files to the bootflash directory.

---

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## copy tftp:

To copy files from the Trivial File Transfer Protocol (TFTP) directory, use the **copy tftp:** command.

**copy tftp://file-address destination-address**

Syntax Description	
<i>//file-address</i>	Address of the files to copy.
<i>destination-address</i>	Address of the destination directory.
	Use one of the following directories in the destination address:
	<ul style="list-style-type: none"> <li>• <b>bootflash:</b></li> <li>• <b>debug:</b></li> <li>• <b>log:</b></li> <li>• <b>modflash:</b></li> <li>• <b>nvr:</b></li> <li>• <b>nvram:</b></li> <li>• <b>system:</b></li> <li>• <b>volatile:</b></li> </ul>

Defaults	None
----------	------

Command Modes	EXEC Global configuration (config)
---------------	---------------------------------------

Supported User Roles	network-admin network-operator
----------------------	-----------------------------------

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

Examples	This example shows how to copy files from a remote TFTP directory to a local bootflash directory: <pre>vsg# copy tftp://user@209.193.10.11/ps/user-rtg/vsg-dplug.bin bootflash:/</pre>
----------	---

Related Commands	Command	Description
	<b>copy sftp:</b>	Copies files from the SFTP directory.

■ **copy volatile:**

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## copy volatile:

To copy files from the volatile directory, use the **copy volatile:** command.

**copy volatile:** *//file-address destination-address*

Syntax Description	
<i>//file-address</i>	Address of the file to copy.
<i>destination-address</i>	Address of the destination directory.
	Use one of the following directories in the destination address:
	<ul style="list-style-type: none"> <li>• <b>bootflash:</b></li> <li>• <b>debug:</b></li> <li>• <b>ftp:</b></li> <li>• <b>log:</b></li> <li>• <b>modflash:</b></li> <li>• <b>nvr:</b></li> <li>• <b>nvram:</b></li> <li>• <b>scp:</b></li> <li>• <b>sftp:</b></li> <li>• <b>system:</b></li> <li>• <b>tftp:</b></li> <li>• <b>volatile:</b></li> </ul>

<b>Defaults</b>	None
-----------------	------

<b>Command Modes</b>	EXEC Global configuration (config)
----------------------	---------------------------------------

<b>SupportedUserRoles</b>	network-admin network-operator
---------------------------	-----------------------------------

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

<b>Examples</b>	This example shows how to copy files from a remote volatile directory to a local bootflash directory: vsg# <b>copy volatile://user@209.193.10.10/ws/user-sjc/vsg-dplug.bin bootflash:/</b>
-----------------	---

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---

**Related Commands**

<b>Command</b>	<b>Description</b>
<b>copy bootflash:</b>	Copies files from the bootflash directory.

---

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## debug logfile

To direct the output of the **debug** command to a specified file, use the **debug logfile** command. To revert to the default, use the **no** form of the command.

**debug logfile** *filename* [*size bytes*]

**no debug logfile** *filename* [*size bytes*]

### Syntax Description

<i>filename</i>	Name of the file for <b>debug</b> command output. The filename is alphanumeric, case sensitive, and has a maximum of 64 characters.
<b>size</b>	(Optional) Specifies the size of the logfile in bytes.
<i>bytes</i>	(Optional) Bytes. The range is from 4096 to 10485760.

### Defaults

Default filename: syslogd\_debugs

Default file size: 10485760 bytes

### Command Modes

EXEC

Global configuration (config)

### Supported User Roles

network-admin

network-operator

### Command History

Release	Modification
4.2(1)VSG1(1)	This command was introduced.

### Usage Guidelines

The logfile is created in the log: file system root directory.

Use the **dir log:** command to display the log files.

### Examples

This example shows how to specify a debug logfile:

```
vsg# debug logfile debug_log
```

This example shows how to revert to the default debug logfile:

```
vsg# no debug logfile debug_log
```

### Related Commands

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Command	Description
<b>dir</b>	Displays the contents of a directory.
<b>show debug</b>	Displays the debug configuration.
<b>show debug logfile</b>	Displays the debug logfile contents.

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## debug logging

To enable **debug** command output logging, use the **debug logging** command. To disable debug logging, use the **no** form of this command.

**debug logging**

**no debug logging**

---

**Syntax Description** This command has no arguments or keywords.

---

**Defaults** Disabled

---

**Command Modes** EXEC  
Global configuration (config)

---

**SupportedUserRoles** network-admin

---

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

---



---

**Examples** This example shows how to enable the output logging for the **debug** command:

```
vsg# debug logging
```

This example shows how to disable the output logging for the **debug** command:

```
vsg# no debug logging
```

---

Related Commands	Command	Description
	<b>debug logfile</b>	Configures the logfile for the <b>debug</b> command output.

---



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# delete

To delete the contents of a directory, use the **delete** command.

```
delete {bootflash: | debug: | log: | modflash: | volatile:}
```

Syntax Description		
<b>bootflash:</b>	Specifies the bootflash directory.	
<b>debug:</b>	Specifies the debug directory.	
<b>log:</b>	Specifies the log directory.	
<b>modflash:</b>	Specifies the modflash directory.	
<b>volatile:</b>	Specifies the volatile directory.	

Defaults	
	None

Command Modes	
	EXEC Global configuration (config)

SupportedUserRoles	
	network-admin network-operator

CommandHistory	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

Examples	
	This example shows how to delete the contents of the bootflash directory: <pre>vsg# delete bootflash:</pre>

Related Commands	Command	Description
	<b>copy</b>	Copies files to directories.

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## dir

To display the contents of a directory or file, use the **dir** command.

**dir** [**bootflash:** | **debug:** | **log:** | **modflash:** | **volatile:**]

Syntax Description	
<b>bootflash:</b>	(Optional) Specifies the directory or filename.
<b>debug:</b>	(Optional) Specifies the directory or filename on expansion flash.
<b>log:</b>	(Optional) Specifies the directory or filename on log flash.
<b>modflash:</b>	(Optional) Specifies the directory or filename on module flash.
<b>volatile:</b>	(Optional) Specifies the directory or filename on volatile flash.

Defaults	
	None

Command Modes	
	EXEC Global configuration (config)

SupportedUserRoles	
	network-admin network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

Usage Guidelines	
	Use the <b>pwd</b> command to identify the directory you are currently working in. Use the <b>cd</b> command to change the directory you are currently working in.

Examples	
	This example shows how to display the contents of the bootflash: directory: <pre>vsg# dir bootflash:</pre>

Related Commands	Command	Description
	<b>cd</b>	Changes the current working directory.
	<b>pwd</b>	Displays the current working directory.

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## echo

To echo an argument back to the terminal screen, use the **echo** command.

```
echo [backslash-interpret] [text]
```

Syntax Description	backslash-interpret	(Optional) Interprets any character following a backslash character (\) as a formatting option.
	<i>text</i>	(Optional) Text string to display. The text string is alphanumeric, case sensitive, can contain spaces, and has a maximum length of 200 characters. The text string can also contain references to CLI variables.

**Defaults** Displays a blank line.

**Command Modes** EXEC  
Global configuration (config)

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Usage Guidelines** You can use this command in a command script to display information while the script is running. [Table 1](#) lists the formatting keywords that you can insert in the text when you include the **backslash-interpret** keyword.

**Table 1** Formatting Options for the echo Command

Formatting Option	Description
<b>\b</b>	Specifies back spaces.
<b>\c</b>	Removes the new line character at the end of the text string.
<b>\f</b>	Inserts a form feed character.
<b>\n</b>	Inserts a new line character.
<b>\r</b>	Returns to the beginning of the text line.
<b>\t</b>	Inserts a horizontal tab character.
<b>\v</b>	Inserts a vertical tab character.

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**Table 1**      **Formatting Options for the echo Command (continued)**

Formatting Option	Description
\\	Displays a backslash character.
\nnn	Displays the corresponding ASCII octal character.

### Examples

This example shows how to display a blank line at the command prompt:

```
vsg# echo
vsg#
```

This example shows how to display a line of text at the command prompt:

```
vsg# echo Script run at $(TIMESTAMP).
Script run at 2008-08-12-23.29.24.
vsg#
```

This example shows how to use a formatting option in the text string:

```
vsg# echo backslash-interpret This is line #1. \nThis is line #2.
This is line #1.
This is line #2.
vsg#
```

### Related Commands

Command	Description
<b>run-script</b>	Runs command scripts.

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## end

To return to EXEC mode from any lower-level mode, use the **end** command.

**end**

**Syntax Description** This command has no arguments or keywords.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**SupportedUserRoles** network-admin  
network-operator

CommandHistory	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to enter VNMC policy agent mode and then how to return to EXEC mode:

```
vsg# configure
VSG(config)# vnm-policy-agent
VSG(config-vnm-policy-agent)#
vsg(config-vnm-policy-agent)# end
vsg#
```

Related Commands	Command	Description
	<b>configure</b>	Enters configuration mode.

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## event

To clear the event counter, use the **event** command.

**event manager clear counter** *counter-name*

Syntax	Description
<b>event manager</b>	Places you in the event manager.
<b>clear counter</b>	Clears the counter.
<i>counter-name</i>	Counter name. The text string is alphanumeric, case sensitive, can contain spaces, and has a maximum length of 28 characters.

**Defaults** Displays a blank line.

**Command Modes** EXEC  
Global configuration (config)

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to clear the event counter:  
vsg# **event manager clear counter default**

Related Commands	Command	Description
	<b>show event</b>	Displays event information.

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## event-log service-path

To enable logging debugs for the service-path process, use the **event-log service-path** command. To disable this feature, use the **no** form of this command..

```
event-log service-path {ac {error | info | inst-error | inst-info} | fm {debug | error | info} | sp
{error | info | pkt-detail | pkt-error | pkt-info | vptah-lib-error | vpath-lib-info |
vpath-lib-frag} [terminal]
```

```
no event-log service-path {ac {error | info | inst-error | inst-info} | fm {debug | error | info} | sp
{error | info | pkt-detail | pkt-error | pkt-info | vpath-lib-error | vpath-lib-info |
vpath-lib-frag} [terminal]
```

Syntax Description		
<b>ac</b>		Enables event logging for the AC module.
<b>fm</b>		Enables event logging for the Flow Manager module.
<b>sp</b>		Enables event logging for the service path module.
<b>error</b>		Enables logging for error events.
<b>info</b>		Enables logging for informational events.
<b>inst-error</b>		Enables logging for installation errors.
<b>inst-info</b>		Enables logging for installation information.
<b>debug</b>		Enables debug information.
<b>pkt-detail</b>		Enables display of packet details events.
<b>pkt-error</b>		Enables display of packet errors events.
<b>pkt-info</b>		Enables display of packet information events.
<b>vpath-lib-error</b>		Enables logging of vPath library errors events.
<b>vpath-lib-info</b>		Enables logging of vPath library information events.
<b>vpath-lib-frag</b>		Enables logging of vPath library fragmentation events.
<b>terminal</b>		Enables logging to be displayed at the terminal.

**Defaults** None

**Command Modes** EXEC

**SupportedUserRoles** network-admin

Command History	Release	Modification
	4.2(1)VSG1(2)	This command was modified to include <b>sp {vpath-lib-error   vpath-lib-info   vpath-lib-frag}</b>
	4.2(1)VSG1(1)	This command was introduced.

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### Usage Guidelines

Event logs are written to the process buffer and can be viewed by the **show system internal event-log service-path** command. When the **terminal** option is entered, the event logs are displayed on the terminal.

### Examples

This example shows how to display on the terminal the event logs for the service-path vPath library errors:

```
vsg# event-log service-path sp vpath-lib-error terminal
vsg#
```

### Related Commands

Command	Description
<b>show event-log all</b>	This command displays all the event-log-s turned on in the system.
<b>show system internal event-log service-path</b>	This command displays the debug logs logged as a result of using the <b>event-log service-path sp</b> command.
<b>event-log save</b>	This command saves the event-log configuration across reboots.



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## exit

To exit the current mode, use the **exit** command.

**exit**

---

**Syntax Description** This command has no arguments or keywords.

---

**Defaults** None

---

**Command Modes** EXEC  
Global configuration (config)

---

**SupportedUserRoles** network-admin  
network-operator

---

CommandHistory	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

---

**Examples** This example shows how to exit the current mode:

```
vsg(config)# exit
vsg#
```

---

Related Commands	Command	Description
	<b>end</b>	Places you in EXEC mode.

## ■ find

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# find

To find file names that begin with a character string, use the **find** command.

**find** *filename-prefix*

<b>Syntax Description</b>	<i>filename-prefix</i>	First part or all of a filename. The filename prefix is case sensitive.
<b>Defaults</b>	None	
<b>Command Modes</b>	EXEC Global configuration (config)	
<b>Supported User Roles</b>	network-admin network-operator	
<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	4.2(1)VSG1(1)	This command was introduced.
<b>Usage Guidelines</b>	The <b>find</b> command searches all subdirectories under the current working directory. You can use the <b>cd</b> and <b>pwd</b> commands to navigate to the starting directory.	
<b>Examples</b>	This example shows how to find a file name that has a prefix of "a": vsg# <b>find a</b>	
<b>Related Commands</b>	<b>Command</b>	<b>Description</b>
	<b>pwd</b>	Lists the directory you are currently in.

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## gunzip

To uncompress a compressed file, use the **gunzip** command.

**gunzip** *filename*

Syntax Description	<i>filename</i>	Name of the file.
--------------------	-----------------	-------------------

Defaults	None
----------	------

Command Modes	EXEC Global configuration (config)
---------------	---------------------------------------

SupportedUserRoles	network-admin network-operator
--------------------	-----------------------------------

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

Usage Guidelines	The compressed filename must have the .gz extension. You do not have to enter the .gz extension as part of the filename. The Cisco NX-OS software uses Lempel-Ziv 1977 (LZ77) coding for compression.
------------------	---

Examples	This example shows how to uncompress a compressed file: vsg# <b>gunzip run_cnfg.cfg</b>
----------	--

Related Commands	Command	Description
	<b>dir</b>	Displays the directory contents.
	<b>gzip</b>	Compresses a file.

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## gzip

To compress a file, use the **gzip** command.

**gzip** *filename*

<b>Syntax Description</b>	<i>filename</i>	File name.
---------------------------	-----------------	------------

<b>Defaults</b>	None	
-----------------	------	--

<b>Command Modes</b>	EXEC Global configuration (config)	
----------------------	---------------------------------------	--

<b>SupportedUserRoles</b>	network-admin network-operator	
---------------------------	-----------------------------------	--

<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	4.2(1)VSG1(1)	This command was introduced.

<b>Usage Guidelines</b>	After you use this command, the file is replaced with the compressed filename that has the .gz extension. The Cisco NX-OS software uses Lempel-Ziv 1977 (LZ77) coding for compression.
-------------------------	--

<b>Examples</b>	This example shows how to compress a file: <pre>vsg# gzip run_cfg.cfg</pre>
-----------------	--

<b>Related Commands</b>	<b>Command</b>	<b>Description</b>
	<b>dir</b>	Displays the directory contents.
	<b>gunzip</b>	Uncompresses a compressed file.

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# install

To install an image upgrade, use the **install** command.

```
install all { iso | kickstart }
```

Syntax Description	iso	kickstart
	Specifies an ISO image.	Specifies a kickstart image.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to install an ISO image upgrade:

```
vsg# install all iso bootflash://smith@209.165.200.226/test
```

Related Commands	Command	Description
	show install	Displays the software installation impact between two images.

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## interface

To configure an interface on the Cisco VSG, use the **interface** command. To remove an interface, use the **no** form of the command.

**interface** { **data** *number* | **ethernet** *slot/port* | **loopback** *number* | **mgmt** *number* | **port-channel** *channel-number* }

**no interface** { **data** *number* | **ethernet** *slot/port* | **loopback** *number* | **mgmt** *number* | **port-channel** *channel-number* }

### Syntax Description

<b>data</b>	Specifies data interface number.
<i>number</i>	The number is 0.
<b>ethernet</b>	Specifies the slot and port number for the Ethernet interface.
<i>slot/port</i>	Slot and port number of the interface.
<b>loopback</b>	Specifies a virtual interface number.
<i>number</i>	The range is from 0 to 1023.
<b>mgmt</b>	Specifies the management interface number.
<i>number</i>	The number is 0.
<b>port-channel</b>	Specifies a port-channel interface number.
<i>channel-number</i>	The range is from 0 to 1023.

### Defaults

None

### Command Modes

Global configuration (config)

### Supported User Roles

network-admin  
network-operator

### Command History

Release	Modification
4.2(1)VSG1(1)	This command was introduced.

### Examples

This example shows how to configure an interface:

```
vsg# interface data 0
```

This example shows how to remove an interface:

```
vsg# no interface data 0
```

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---

**Related Commands**

<b>Command</b>	<b>Description</b>
<b>show interface</b>	Displays the interface and IP details, including Rx and Tx packets or bytes.

---

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## ip

To configure IP details, use the **ip** command. To revert to the default settings, use the **no** form of this command.

**ip** { **access-list match-local-traffic** | **arp timeout** *seconds* | **domain-list** *name* | **domain-lookup** | **host** *name* | **igmp** | **name-server** | **route** | **routing event-history** | **tcp** | **tftp path-mtu-discovery** }

**no ip** { **access-list match-local-traffic** | **arp timeout** *seconds* | **domain-list** *name* | **domain-lookup** | **host** *name* | **igmp** | **name-server** | **route** | **routing event-history** | **tcp** | **tftp path-mtu-discovery** }

Syntax Description		
<b>access-list match-local-traffic</b>		Specifies the access-list matching for locally generated traffic.
<b>arp timeout</b> <i>seconds</i>		Specifies the Address Resolution Protocol (ARP) timeout. The range is from 60 to 28800.
<b>domain-list</b> <i>name</i>		Specifies an additional domain name. The name has a maximum of 64 characters.
<b>domain-lookup</b>		Enables or disables the domain name server (DNS).
<b>host</b> <i>name</i>		Specifies an entry to the IP hostname table.
<b>igmp</b>		Specifies event-history buffers or snooping in Internet Gateway Management Protocol (IGMP) global configuration mode.
<b>name-server</b>		Specifies the name-server address, IPv4 or IPv6.
<b>route</b>		Specifies the route IP prefix information.
<b>routing event-history</b>		Specifies the logs for routing events.
<b>tcp</b>		Configures global Transfer Control Protocol (TCP) parameters.
<b>tftp path-mtu-discovery</b>		Enables or disables path-MTU discovery on Trivial File Transfer Protocol (TFTP).

**Defaults** 1500

**Command Modes** Global configuration

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.



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---

**Examples**

This example shows the **ip** command being used to configure IP details:

```
vsg# configure  
vsg(config)# ip host testOne 209.165.200.231
```

---

**Related Commands**

<b>Command</b>	<b>Description</b>
<b>show ip</b>	Displays IP details.

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## line

To specify the line configuration, use the **line** command.

```
line {com1 | console | vty}
```

Syntax Description	com1	Specifies the COM1 port and enters the COM1 port configuration mode.
	console	Specifies the console port and enters the console port configuration mode.
	vtv	Specifies the virtual terminal and enters the line configuration mode.

**Command Default** None

**Command Modes** Global configuration (config)

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to enter the COM1 port configuration mode:

```
vsg(config)# line com1
vsg(config-com1)#
```

This example shows how to enter the console port configuration mode:

```
vsg(config)# line console
vsg(config-console)#
```

This example shows how to enter the line configuration mode:

```
vsg(config)# line vty
vsg(config-line)#
```

Related Commands	Command	Description
	show line	Displays information about the COM1 port, console port configuration, and the line configuration.

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## logging

To configure logging, use the **logging** command.

```
logging {abort | commit | console severity-level | distribute | event | level | logfile name | module
severity-level | monitor severity-level | server | source-interface loopback number |
timestamp time-type}
```

Syntax	Description
<b>abort</b>	Discards the logging Cisco Fabric Services (CFS) distribution session in progress without committing and then releases the lock.
<b>commit</b>	Applies the pending configuration pertaining to the logging CFS distribution session in progress in the fabric and then releases the lock.
<b>console</b> <i>severity-level</i>	Enables logging messages to the console session. To disable, use the <b>no logging console</b> command. The range is from 0 to 7.
<b>distribute</b>	Enables fabric distribution using CFS distribution for logging. To disable, use the <b>no logging distribute</b> command.
<b>event</b>	Logs interface events. To disable, use the <b>no logging event</b> command.
<b>level</b>	Enables logging of messages from a named facility at a specified severity level. To disable, use the <b>no logging level</b> command.
<b>logfile</b> <i>name</i>	Configures the specified log file that stores system messages. To disable, use the <b>no logging logfile</b> command.
<b>module</b> <i>severity-level</i>	Starts logging of module messages to the log file. To disable, use the <b>no logging module</b> command. The range is from 0 to 7.
<b>monitor</b> <i>severity-level</i>	Enables the logging of messages to the monitor (terminal line). To disable, use the <b>no logging monitor</b> command. The range is from 0 to 7.
<b>server</b>	Designates and configures a remote server for logging system messages. To disable, use the <b>no logging server</b> command.
<b>source-interface</b> <b>loopback</b> <i>number</i>	Enables a source interface for the remote syslog server. To disable, use the <b>no logging source-interface</b> command. The range is from 0 to 1023.
<b>timestamp</b> <i>time-type</i>	Sets the unit of time used for the system messages timestamp, in microseconds, milliseconds, or seconds. To disable, use the <b>no logging timestamp</b> command.

Defaults None

Command Modes Global configuration (config)

Supported User Roles network-admin  
network-operator

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---

**Command History**

Release	Modification
4.2(1)VSG1(1)	This command was introduced.

---

**Examples**

This example shows how to discard logging a CFS distribution session in progress:

```
vsg# configure
vsg(config)# logging abort
vsg(config)#
```

---

**Related Commands**

Command	Description
<b>show logging</b>	Displays logging information.

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## match

To specify a condition used in an object-group, use the **match** command. To remove a condition in an object group, use the **no** version of this command.

```
match {eq | gt | lt | prefix | contains | in-range | neq | not-in-range} attribute-value1
      [attribute-value2]
```

Syntax Description		
<b>eq</b>		Equal to a number or exactly matching a string.
<b>gt</b>		Greater than.
<b>lt</b>		Less than.
<b>prefix</b>		Specifies a prefix of a string or an IP address.
<b>contains</b>		Contains a substring.
<b>in-range</b>		A range of two integers, dates, times, or IP addresses.
<b>neq</b>		Not equal to a number or not exactly matched with a string.
<b>not-in-range</b>		Negates the <b>in-range</b> operator.
<i>attribute-value1</i>		The value of the attribute such as 10.10.10.10 or name of an object-group such as "ipaddr-group."
<i>attribute-value2</i>		(Optional) The value of an attribute or netmask of a network address.

**Command Default** None

**Command Modes** Policy configuration (config-policy)

**Supported User Roles** network-admin

Command History	Release	Modification
	4.2(1)VSG1(2)	This command was introduced.

**Usage Guidelines** When multiple condition statements are used in an object-group, all conditions are considered to be OR'd during policy evaluation. The following operators require at least two attribute values:

- **prefix**—When applied against a subnet mask (for example, **prefix** 10.10.10.1 255.255.255.0)
- **in-range**—For all types of attribute values (for example, **in-range** 10.10.10.1 10.10.10.200)
- **not-in-range**—For all types of attribute values (for example, **not-in-range** 10.10.10.1 10.10.10.200)

Attribute values can be any of the following:

- Integer
- Integer range

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- IP address, or a netmask
- IP address range
- String

**Examples**

This example shows how to set conditions to be used in an object group:

```
vsg(config-policy)# match 1 eq 80
vsg(config-policy)# match 2 eq 443
vsg(config-policy)# exit
vsg(config)#
```

**Related Commands**

Command	Description
<b>object-group</b>	Enters the object-group configuration submode.

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## mkdir (VSG)

To create a new directory, use the **mkdir** command.

```
mkdir {bootflash: | debug: | modflash: | volatile: }
```

Syntax Description	
<b>bootflash:</b>	Specifies bootflash: as the directory name.
<b>debug:</b>	Specifies debug: as the directory name.
<b>modflash:</b>	Specifies modflash: as the directory name.
<b>volatile:</b>	Specifies volatile: as the directory name.

Defaults	
	None

Command Modes	
	EXEC
	Global configuration (config)

SupportedUserRoles	
	network-admin

Command History	Release	Modification
	4.0(4)SV1(1)	This command was introduced.
	4.2(1)VSG1(1)	This command was introduced for the Cisco VSG.

Examples	
	This example shows how to create the bootflash: directory:
	<pre>vsg# mkdir bootflash:</pre>

Related Commands	Command	Description
	<b>cd</b>	Changes the current working directory.
	<b>dir</b>	Displays the directory contents.
	<b>pwd</b>	Displays the name of the current working directory.

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## ntp sync-retry (VSG)

To retry synchronization with configured servers, use the **ntp sync-retry** command. To stop this process, use the **no** form of this command.

**ntp sync-retry**

**no ntp sync-retry**

---

**Syntax Description** This command has no arguments or keywords.

---

**Defaults** Enabled

---

**Command Modes** EXEC  
Global configuration (config)

---

**SupportedUserRoles** network-admin

---

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced for the Cisco VSG.

---



---

**Examples** This example shows how to enable the Network Time Protocol (NTP) synchronization retry:

```
vsg# ntp sync-retry
```

This example shows how to disable the NTP synchronization retry:

```
vsg# no ntp sync-retry
```

---

Related Commands	Command	Description
	show clock	Displays the time and date.

---



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## object-group

To reduce the number of rule configurations to accommodate the “or” conditions for the HTTP/HTTPS ports, use the **object-group** command. To remove the given object group object and all the relevant configurations, use the **no** form of this command.

**object-group** *group-name attribute-name*

<b>Syntax Description</b>	<i>group-name</i>	Name of the object group.
	<i>attribute-name</i>	Attribute designated for the group. The attribute used in an object group must be a neutral attribute.
<b>Command Default</b>	None	
<b>Command Modes</b>	Cisco VSG global configuration (config)	
<b>SupportedUserRoles</b>	network-admin	
<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	4.2(1)VSG1(2)	This command was introduced.
<b>Usage Guidelines</b>	This command enters the object-group submode. This command can be used to build a group of attribute values so the group can be used in a condition statement later on with the operator <b>member</b> .	
<b>Examples</b>	This example shows how to use the <b>object-group</b> command:	
	<pre>vsg(config)# <b>object-group</b> http_ports net.port vsg(config-object-group)#</pre>	
<b>Related Commands</b>	<b>Command</b>	<b>Description</b>
	<b>match</b>	Specifies a condition used in an object group.

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## password strength-check

To enable password strength checking, use the **password strength-check** command. To disable the password strength checking, use the **no** form of this command.

**password strength-check**

**no password strength-check**

**Syntax Description** This command has no arguments or keywords.

**Defaults** This feature is enabled by default.

**Command Modes** Global configuration (config)

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to enable the checking of the password strength:

```
vsg# config t
vsg(config)# password strength-check
vsg(config)#
```

This example shows how to disable the checking of the password strength:

```
vsg# config t
vsg(config)# no password strength-check
vsg(config)#
```

Related Commands	Command	Description
	<b>show password strength-check</b>	Displays the configuration for checking the password strength.
	<b>username</b>	Creates a user account.
	<b>role name</b>	Names a user role and places you in role configuration mode for that role.

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## policy

To enter the policy configuration submode for constructing a firewall policy on the Cisco VSG, use the **policy** command. To remove the given policy object and all its bindings with other policy objects, use the **no** form of this command.

**policy** *policy-name*

<b>Syntax Description</b>	<i>policy-name</i> Policy-map object.				
<b>Command Default</b>	None				
<b>Command Modes</b>	Global configuration (config)				
<b>SupportedUserRoles</b>	network-admin				
<b>Command History</b>	<table border="1"> <thead> <tr> <th>Release</th> <th>Modification</th> </tr> </thead> <tbody> <tr> <td>4.2(1)VSG1(2)</td> <td>This command was introduced.</td> </tr> </tbody> </table>	Release	Modification	4.2(1)VSG1(2)	This command was introduced.
Release	Modification				
4.2(1)VSG1(2)	This command was introduced.				

**Usage Guidelines** Use the **policy** command to enable the policy configuration subcommand mode when the variable *policy-name* is used to specify the policy-map object.

The **policy** command configuration submode provides the following functions:

- Binding rules to a given policy.
- Creating rank or precedence among all the bound rules.
- Binding zones to a given policy.

### Examples

This example shows how to set a 3-tiered policy object:

```
vsg(config)# policy 3-tiered-policy
vsg(config-policy)# rule inet_web_rule order 10
vsg(config-policy)# rule office_app_ssh_rule order 20
vsg(config-policy)# rule web_app_rule order 40
vsg(config-policy)# rule app_db_rule order 50
vsg(config-policy)# rule default_deny_rule order 60
vsg(config-policy)# exit
vsg(config)#
```

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Related Commands	Command	Description
	<b>rule</b>	Configures the binding of the policy with a given rule.
	<b>zone</b>	Configures the binding of the policy with a given zone.

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## pwd

To view the current directory, use the **pwd** command.

**pwd**

**Syntax Description** This command has no arguments or keywords.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	4.0(4)SV1(1)	This command was introduced.
	4.2(1)VSG1(1)	This command was introduced for the Cisco VSG.

**Examples** This example shows how to view the current directory:

```
vsg# pwd
bootflash:
vsg#
```

Related Commands	Command	Description
	<b>cd</b>	Changes the current directory.

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## role

To configure a user role, use the **role** command. To delete a user role, use the **no** form of this command.

```
role { feature-group feature-group-name | name { name | network-observer } }
```

```
no role { feature-group name | [name name | network-observer] }
```

### Syntax Description

<b>feature-group</b> <i>name</i>	Specifies a role for a feature group. The name can be any alphanumeric string up to 32 characters.
<b>name</b> <i>name</i>	Specifies the role name. The name can be any alphanumeric string up to 16 characters.
<b>network-observer</b>	Specifies the user role.

### Defaults

This feature is enabled by default.

### Command Modes

Global configuration

### Supported User Roles

network-admin  
network-operator

### Command History

Release	Modification
4.2(1)VSG1(1)	This command was introduced.

### Examples

This example shows how to configure a user role for a feature group:

```
vsg# configure
vsg(config)# role feature-group name abc
vsg(config-role-featuregrp)#
```

### Related Commands

Command	Description
<b>show role</b>	Displays the role configuration.
<b>role name</b>	Names a user role and places you in role configuration mode for that role.

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## reload

To reboot both the primary and secondary Cisco VSG in a redundant pair, use the **reload** command.

**reload**

**Syntax Description** This command has no arguments or keywords.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**SupportedUserRoles** network-admin

Command History	Release	Modification
	4.0(4)SV1(1)	This command was introduced.
	4.2(1)VSG1(1)	This command was introduced for the Cisco VSG.

**Usage Guidelines** To reboot only one of the Cisco VSGs in a redundant pair, use the **reload module** command instead. Before reloading, use the **copy running-configuration to startup-configuration** command to preserve any configuration changes made since the previous reboot or restart. After reloading it, you must manually restart the Cisco VSG.

**Examples** This example shows how to reload both the primary and secondary Cisco VSG:

```
vsg(config)# reload
!!!WARNING! there is unsaved configuration!!!
This command will reboot the system. (y/n)? [n] y
2010 Dec 20 11:33:35 bl-vsg %PLATFORM-2-PFM_SYSTEM_RESET: Manual system restart from
Command Line Interface
```

Related Commands	Command	Description
	<b>reload module</b>	Reloads the specified Cisco VSG (1 or 2) in a redundant pair.

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## reload module

To reload one of the Cisco VSGs in a redundant pair, use the **reload module** command.

**reload module** *module* [**force-dnld**]

Syntax Description		
<i>module</i>		The module number (use 1 for the primary Cisco VSG or 2 for the secondary Cisco VSG).
<b>force-dnld</b>		(Optional) Reboots the specified module to force NetBoot and image download.

Defaults	None
----------	------

Command Modes	EXEC Global configuration (config)
---------------	---------------------------------------

SupportedUserRoles	network-admin
--------------------	---------------

Command History	Release	Modification
	4.0(4)SV1(1)	This command was introduced.
	4.2(1)VSG1(1)	This command was introduced for the Cisco VSG.

Usage Guidelines	<p>To reboot both the Cisco VSGs in a redundant pair, use the <b>reload</b> command instead.</p> <p>Before reloading, use the <b>copy running-configuration to startup-configuration</b> command to preserve any configuration changes made since the previous reboot or restart.</p> <p>After reloading it, you must manually restart the Cisco VSG.</p>
------------------	---

Examples	This example shows how to reload Cisco VSG 2, the secondary Cisco VSG in a redundant pair:
----------	--

```
vsg# reload module 2
!!!WARNING! there is unsaved configuration!!!
This command will reboot the system. (y/n)? [n] y
2010 Dec 20 11:33:35 bl-vsg %PLATFORM-2-PFM_SYSTEM_RESET: Manual system restart from
Command Line Interface
```

Related Commands	Command	Description
	<b>show version</b>	Displays information about the software version.
	<b>reload</b>	Reboots both the primary and secondary Cisco VSG.



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## restart

To manually restart a component, use the **restart** command. To disable manual restart, use the **no** form of this command.

**restart**

**no restart**

**Syntax Description** This command has no arguments or keywords.

**Command Default** Disabled

**Command Modes** EXEC

**Supported User Roles** network-admin

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Usage Guidelines** Do not use this command unless you are absolutely certain that there is no one else using the system.

**Examples** This example shows how to restart the Cisco VSG:

```
vsg# restart
```

Related Commands	Command	Description
	reload	Reboots the entire device.

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## rmdir (VSG)

To remove a directory, use the **rmdir** command.

```
rmdir { bootflash: | debug: | modflash: | volatile: }
```

### Syntax Description

<b>bootflash:</b>	Deletes the bootflash: directory.
<b>debug:</b>	Deletes the debug: directory.
<b>modflash:</b>	Deletes the modflash: directory.
<b>volatile:</b>	Deletes the volatile: directory.

### Defaults

Removes the directory from the current working directory.

### Command Modes

EXEC  
Global configuration (config)

### Supported User Roles

network-admin

### Command History

Release	Modification
4.2(1)VSG1(1)	This command was introduced.

### Examples

This example shows how to remove the bootflash directory:

```
vsg# rmdir bootflash:
```

### Related Commands

Command	Description
<b>cd</b>	Changes the current working directory.
<b>dir</b>	Displays the directory contents.
<b>pwd</b>	Displays the name of the current working directory.

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## rule

To enter the configuration submode to build a firewall rule that consists of multiple conditions and actions, use the **rule** command. To remove the given rule object and all the relevant configurations, use the **no** form of this command.

**rule** *rule-name*

<b>Syntax Description</b>	<i>rule-name</i>	Specifies a rule object.
<b>Command Default</b>	None	
<b>Command Modes</b>	Global configuration (config)	
<b>Supported User Roles</b>	network-admin	
<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	4.2(1)VSG1(2)	This command was introduced.

**Usage Guidelines** Use the **rule** command to enter the rule configuration submode. The *rule-name* variable is used to specify the rule object that is to be configured.

**Examples** This example shows how to build firewall rules on the Cisco VSG:

```
vsg(config)# rule inet_web_rule
vsg(config-rule)# condition 1 dst.zone.name eq web_servers
vsg(config-rule)# condition 2 dst.net.port member_of http_ports
vsg(config-rule)# action permit
vsg(config-rule)# exit

vsg(config)# rule office_app_ssh_rule
vsg(config-rule)# condition 1 dst.zone.name eq app_servers
vsg(config-rule)# condition 2 src.net.ip-address prefix 192.10.1.0 \
255.255.255.0
vsg(config-rule)# condition 3 dst.net.port eq 22
vsg(config-rule)# action permit
vsg(config-rule)# exit

vsg(config)# rule web_app_https_rule
vsg(config-rule)# condition 1 src.zone.name eq web_servers
vsg(config-rule)# condition 2 dst.zone.name eq app_servers
vsg(config-rule)# condition 3 dst.net.port member_of http_ports
vsg(config-rule)# action permit
vsg(config-rule)# exit

vsg(config)# rule app_db_rule
```

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```

vsg(config-rule)# condition 1 src.zone.name eq app_servers
vsg(config-rule)# condition 2 dst.zone.name eq db_servers
vsg(config-rule)# action permit
vsg(config-rule)# exit

vsg(config)# rule default_deny_rule
vsg(config-rule)# action 1 deny
vsg(config-rule)# action 2 log
vsg(config-rule)# exit

```

**Related Commands**

<b>Command</b>	<b>Description</b>
<b>condition</b>	Specifies an condition statement used in a rule.
<b>action</b>	Specifies the actions to be executed when traffic characteristics match with the associated rule.

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## run-script (VSG)

To run a command script that is saved in a file, use the **run-script** command.

```
run-script [bootflash: [> [bootflash: | ftp: | scp: | sftp: | tftp: | volatile:] | >> [bootflash: | ftp: |
scp: | sftp: | tftp: | volatile:] | | [cut | diff | egrep | grep | head | human | last | less | no-more |
sed | sort | sscp | tr | uniq | vsh | wc | xml | begin | count | end | exclude | include] | volatile:
 [> [bootflash: | ftp: | scp: | sftp: | tftp: | volatile:] | >> [bootflash: | ftp: | scp: | sftp: | tftp: |
volatile:] | | [cut | diff | egrep | grep | head | human | last | less | no-more | sed | sort | sscp | tr
| uniq | vsh | wc | xml | begin | count | end | exclude | include] ] [filename]
```

### Syntax Description

<b>bootflash:</b>	(Optional) Indicates that the file containing the command script is located in the bootflash file system.
<b>&gt;</b>	(Optional) Redirects the output to a file.
<b>bootflash:</b>	(Optional) Designates the destination filesystem path; in this case, the bootflash: directory.
<b>ftp:</b>	(Optional) Designates the destination filesystem path; in this case, the ftp: directory.
<b>scp:</b>	(Optional) Designates the destination filesystem path; in this case, the scp: directory.
<b>sftp:</b>	(Optional) Designates the destination filesystem path; in this case, the sftp: directory.
<b>tftp:</b>	(Optional) Designates the destination filesystem path; in this case, the tftp: directory.
<b>volatile:</b>	(Optional) Indicates that the file containing the command script is located in the volatile file system.
<b>&gt;&gt;</b>	(Optional) Redirects the output to a file in append mode.
<b> </b>	(Optional) Pipes the command output to a filter.
<b>volatile:</b>	(Optional) Designates the destination filesystem path; in this case, the volatile: directory.
<b>cut</b>	(Optional) Prints selected parts of lines.
<b>diff</b>	(Optional) Shows difference between current and previous invocation (creates temp files— remove them with the <b>diff-clean</b> command and do not use it on commands with big outputs, such as <b>show tech</b> )
<b>egrep</b>	(Optional) Prints lines matching a pattern.
<b>grep</b>	(Optional) Prints lines matching a pattern.
<b>head</b>	(Optional) Displays only the first lines.
<b>human</b>	(Optional) Provides command output in human readable format (if permanently set to XML, otherwise it turns on XML for the next command).
<b>last</b>	(Optional) Displays only the last lines.
<b>less</b>	(Optional) Designates filter for paging.
<b>no-more</b>	(Optional) Turns off the pagination for command output.
<b>sed</b>	(Optional) Enables the stream editor (SED).
<b>sort</b>	(Optional) Enables the stream sorter.
<b>sscp</b>	(Optional) Enables the stream secure copy (SSCP).
<b>tr</b>	(Optional) Translates, squeezes, and/or deletes characters.
<b>uniq</b>	(Optional) Discards all but one of successive identical lines.
<b>vsh</b>	(Optional) Enables the shell that understands CLI commands.

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<b>wc</b>	(Optional) Enables word count, line count, and character count.
<b>xml</b>	(Optional) Enables output in XML format (according to .xsd definitions).
<b>begin</b>	(Optional) Begins with the line that matches the variable included after the command keyword.
<b>count</b>	(Optional) Enables count of the number of lines.
<b>end</b>	(Optional) Ends display with the line that matches the string input after the command keyword.
<b>exclude</b>	(Optional) Excludes the lines that match the string input after the command keyword.
<b>include</b>	(Optional) Includes the lines that match the string input after the command keyword.
<i>filename</i>	(Optional) The name of the file containing the command script. The name is case sensitive.

### Defaults

None

### Command Modes

EXEC

Global configuration (config)

### SupportedUserRoles

network-admin

network-operator

### Command History

Release	Modification
4.2(1)VSG1(1)	This command was introduced.

### Examples

This example shows how to run a command script that is saved in a file called Sample:

```
vsg(config)# run-script volatile:Sample
```

### Related Commands

Command	Description
<b>cd</b>	Changes the current working directory.
<b>copy</b>	Copies files.
<b>dir</b>	Displays the contents of the working directory.
<b>pwd</b>	Displays the name of the present working directory (pwd).

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## send

To send a message to an open session, use the **send** command.

```
send {message | session device message}
```

Syntax Description		
<i>message</i>		Message.
<b>session</b>		Specifies a specific session.
<i>device</i>		Device type.

Defaults	
	None

Command Modes	
	EXEC Global configuration (config)

SupportedUserRoles	
	network-admin network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

Examples	
	This example shows how to send a message to an open session: <pre>vsg# send session sessionOne testing</pre> <pre>vsg#</pre>

Related Commands	Command	Description
	<b>show banner</b>	Displays a banner.

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## setup

To use the basic system configuration dialog for creating or modifying a configuration file, use the **setup** command.

**setup**

---

**Syntax Description** This command has no arguments or keywords.

---

**Defaults** None

---

**Command Modes** EXEC  
Global configuration (config)

---

**SupportedUserRoles** network-admin

---

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

---



---

**Usage Guidelines** The Basic System Configuration Dialog assumes the factory defaults.

All changes made to your configuration are summarized for you at the completion of the setup sequence with an option to save the changes or not.

You can exit the setup sequence at any point by pressing **Ctrl-C**.

---

**Examples** This example shows how to use the setup command to create or modify a basic system configuration:

```
vsg# setup
```

```
Enter the domain id<1-4095>: 400
```

```
Enter HA role[standalone/primary/secondary]: standalone
```

```
[#####] 100%
```

```
---- Basic System Configuration Dialog ----
```

```
This setup utility will guide you through the basic configuration of
the system. Setup configures only enough connectivity for management
of the system.
```

```
*Note: setup is mainly used for configuring the system initially,
when no configuration is present. So setup always assumes system
```



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defaults and not the current system configuration values.

Press Enter at anytime to skip a dialog. Use ctrl-c at anytime to skip the remaining dialogs.

Would you like to enter the basic configuration dialog (yes/no): y

Create another login account (yes/no) [n]: n

Configure read-only SNMP community string (yes/no) [n]: n

Configure read-write SNMP community string (yes/no) [n]: n

Enter the vsg name : vsg

Continue with Out-of-band (mgmt0) management configuration? (yes/no) [y]:

Mgmt0 IPv4 address :

Configure the default gateway? (yes/no) [y]: n

Configure advanced IP options? (yes/no) [n]:

Enable the telnet service? (yes/no) [y]:

Enable the ssh service? (yes/no) [n]:

Configure the ntp server? (yes/no) [n]:

Configure vem feature level? (yes/no) [n]:

Configure svcs domain parameters? (yes/no) [y]:

Enter SVS Control mode (L2 / L3) : 12

Invalid SVS Control Mode

Enter SVS Control mode (L2 / L3) : L2

Enter control vlan <1-3967, 4048-4093> : 400

Enter packet vlan <1-3967, 4048-4093> : 405

The following configuration will be applied:

```
vsgname vsg
telnet server enable
no ssh server enable
svs-domain
  svcs mode L2
  control vlan 400
  packet vlan 405
  domain id 400
vlan 400
vlan 405
```

Would you like to edit the configuration? (yes/no) [n]:

Use this configuration and save it? (yes/no) [y]: n

vsgvsgvsg#

### Related Commands

Command	Description
<b>show running-config</b>	Displays the running configuration.

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# sleep

To set a sleep time, use the **sleep** command.

**sleep** *time*

Syntax Description	<i>time</i>	Sleep time, in seconds. The range is from 0 to 2147483647.
--------------------	-------------	--

Defaults	Sleep time is not set.
----------	------------------------

Command Modes	EXEC Global configuration (config)
---------------	---------------------------------------

Supported User Roles	network-admin network-operator
----------------------	-----------------------------------

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

Usage Guidelines	When you set <i>time</i> to 0, sleep is disabled.
------------------	---

Examples	This example shows how to set a sleep time:
----------	---

```
vsg# sleep 100
vsg#
```

This example shows how to disable sleep:

```
vsg# sleep 0
vsg#
```

Related Commands	Command	Description
	<b>reload</b>	Reboots the Cisco VSG.

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## snmp-server

To configure the Simple Network Management Protocol (SNMP) values, use the **snmp-server** command. To revert to default, use the **no** form of this command.

```
snmp-server {aaa-user cache-timeout seconds | community word | contact | context word |
counter | enable traps | globalEnforcePriv | host | location name | mib community-map
name | protocol | source-interface | tcp-session auth | user name}
```

```
no snmp-server {aaa-user cache-timeout seconds | community word | contact | context word |
counter | enable traps | globalEnforcePriv | host | location name | mib community-map
name | protocol | source-interface | tcp-session auth | user name}
```

Syntax Description		
<b>aaa-user cache-timeout seconds</b>	Configures an SNMP timeout value for synchronized AAA users. To revert to the default, use <b>no snmp-server aaa-user cache-timeout</b> . The range is from 1 to 86400.	
<b>community word</b>	Creates an SNMP community name and assigns access privileges for the community. To remove the community or its access privileges, use the <b>no snmp-server community</b> command. The maximum number of characters is 32.	
<b>contact</b>	Configure the sysContact, which is the SNMP contact name. To remove or modify the sysContact, use the <b>no snmp-server contact</b> command.	
<b>context word</b>	Configures SNMP context name to logical network entity mapping. To remove the context, use the <b>no snmp-server context</b> command. The maximum number of characters is 32.	
<b>counter</b>	Enables the SNMP cache counter and sets the timeout. To remove the counter, use the <b>no snmp-server counter</b> command.	
<b>enable traps</b>	Enables SNMP notifications for traps of module notifications. To disable, use the <b>no snmp-server enable traps</b> command.	
<b>globalEnforcePriv</b>	Globally enforces privacy for all SNMP users. To disable, use the <b>no snmp-server globalEnforcePriv</b> command.	
<b>host</b>	Configures a host receiver for SNMPv1 or SNMPv2c traps. To remove the host, use the <b>no snmp-server host</b> command.	
<b>location name</b>	Configures the sysLocation, which is the SNMP location name. To remove the sysLocation, use the <b>no snmp-server location</b> command. The maximum number of characters is 32.	
<b>mib community-map name</b>	Configures the SNMP MIB community-map. To remove, use the <b>no snmp-server mib community-map</b> command. The maximum number of characters is 32.	
<b>protocol</b>	Enables SNMP protocol operations. To disable, use the <b>no snmp-server protocol</b> command.	
<b>source-interface</b>	Configure the SNMP source interface through which notifications are sent. To remove the notifications, use the <b>no snmp-server source-interface</b> command.	
<b>tcp-session auth</b>	Enables a one-time authentication for SNMP over a TCP session. To disable authentication, use the <b>no snmp-server tcp-session auth</b> command.	
<b>user name</b>	Defines a user who can access the SNMP engine. To deny access, use the <b>no snmp-server user</b> command. The maximum number of characters is 32.	

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**Defaults** None

**Command Modes** Global configuration (config)

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to configure the AAA user synchronization timeout value:

```
vsg# configure
vsg(config)# snmp-server aaa-user cache-timeout 6000
vsg(config)#
```

Related Commands	Command	Description
	<b>show snmp</b>	Displays information about SNMP.

***Send document comments to [vsg-docfeedback@cisco.com](mailto:vsg-docfeedback@cisco.com).***

## ssh

To create a Secure Shell (SSH) session, use the **ssh** command.

```
ssh {hostname| connect | name}
```

Syntax Description	hostname	Hostname or user@hostname for the SSH session. The hostname is not case sensitive. The maximum number of characters is 64.
	<b>connect</b>	Connects to a named remote host.
	<b>name</b>	Specifies the name of the SSH connection.

Defaults	None
----------	------

Command Modes	EXEC
---------------	------

Supported User Roles	network-admin network-operator
----------------------	-----------------------------------

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

Usage Guidelines	Cisco NX-OS software supports SSH version 2.
------------------	--

Examples	This example shows how to start an SSH session:
----------	---

```
vsg# ssh 10.10.1.1 vrf management
The authenticity of host '10.10.1.1 (10.10.1.1)' can't be established.
RSA key fingerprint is 9b:d9:09:97:f6:40:76:89:05:15:42:6b:12:48:0f:d6.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '10.10.1.1' (RSA) to the list of known hosts.
User Access Verification
Password:
```

Related Commands	Command	Description
	<b>clear ssh session</b>	Clears SSH sessions.
	<b>ssh server enable</b>	Enables the SSH server.

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## ssh key

To generate a secure-shell (SSH) session key with a specific security configuration, use the **ssh key** command.

```
ssh key {dsa | rsa}
```

Syntax Description	Parameter	Description
	<b>dsa</b>	Generates DSA security keys. There is an option to force the generation of keys, even if the previous ones are present.
	<b>rsa number</b>	Generates RSA security keys at a specified level of bits. The range is 768 to 2048.

Defaults	Value
	None

Command Modes	Mode
	Global configuration

Supported User Roles	Role
	network-admin
	network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

Usage Guidelines	Guideline
	Cisco NX-OS software supports SSH version 2.

Examples	Example
	This example shows how to generate an SSH session key:

```
vsg# configure
vsg(config)# ssh key rsa 770
```

Related Commands	Command	Description
	<b>clear ssh session</b>	Clears SSH sessions.
	<b>ssh server enable</b>	Enables the SSH server.

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## system clis

To generate an event history, use the **system clis** command. To disable the event history, use the **no** form of this command.

```
system clis event-history { client | errors | ha | nvdb | parser }
```

```
no system clis event-history { client | errors | ha | nvdb | parser }
```

Syntax Description	event-history	Generate event history logs for the command line interface (CLI).
	<b>client</b>	Generates a client interaction event history log.
	<b>errors</b>	Generates an error event history log.
	<b>ha</b>	Generates a high-availability (HA) event history log.
	<b>nvdb</b>	Generates an NVDB and PSS event history log.
	<b>parser</b>	Generates a parser event history event log.

**Command Default** None

**Command Modes** Global configuration (config)

**SupportedUserRoles** network-administrator  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to generate an error event history log:

```
vsg# system clis event-history errors
```

Related Commands	Command	Description
	<b>show system clis event-history</b>	Displays the event history of the CII servers.

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## system cores

To copy cores to a destination, use the **system cores** command. To disable, use the **no** form of the command.

**system cores tftp:** *//server@ip-address*

**no system cores tftp:** *//server@ip-address*

Syntax Description	Parameter	Description
	<b>tftp:</b>	Specifies the Trivial File Transfer Protocol (TFTP) protocol.
	<i>server</i>	Destination server.
	<i>ip-address</i>	Destination IP address.

Command Default	Default Value
	None

Command Modes	Mode
	Global configuration (config)

Supported User Roles	User Roles
	network-admin network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

Examples	Example
	This example shows how to copy cores to a destination: vsg# <b>system cores tftp://jjones@209.165.200.229</b>

Related Commands	Command	Description
	<b>show system cores</b>	Displays the core transfer option.



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## system default switchport

To return to system-level default values, use the **system default** command. To disable the default switchport feature, use the **no** form of this command.

```
system default switchport [shutdown]
```

```
no system default switchport [shutdown]
```

<b>Syntax Description</b>	<b>shutdown</b> (Optional) Shuts down the admin state.				
<b>Command Default</b>	None				
<b>Command Modes</b>	Global configuration (config)				
<b>Supported User Roles</b>	network-admin network-operator				
<b>Command History</b>	<table border="1"> <thead> <tr> <th>Release</th> <th>Modification</th> </tr> </thead> <tbody> <tr> <td>4.2(1)VSG1(1)</td> <td>This command was introduced.</td> </tr> </tbody> </table>	Release	Modification	4.2(1)VSG1(1)	This command was introduced.
Release	Modification				
4.2(1)VSG1(1)	This command was introduced.				
<b>Examples</b>	<p>This example shows how to return to system-level default values:</p> <pre>vsg# system default switchport shutdown</pre>				
<b>Related Commands</b>	<table border="1"> <thead> <tr> <th>Command</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>show system resources</td> <td>Displays system resources.</td> </tr> </tbody> </table>	Command	Description	show system resources	Displays system resources.
Command	Description				
show system resources	Displays system resources.				

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## system hap-reset

To reset local or remote supervisors after a high-availability (HA) failure, use the **system hap-reset** command. To disable the hap-reset feature, use the **no** form of the command.

**system hap-reset**

**system no hap-reset**

**Syntax Description** This command has no arguments or keywords.

**Command Default** None

**Command Modes** EXEC

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to switch over to the standby supervisor:

```
vsg# system hap-reset
```

Related Commands	Command	Description
	show system redundancy	Displays the system redundancy status.

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## system health

To check the system health, use the **system health** command.

**system health check bootflash**

Syntax	Description
<b>check</b>	Runs a consistency check on the compact flash.
<b>bootflash</b>	Checks the internal bootflash.

**Command Default** None

**Command Modes** EXEC

**Supported User Roles** network-admin

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to check the system health:

```
vsg# system health check bootflash
```

Related Commands	Command	Description
	<b>show system resources</b>	Displays system resources.

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## system heartbeat

To enable the system heartbeat, use the **system heartbeat** command. To disable the system heartbeat, use the **no** form of the command.

**system heartbeat**

**system no heartbeat**

---

**Syntax Description** This command has no arguments or keywords.

---

**Command Default** None

---

**Command Modes** EXEC

---

**SupportedUserRoles** network-admin  
network-operator

---

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

---



---

**Examples** This example shows how to enable the system heartbeat:

```
vsg# system heartbeat
```

---

Related Commands	Command	Description
	<b>system health</b>	Checks the system health status.

---

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## system internal

To generate debug snapshots for services, use the **system internal** command.

**system internal snapshot service** *service-name*

Syntax Description		
	<b>snapshot</b>	Generates debug snapshots.
	<b>service</b>	Generates a debug snapshot for a service.
	<i>service-name</i>	Service name.

**Command Default** None

**Command Modes** EXEC

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to generate debug snapshots for services:

```
vsg# system internal snapshot service
```

Related Commands	Command	Description
	<b>show system internal</b>	Displays all internal commands.

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## system jumbomtu

To set the maximum transmission units (MTU) to jumbo, use the **system jumbomtu** command.

```
system jumbomtu 9000
```

<b>Syntax Description</b>	<b>9000</b>	MTU size.
<b>Command Default</b>	None	
<b>Command Modes</b>	Global configuration (config)	
<b>SupportedUserRoles</b>	network-admin network-operator	
<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	4.2(1)VSG1(1)	This command was introduced.
<b>Examples</b>	This example shows how to set the MTU size to jumbo: vsg# <b>system jumbomtu 9000</b>	
<b>Related Commands</b>	<b>Command</b>	<b>Description</b>
	<b>show system resources</b>	Displays the system resource details.

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## system memlog

To generate a memory log in bootflash, use the **system memlog** command.

```
system memlog
```

**Syntax Description** This command has no arguments or keywords.

**Command Default** None

**Command Modes** EXEC

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to generate a memory log in bootflash:

```
vsg# system memlog
```

Related Commands	Command	Description
	<b>show system memory-alerts-log</b>	Displays a detailed log for memory alerts.
	<b>show system memory-status</b>	Displays memory status information.

[Send document comments to vsg-docfeedback@cisco.com.](mailto:vsg-docfeedback@cisco.com)

## system memory-thresholds

To set system memory thresholds, use the **system memory-thresholds** command.

**system memory-thresholds** { **minor** *minor-memory-threshold* **severe** *severe memory-threshold*  
**critical** *critical-memory-threshold* | **threshold** **critical** **no-process-kill** }

Syntax	Description
<b>minor</b>	Sets the minor memory threshold.
<i>minor-memory-threshold</i>	Minor threshold as a percentage of memory. The range is from 50 to 100.
<b>severe</b>	Sets the severe memory threshold.
<i>severe memory-threshold</i>	Severe threshold as a percentage of memory. The range is from 50 to 100.
<b>critical</b>	Sets the critical memory threshold.
<i>critical-memory-threshold</i>	Critical threshold as a percentage of memory. The range is from 50 to 100.
<b>threshold</b>	Sets the threshold behavior.
<b>critical</b>	Sets the critical memory threshold.
<b>no-process-kill</b>	Enables do not kill processes when out of memory.

**Command Default** None

**Command Modes** Global configuration (config)

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to set the memory threshold:

```
vsg# system memory-thresholds minor 60
```

Related Commands	Command	Description
	<b>show system resources</b>	Displays the system resources.



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## system pss

To shrink PSS files, use the **system pss** command.

**system pss shrink**

<b>Syntax Description</b>	<b>shrink</b>	Shrinks the PSS files.
<b>Command Default</b>	None	
<b>Command Modes</b>	EXEC	
<b>SupportedUserRoles</b>	network-admin network-operator	
<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	4.2(1)VSG1(1)	This command was introduced.
<b>Examples</b>	This example shows how to shrink PSS files: vsg# <b>system shrink pss</b>	
<b>Related Commands</b>	<b>Command</b>	<b>Description</b>
	<b>show system pss</b>	Displays the PSS shrink status.

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## system redundancy

To set a system redundancy policy, use the **system redundancy** command.

```
system redundancy role {primary | secondary | standalone}
```

Syntax Description	role	Sets the redundancy role.
	<b>primary</b>	Specifies the primary redundant Cisco VSG.
	<b>secondary</b>	Specifies the secondary redundant Cisco VSG.
	<b>standalone</b>	Specifies no redundant Cisco VSG.

**Command Default** None

**Command Modes** EXEC

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to set the redundancy role:

```
vsg# system redundancy role primary
```

Related Commands	Command	Description
	<b>show system redundancy</b>	Displays the system redundancy status.

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## system standby

To enable a system standby manual boot, use the **system standby** command. To disable a system standby manual boot, use the **no** form of this command.

**system standby manual-boot**

**no system standby manual-boot**

Syntax	Description
<b>manual-boot</b>	Performs manual boot.

Command Default	None
-----------------	------

Command Modes	EXEC
---------------	------

Supported User Roles	network-admin network-operator
----------------------	-----------------------------------

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

Examples	This example shows how to set a system standby manual boot: <pre>vsg# system standby manual-boot</pre>
----------	---

Related Commands	Command	Description
	<b>show system standby</b>	Displays the system standby manual boot option.

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## system startup-config

To initialize or unlock the system startup configuration, use the **system startup-config** command.

```
system startup-config {init | unlock lock id}
```

Syntax Description		
<b>init</b>		Initializes the startup configuration.
<b>unlock</b>		Unlocks the startup configuration.
<i>lock id</i>		Lock identification number. The range is from 0 to 65536.

**Command Default** None

**Command Modes** EXEC

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to unlock the system startup configuration:

```
vsg# system startup-config unlock 1324
```

Related Commands	Command	Description
	<b>show startup-config</b>	Displays startup system information.

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## system statistics

To reset the system statistics, use the **system statistics** command.

```
system statistics reset
```

**Syntax Description** This command has no arguments or keywords.

**Command Default** None

**Command Modes** EXEC

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to reset the system statistics:

```
vsg# system statistics reset
```

Related Commands	Command	Description
	show system redundancy	Displays the system redundancy status.

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## system switchover

To switch over to the standby supervisor in EXEC mode, use the **system switchover** command.

**system switchover**

To configure a system switchover in configuration mode, use the **system switchover** command.

**system switchover {ha | warm}**

### Syntax Description

<b>ha</b>	Enables high availability.
<b>warm</b>	Enables a warm switchover.

### Command Default

None

### Command Modes

EXEC  
Global configuration (config)

### Supported User Roles

network-admin  
network-operator

### Command History

Release	Modification
4.2(1)VSG1(1)	This command was introduced.

### Examples

This example shows how to switch over to the standby supervisor:

```
vsg# system switchover
```

### Related Commands

Command	Description
<b>show redundancy</b>	Displays the system redundancy status.

***Send document comments to [vsg-docfeedback@cisco.com](mailto:vsg-docfeedback@cisco.com).***

## system trace

To configure the system trace level, use the **system trace** command.

```
system trace {mask}
```

<b>Syntax Description</b>	<i>mask</i>	Mask name.
<b>Command Default</b>	None	
<b>Command Modes</b>	Global configuration (config)	
<b>SupportedUserRoles</b>	network-admin	
<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	4.2(1)VSG1(1)	This command was introduced.
<b>Examples</b>	This example shows how to configure the system trace level: vsg# <b>system trace dc1</b>	
<b>Related Commands</b>	<b>Command</b>	<b>Description</b>
	<b>system default</b>	Configures system-level default values.

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## system watchdog kdgb

To enable a system watchdog, use the **system watchdog** command. To disable a system watchdog, use the **no** form of this command.

**system watchdog kdgb**

**no system watchdog kdgb**

**Syntax Description** This command has no arguments or keywords.

**Command Default** None

**Command Modes** EXEC

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to enable watchdog:  
vsg# **system watchdog**

Related Commands	Command	Description
	<b>system default</b>	Configures system-level default values.



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## tail

To display the end of a file, use the **tail** command.

```
tail { bootflash: filename [number] | debug: filename [number] | modflash: filename [number] | volatile: filename [number] }
```

Syntax Description		
<b>bootflash:</b>	Specifies the bootflash directory.	
<i>filename</i>	Name of the file.	
<i>number</i>	(Optional) Number of lines to display.	
<b>debug:</b>	Specifies the debug directory.	
<b>modflash:</b>	Specifies the modflash directory.	
<b>volatile:</b>	Specifies the volatile directory.	

**Defaults** 10 lines

**Command Modes** EXEC  
Global configuration (config)

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

### Examples

This example shows how to display the last 10 lines of a file:

```
vsg# tail bootflash:startup.cfg
ip arp inspection filter marp vlan 9
ip dhcp snooping vlan 13
ip arp inspection vlan 13
ip dhcp snooping
ip arp inspection validate src-mac dst-mac ip
ip source binding 10.3.2.2 0f00.60b3.2333 vlan 13 interface Ethernet2/46
ip source binding 10.2.2.2 0060.3454.4555 vlan 100 interface Ethernet2/10
logging level dhcp_snoop 6
logging level eth_port_channel 6
```

This example shows how to display the last 20 lines of a file:

```
vsg# tail bootflash:startup.cfg 20
area 99 virtual-link 1.2.3.4
router rip Enterprise
router rip foo
```

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```

address-family ipv4 unicast
router bgp 33.33
event manager applet sdtest
monitor session 1
monitor session 2
ip dhcp snooping vlan 1
ip arp inspection vlan 1
ip arp inspection filter marp vlan 9
ip dhcp snooping vlan 13
ip arp inspection vlan 13
ip dhcp snooping
ip arp inspection validate src-mac dst-mac ip
ip source binding 10.3.2.2 0f00.60b3.2333 vlan 13 interface Ethernet2/46
ip source binding 10.2.2.2 0060.3454.4555 vlan 100 interface Ethernet2/10
logging level dhcp_snoop 6
logging level eth_port_channel 6

```

#### Related Commands

Command	Description
<b>cd</b>	Changes the current working directory.
<b>copy</b>	Copies files.
<b>dir</b>	Displays the directory contents.
<b>pwd</b>	Displays the name of the current working directory.

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## telnet

To create a Telnet session, use the **telnet** command.

```
telnet {ipv4-address | hostname} [port-number | vrf vrf-name]
```

Syntax Description		
	<i>ipv4-address</i>	IPv4 address of the remote device.
	<i>hostname</i>	Hostname of the remote device. The name is alphanumeric, case sensitive, and has a maximum of 64 characters.
	<i>port-number</i>	(Optional) Port number for the Telnet session. The range is from 1 to 65535.
	<b>vrf</b> <i>vrf-name</i>	(Optional) Specifies the virtual routing and forwarding (VRF) name used for the Telnet session. The name is case sensitive.

Defaults	
	Port 23
	Default VRF

Command Modes	
	EXEC
	Global configuration (config)

SupportedUserRoles	
	network-admin
	network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

Examples	
	This example shows how to start a Telnet session:
	<pre>vsg# telnet 10.10.1.1 vrf management</pre>

Related Commands	Command	Description
	<b>clear line</b>	Clears Telnet sessions.
	<b>telnet server enable</b>	Enables the Telnet server.

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## terminal alias

To display a terminal alias, use the **terminal alias** command. To disable the terminal alias, use the **no** form of this command.

**terminal alias** *word persist*

**no terminal alias** *word persist*

Syntax Description	word	Name of the alias.
	<i>persist</i>	Alias configuration saved.

Defaults	None
----------	------

Command Modes	EXEC Global configuration (config)
---------------	---------------------------------------

SupportedUserRoles	network-admin network-operator
--------------------	-----------------------------------

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

Examples	This example shows how to displays an alias for engineering: <code>vsg# terminal alias engineering</code>
----------	--

Related Commands	Command	Description
	<b>show terminal</b>	Displays the terminal configuration.

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## terminal color

To enable colorization of the command prompt, command line, and output, use the **terminal color** command. To disable terminal color, use the **no** form of this command.

**terminal color** *evening persist*

**no terminal color** *evening persist*

Syntax	Description
<i>evening</i>	Designator that sets the screen background to black.
<i>persist</i>	Designator that saves the configuration.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to set the colorization of the command line:  
vsg# **terminal color evening persist**

Related Commands	Command	Description
	<b>show terminal</b>	Displays the terminal configuration.

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## terminal dont-ask

To turn off the “Are you sure?” questions when a command is entered, use the **terminal dont-ask** command. To disable the terminal don’t ask question, use the **no** form of this command.

**terminal dont-ask** *persist*

**no terminal dont-ask** *persist*

<b>Syntax Description</b>	<i>persist</i> Designator that saves the configuration.				
<b>Defaults</b>	None				
<b>Command Modes</b>	EXEC Global configuration (config)				
<b>SupportedUserRoles</b>	network-admin network-operator				
<b>Command History</b>	<table border="1"> <thead> <tr> <th>Release</th> <th>Modification</th> </tr> </thead> <tbody> <tr> <td>4.2(1)VSG1(1)</td> <td>This command was introduced.</td> </tr> </tbody> </table>	Release	Modification	4.2(1)VSG1(1)	This command was introduced.
Release	Modification				
4.2(1)VSG1(1)	This command was introduced.				
<b>Examples</b>	<p>This example shows how to turn off the “Are you sure?” question when a command is entered:</p> <pre>vsg# terminal dont-ask persist</pre>				
<b>Related Commands</b>	<table border="1"> <thead> <tr> <th>Command</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td><b>show terminal</b></td> <td>Displays the terminal configuration.</td> </tr> </tbody> </table>	Command	Description	<b>show terminal</b>	Displays the terminal configuration.
Command	Description				
<b>show terminal</b>	Displays the terminal configuration.				

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## terminal edit-mode

To set the edit mode to vi, use the **terminal edit-mode** command. To return the edit mode to emacs, use the **no** form of this command.

**terminal edit-mode vi**

**no terminal edit-mode vi**

<b>Syntax Description</b>	<b>vi</b>	Sets the edit mode to vi.
<b>Defaults</b>	emacs	
<b>Command Modes</b>	EXEC Global configuration (config)	
<b>SupportedUserRoles</b>	network-admin network-operator	
<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	4.2(1)VSG1(1)	This command was introduced.
<b>Examples</b>	This example shows how to set the command line edition keys: vsg# <b>terminal edit-mode vi</b>	
<b>Related Commands</b>	<b>Command</b>	<b>Description</b>
	show <b>terminal</b>	Displays the terminal configuration.

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## terminal event-manager

To bypass the CLI event manager, use the **terminal event-manager** command.

**terminal event-manager bypass**

<b>Syntax Description</b>	<b>bypass</b> Bypasses the CLI event manager.				
<b>Defaults</b>	None				
<b>Command Modes</b>	EXEC Global configuration (config)				
<b>Supported User Roles</b>	network-admin network-operator				
<b>Command History</b>	<table border="1"> <thead> <tr> <th>Release</th> <th>Modification</th> </tr> </thead> <tbody> <tr> <td>4.2(1)VSG1(1)</td> <td>This command was introduced.</td> </tr> </tbody> </table>	Release	Modification	4.2(1)VSG1(1)	This command was introduced.
Release	Modification				
4.2(1)VSG1(1)	This command was introduced.				
<b>Examples</b>	<p>This example shows how to bypass the CLI event manager:</p> <pre>vsg# terminal event-manager bypass</pre>				
<b>Related Commands</b>	<table border="1"> <thead> <tr> <th>Command</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td><b>show terminal</b></td> <td>Displays the terminal configuration.</td> </tr> </tbody> </table>	Command	Description	<b>show terminal</b>	Displays the terminal configuration.
Command	Description				
<b>show terminal</b>	Displays the terminal configuration.				



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## terminal history

To disable the recall of EXEC mode commands when in configuration mode, use the **terminal history** command. To enable recall, use the **no** form of this command.

**terminal history no-exec-in-config**

**no terminal history no-exec-in-config**

<b>Syntax Description</b>	<b>no-exec-in-config</b> Disables the recall of EXEC mode commands when in configuration mode.				
<b>Defaults</b>	None				
<b>Command Modes</b>	EXEC Global configuration (config)				
<b>Supported User Roles</b>	network-admin network-operator				
<b>Command History</b>	<table border="1"> <thead> <tr> <th>Release</th> <th>Modification</th> </tr> </thead> <tbody> <tr> <td>4.2(1)VSG1(1)</td> <td>This command was introduced.</td> </tr> </tbody> </table>	Release	Modification	4.2(1)VSG1(1)	This command was introduced.
Release	Modification				
4.2(1)VSG1(1)	This command was introduced.				
<b>Examples</b>	<p>This example shows how to set terminal history properties:</p> <pre>vsg# terminal history no-exec-in-config</pre>				
<b>Related Commands</b>	<table border="1"> <thead> <tr> <th>Command</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>show terminal</td> <td>Displays the terminal configuration.</td> </tr> </tbody> </table>	Command	Description	show terminal	Displays the terminal configuration.
Command	Description				
show terminal	Displays the terminal configuration.				

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## terminal length

To set the number of lines that appear on the terminal screen, use the **terminal length** command.

**terminal length** *number*

<b>Syntax Description</b>	<i>number</i>	Number of lines. The range of valid values is 0 to 511.
<b>Defaults</b>	28 lines	
<b>Command Modes</b>	EXEC Global configuration (config)	
<b>SupportedUserRoles</b>	network-admin network-operator	
<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	4.2(1)VSG1(1)	This command was introduced.
<b>Usage Guidelines</b>	Set <i>number</i> to 0 to disable pausing.	
<b>Examples</b>	This example shows how to set the number of lines that appear on the screen: vsg# <b>terminal length 60</b>	
<b>Related Commands</b>	<b>Command</b>	<b>Description</b>
	<b>show terminal</b>	Displays the terminal configuration.

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## terminal log-all

To log all commands including the **show** commands, use the **terminal log-all** command.

### **terminal log-all**

**Syntax Description** This command has no arguments or keywords.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to log all commands:  
vsg# **terminal log-all**

Related Commands	Command	Description
	<b>show terminal</b>	Displays the terminal configuration.

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## terminal monitor

To copy syslog output to the current terminal line, use the **terminal monitor** command.

### **terminal monitor**

**Syntax Description** This command has no arguments or keywords.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to copy syslog output to the current terminal line:

```
vsg# terminal monitor
```

Related Commands	Command	Description
	show terminal	Displays the terminal configuration.

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## terminal output

To display **show** command output in XML, use the **terminal output** command. To display **show** command output in text, use the **no** form of this command.

**terminal output xml**

**no terminal output xml**

<b>Syntax Description</b>	<b>xml</b>	Displays show command output in XML.
<b>Defaults</b>	None	
<b>Command Modes</b>	EXEC Global configuration (config)	
<b>SupportedUserRoles</b>	network-admin network-operator	
<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	4.2(1)VSG1(1)	This command was introduced.
<b>Examples</b>	This example shows how to display <b>show</b> command output in XML: vsg# <b>terminal output xml</b>	
<b>Related Commands</b>	<b>Command</b>	<b>Description</b>
	<b>show terminal</b>	Displays the terminal configuration.

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## terminal redirection-mode

To set the redirection mode, use the **terminal redirection-mode** command.

```
terminal redirection-mode {ascii | zipped}
```

Syntax Description	ascii	Sets the redirection mode to ASCII.
	zipped	Sets the redirection mode to zipped.

Defaults	None
----------	------

Command Modes	EXEC Global configuration (config)
---------------	---------------------------------------

Supported User Roles	network-admin network-operator
----------------------	-----------------------------------

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

Examples	This example shows how to set the redirecton mode to ASCII: vsg# <b>terminal redirection-mode ascii</b>
----------	--

Related Commands	Command	Description
	<b>show terminal</b>	Displays the terminal configuration.

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## terminal session-timeout

To set the terminal session timeout, use the **terminal session-timeout** command.

**terminal session-timeout** *time*

<b>Syntax Description</b>	<i>time</i>	Timeout time, in seconds. The range is from 0 to 525600.
<b>Defaults</b>	None	
<b>Command Modes</b>	EXEC Global configuration (config)	
<b>SupportedUserRoles</b>	network-admin network-operator	
<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	4.2(1)VSG1(1)	This command was introduced.
<b>Usage Guidelines</b>	Set <i>time</i> to 0 to disable terminal session timeout.	
<b>Examples</b>	This example shows how to set the terminal session timeout: vsg# <b>terminal session-timeout 100</b>	
<b>Related Commands</b>	<b>Command</b>	<b>Description</b>
	<b>show terminal</b>	Displays the terminal configuration.

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## terminal terminal-type

To specify the terminal type, use the **terminal terminal-type** command.

**terminal terminal-type** *type*

<b>Syntax Description</b>	<i>type</i>	Terminal type.
<b>Defaults</b>	None	
<b>Command Modes</b>	EXEC Global configuration (config)	
<b>SupportedUserRoles</b>	network-admin network-operator	
<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	4.2(1)VSG1(1)	This command was introduced.
<b>Examples</b>	This example shows how to specify the terminal type: vsg# <b>terminal terminal-type vt100</b>	
<b>Related Commands</b>	<b>Command</b>	<b>Description</b>
	<b>show terminal</b>	Displays the terminal configuration.



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## terminal tree-update

To update the main parse tree, use the **terminal tree-update** command.

### **terminal tree-update**

**Syntax Description** This command has no arguments or keywords.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to update the main parse tree:

```
vsg# terminal tree-update
```

Related Commands	Command	Description
	show terminal	Displays the terminal configuration.

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## terminal verify-only

To verify commands, use the **terminal verify-only** command.

**terminal verify-only username *word***

Syntax Description	username	Specifies the username for AAA authorization.
	<i>word</i>	Username.

Defaults	None
----------	------

Command Modes	EXEC Global configuration (config)
---------------	---------------------------------------

Supported User Roles	network-admin network-operator
----------------------	-----------------------------------

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

Examples	This example shows how to verify commands: vsg# <b>terminal verify-only</b>
----------	--

Related Commands	Command	Description
	<b>show terminal</b>	Displays the terminal configuration.

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## terminal width

To set the terminal width, use the **terminal width** command.

**terminal width** *width*

<b>Syntax Description</b>	<i>width</i>	Sets the number of characters on a single line. The range is from 24 to 511.
<b>Defaults</b>	102 columns	
<b>Command Modes</b>	EXEC Global configuration (config)	
<b>SupportedUserRoles</b>	network-admin network-operator	
<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	4.2(1)VSG1(1)	This command was introduced.
<b>Examples</b>	This example shows how to set the terminal width: vsg# <b>terminal width 60</b>	
<b>Related Commands</b>	<b>Command</b>	<b>Description</b>
	<b>show terminal</b>	Displays the terminal configuration.

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## test policy-engine

To test the policy engine on a RADIUS server or in a server group, use the **test policy-engine** command.

```
test policy-engine {simulate-pe-req | simulate-zone-req}
```

Syntax Description		
	<b>simulate-pe-req</b>	Simulates the policy engine lookup.
	<b>simulate-zone-req</b>	Simulates the policy engine zone.

**Defaults** None

**Command Modes** EXEC  
Global configuration (config)

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to test the policy engine:  
vsg# **test policy-engine simulate-zone-req**

Related Commands	Command	Description
	<b>show policy-engine</b>	Displays policy-engine statistics.

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## test-policy-engine simulate-pe-req policy

To enter the policy-engine configuration submode for unit testing or verification of a policy configuration, use the **test-policy-engine** command is used .

**test-policy-engine simulate-pe-req policy** *policy-name*

<b>Syntax Description</b>	<i>policy-name</i>	Policy to be tested or verified for configuration parameters.
<b>Command Default</b>	None	
<b>Command Modes</b>	Global configuration (config)	
<b>SupportedUserRoles</b>	network-admin	
<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	4.2(1)VSG1(2)	This command was introduced.
<b>Examples</b>	This example shows how to test the ext-company policy. vsm(config)# <b>test policy-engine simulate-pe-req policy ext-company</b>	
<b>Related Commands</b>	<b>Command</b>	<b>Description</b>
	<b>attribute</b>	Specifies the particular attribute to be tested in the policy configuration.

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## traceroute

To discover routes, use the **traceroute** command.

```
traceroute {A.B.C.D. | host-name} [source src-ipv4-addr | vrf vrf-name | show-mpls-hops]
```

Syntax Description		
<i>A.B.C.D.</i>   <i>host-name</i>		IPv4 address or hostname of the destination device. The name is case sensitive.
<b>vrf</b> <i>vrf-name</i>		(Optional) Specifies the virtual routing and forwarding (VRF) instance to use. The name is case sensitive.
<b>show-mpls-hops</b>		(Optional) Displays the Multiprotocol Label Switching (MPLS) hops.
<b>source</b> <i>src-ipv4-addr</i>		(Optional) Specifies a source IPv4 address. The format is <i>A.B.C.D.</i>

### Defaults

Uses the default VRF.

Does not show the MPLS hops.

Uses the management IPv4 address for the source address.

### Command Modes

EXEC

Global configuration (config)

### Supported User Roles

network-admin

### Command History

Release	Modification
4.2(1)VSG1(1)	This command was introduced.

### Usage Guidelines

Use the **traceroute6** command to use IPv6 addressing for discovering the route to a device.

### Examples

This example shows how to discover a route to a device:

```
vsg# traceroute 172.28.255.18 vrf management
traceroute to 172.28.255.18 (172.28.255.18), 30 hops max, 40 byte packets
 1 172.28.230.1 (172.28.230.1) 0.746 ms 0.595 ms 0.479 ms
 2 172.24.114.213 (172.24.114.213) 0.592 ms 0.51 ms 0.486 ms
 3 172.20.147.50 (172.20.147.50) 0.701 ms 0.58 ms 0.486 ms
 4 172.28.255.18 (172.28.255.18) 0.495 ms 0.43 ms 0.482 ms
```

### Related Commands

Command	Description
<b>traceroute6</b>	Discovers the route to a device using IPv6 addressing.

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## username *name* password

To set a password for the username, use the **username *name* password** command.

**username *name* password** {**0** *password* | **5** *password* | *password*}

Syntax Description		
<b>0</b> <i>password</i>	Specifies a password. <b>0</b> denotes that the password that follows should be set in clear text. The maximum size for <i>password</i> is 64 characters.	
<b>5</b> <i>password</i>	Specifies a password. <b>5</b> denotes that the password that follows should be encrypted. The maximum size for <i>password</i> is 64 characters.	
<i>password</i>	Specifies a password in clear text. The maximum size for <i>password</i> is 64 characters.	

**Defaults** None

**Command Modes** Global configuration (config)

**SupportedUserRoles** network-admin

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Examples** This example shows how to set a password for the username:

```
vsg# configure
vsg(config)# username admin password 5 q0w9e8R7
```

**Usage Guidelines** The Cisco VSG does not support multiple user accounts. It supports only the default **admin** user account.

Related Commands	Command	Description
	<b>show users</b>	Displays users.

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## where

To display your current context, use the **where** command.

**where** [**detail**]

Syntax Description	detail	(Optional) Displays detailed context information.
--------------------	--------	---

Defaults	Displays summary context information.
----------	---------------------------------------

Command Modes	EXEC Global configuration (config)
---------------	---------------------------------------

SupportedUserRoles	network-admin network-operator
--------------------	-----------------------------------

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

Examples	This example shows how to display summary context information:
----------	--

```
vsg# where
      admin@firewall
vsg#
```

Related Commands	Command	Description
	<b>pwd</b>	Displays what directory you are in.



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## write erase

To erase configurations in persistent memory areas, use the **write erase** command.

**write erase [boot | debug]**

Syntax Description	boot	(Optional) Erases the boot variable and management 0 interface configurations.
	<b>debug</b>	(Optional) Erases only the debug configuration.

**Defaults** Erases all configuration in persistent memory except for the boot variable, mgmt0 interface, and debug configuration.

**Command Modes** Global configuration (config)

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	4.2(1)VSG1(1)	This command was introduced.

**Usage Guidelines** When information is corrupted or unusable, use the **write erase** command to erase the startup configuration in the persistent memory. Entering this command returns the device to its initial state, except for the boot variable, mgmt0 interface, and debug configurations. To erase those configurations, specifically use the **boot** and **debug** options.

**Examples** This example shows how to erase the startup configuration:

```
vsg(config)# write erase
Warning: This command will erase the startup-configuration.
Do you wish to proceed anyway? (y/n) [n] y
```

This example shows how to erase the boot variable and mgmt0 interface configuration in the persistent memory:

```
vsg(config)# write erase boot
```

This example shows how to erase the debug configuration in the persistent memory:

```
vsg(config)# write erase debug
```

■ write erase

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Related Commands	Command	Description
	<b>copy running-config startup-config</b>	Copies the running configuration to the startup configuration.
	<b>show running-config</b>	Displays the startup configuration.

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## zone

To configure a zone definition that is used to build VM-to-zone mapping on the control plane, use the **zone** command to enter the zone configuration submode. To disable this feature, use the **no** form of this command.

**zone** *zone-name*

<b>Syntax Description</b>	<i>zone-name</i> Zone object that is to be configured.
---------------------------	--

<b>Command Default</b>	None
------------------------	------

<b>Command Modes</b>	Global configuration (config)
----------------------	-------------------------------

<b>SupportedUserRoles</b>	network-admin
---------------------------	---------------

Command History	Release	Modification
	4.2(1)VSG1(2)	This command was introduced.

<b>Usage Guidelines</b>	Use the <b>zone</b> command to enter the zone configuration submode. The <i>zone-name</i> variable specifies a zone object.
-------------------------	---

The **no** option removes the given zone object and all relevant configurations (for example, condition statements).



### Note

Attributes used in a zone condition are all neutral attributes.

<b>Examples</b>	This example shows how to enter the zone configuration submode:
-----------------	---

```
vsg(config)# zone zone-name
vsg(config-zone)#
```

Related Commands	Command	Description
	<b>condition</b>	Specifies the parameters and rules for the security zone.

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