



Managing the Configuration

This chapter contains the following sections:

- [Information About Configuration Management, on page 1](#)
- [Changing the Switch Name or Prompt, on page 1](#)
- [Configuring a Message of the Day, on page 2](#)
- [Verifying the Configuration, on page 3](#)
- [Verifying the Interface Configuration, on page 7](#)
- [Saving a Configuration, on page 10](#)
- [Erasing a Configuration, on page 11](#)

Information About Configuration Management

The Cisco Nexus 1000VE enables you to change the switch name, configure messages of the day, and display, save, and erase configuration files.

Changing the Switch Name or Prompt

You can change the switch name or prompt from the default (switch#) to another character string.

Before you begin

Log in to the CLI in global configuration mode.

Procedure

	Command or Action	Purpose
Step 1	switch(config)# switchname	Changes the switch prompt.

Example

This example shows how to change the switch name:

```
switch(config)# switchname metro
metro(config)# exit
metro#
```

Configuring a Message of the Day

You can configure a message of the day (MOTD) to display before the login prompt on the terminal when a user logs in.

- The banner message can be up to 40 lines with up to 80 characters per line.
- Use the following guidelines when choosing your delimiting character:
 - Do not use the delimiting character in the message string.
 - Do not use " and % as delimiters.
- You can use the following tokens the message of the day:
 - \$(hostname) displays the hostname for the switch.
 - \$(line) displays the vty or tty line or name.

Before you begin

Log in to the CLI in global configuration mode.

Procedure

	Command or Action	Purpose
Step 1	switch(config)# banner motd [<i>delimiting character message delimiting character</i>]	Configures a banner message of the day with the following features: <ul style="list-style-type: none"> • Up to 40 lines • Up to 80 characters per line • Enclosed in delimiting character, such as # • Can span multiple lines • Can use tokens
Step 2	switch(config)# show banner motd	Displays the configured banner message.

Example

This example shows how to configure a message of a day:

```
switch(config)# banner motd #April 16, 2011 Welcome to the svcs#
switch(config)# show banner motd
April 16, 2011 Welcome to the Switch
```

Verifying the Configuration

Use this section to view the switch configuration. This section includes the following topics:

- Verifying the Software and Hardware Versions
- Verifying the Running Configuration
- Comparing the Startup and Running Configurations
- Verifying the Interface Configuration

Verifying the Software and Hardware Versions

You can view the versions of software and hardware on your system, for example, to verify the version before and after an upgrade.

Before you begin

Log in to the CLI in EXEC mode.

Procedure

	Command or Action	Purpose
Step 1	switch# show version	Displays the versions of system software and hardware that are currently running on the switch.

Example

This example shows how to verify the software and hardware versions on your system:

```
switch# show version
switch# show version
Cisco Nexus Operating System (NX-OS) Software
TAC support: http://www.cisco.com/tac
Documents: http://www.cisco.com/en/US/products/ps9372/tsd_products_support_series_home.html
Copyright (c) 2002-2018, Cisco Systems, Inc. All rights reserved.
The copyrights to certain works contained herein are owned by
other third parties and are used and distributed under license.
Some parts of this software are covered under the GNU Public
License. A copy of the license is available at
http://www.gnu.org/licenses/gpl.html.

Software
kickstart: version 5.2(1)SV5(1.1)
system: version 5.2(1)SV5(1.1)
kickstart image file is: bootflash:///n1000v-dk9-kickstart.5.2.1.SV5.1.1.bin
kickstart compile time: 7/5/2018 0:00:00 [07/05/2018 07:54:21]
system image file is: bootflash:///n1000v-dk9.5.2.1.SV5.1.1.bin
system compile time: 7/5/2018 0:00:00 [07/05/2018 08:23:05]

Hardware
```

```

cisco Nexus 1000V Chassis ("Virtual Supervisor Module")
Intel(R) Xeon(R) CPU E5-2620 with 4126584 kB of memory.
Processor Board ID T505698E126

Device name: switch
bootflash: 2332296 kB

System uptime is 2 days, 19 hours, 18 minutes, 12 seconds

Kernel uptime is 2 day(s), 19 hour(s), 18 minute(s), 45 second(s)

plugin
Core Plugin, Ethernet Plugin, Virtualization Plugin

Reset reason
1) Time: Fri Jul 6 08:25:12 2018
Reason: Reset Requested by CLI command reload

switch#
=====

```

Verifying the Running Configuration

You can view the configuration that is currently running on the system.

Before you begin

Log in to the CLI in any command mode.

Procedure

	Command or Action	Purpose
Step 1	switch# show running-config	Displays the versions of system software and hardware that are currently running on the switch.

Example

This example shows how to verify the software and hardware versions running on a switch:

```

switch# show running-config
version 5.2(1)SV5(1.1)
hostname <VSM-NAME>

ip domain-lookup
ip host <VSM-NAME> <VSM-IP>
radius-server host <RADIUS-SERVER-IP> key 7 "<PASSWORD>" pac authentication accounting
errdisable recovery cause failed-port-state
rmon event 1 log trap public description FATAL(1) owner PMON@FATAL
rmon event 2 log trap public description CRITICAL(2) owner PMON@CRITICAL
rmon event 3 log trap public description ERROR(3) owner PMON@ERROR
rmon event 4 log trap public description WARNING(4) owner PMON@WARNING
rmon event 5 log trap public description INFORMATION(5) owner PMON@INFO
snmp-server context mib2

```

```
snmp-server context system
snmp-server community <removed> group network-operator
snmp-server mib community-map <removed> context system
no ntp passive
aaa authentication login error-enable

vrf context management
  ip route 0.0.0.0/0 <GATEWAY-IP>
vlan 2-1000

port-channel load-balance ethernet source-mac
port-profile default max-ports 32
port-profile default port-binding static
port-profile type ethernet Unused_Or_Quarantine_Uplink
  shutdown
  description Port-group created for Nexus 1000VE internal usage. Do not use.
  state enabled
  vmware port-group
port-profile type vethernet Unused_Or_Quarantine_Veth
  shutdown
  description Port-group created for Nexus 1000VE internal usage. Do not use.
  state enabled
  vmware port-group
port-profile type ethernet outside-trunk
  switchport mode trunk
  switchport trunk allowed vlan 1-3967,4048-4093
  no shutdown
  description Port-group created for Nexus 1000VE internal usage. Do not use.
  state enabled
  vmware port-group
port-profile type vethernet inside-trunk1
  switchport mode trunk
  switchport trunk allowed vlan 1-50
  no shutdown
  description Port-group created for Nexus 1000VE internal usage. Do not use.
  state enabled
  vmware port-group
port-profile type vethernet inside-trunk2
  switchport mode trunk
  switchport trunk allowed vlan 2047-2097
  no shutdown
  description Port-group created for Nexus 1000VE internal usage. Do not use.
  state enabled
  vmware port-group

system storage-loss log time 60
system inter-sup-heartbeat time 15

interface mgmt0
  ip address <Mgmt-IP>/<MASK>
line console
  exec-timeout 0
line vty
  exec-timeout 0

boot kickstart bootflash:/kick.bin
boot system bootflash:/sys.bin
boot kickstart bootflash:/kick.bin
boot system bootflash:/sys.bin

svs-domain
  domain id 100
  control vlan 1
```

```

packet vlan 1
svs mode L3 interface mgmt0
switch-guid <Switch-GUID>
enable l3sec
vse-dvs
  outside-trunk vlan 1-4094
  inside-trunk 1 tag 1-50
  inside-trunk 2 tag 2047-2097
svs connection vc
  protocol vmware-vim
  remote ip address <VCenter-IP> port 80 vrf management
  transport type ipv4
  vmware dvs uuid "<DVS-UUID>" datacenter-name <DataCenter Name>
  max-ports 12000
  vmware dvs-version 5.0.0
  connect
vservice global type vsg
  no tcp state-checks invalid-ack
  no tcp state-checks seq-past-window
  no tcp state-checks window-variation
  no bypass asa-traffic
  no l3-frag
vservice global
  idle-timeout
    tcp 30
    udp 4
    icmp 4
    layer-3 4
    layer-2 2
nsc-policy-agent
  registration-ip 0.0.0.0
  shared-secret *****
  log-level
no logging logfile
logging monitor 7

switch#

```

Comparing the Startup and Running Configurations

Before you begin

Log in to the CLI in any command mode.

Procedure

	Command or Action	Purpose
Step 1	switch# show running-config diff	Displays the difference between the startup configuration and the running configuration currently on the switch.

Example

This example shows how to compare the startup and running configurations:

```

switch# show running-config diff*** Startup-config
--- Running-config
*****
*** 261,276 ****
    inherit port-profile VSG_Secured_1161
    description HPING-1161_24, Net Adapter 1
    vmware dvport 0 dvswitch uuid "50 13 3b cc 83 4a 88 c8-21 c6 c4 e8 c9 34 e8 bd"
    vmware vm mac 0050.5693.288B

- interface Vethernet15
-   inherit port-profile VSG_Data_1163
-   description VMware VMkernel, vmk1
-   vmware dvport 0 dvswitch uuid "50 13 3b cc 83 4a 88 c8-21 c6 c4 e8 c9 34 e8 bd"
-   vmware vm mac 0050.566C.1B76
-
interface Vethernet16
  inherit port-profile vlan-1057
  description VMware VMkernel, vmk2
  vmware dvport 0 dvswitch uuid "50 13 3b cc 83 4a 88 c8-21 c6 c4 e8 c9 34 e8 bd"
  vmware vm mac 0050.566D.815A
--- 260,269 --

```

=====

Verifying the Interface Configuration

This section includes the following procedures:

- Verifying a Brief Version of an Interface Configuration
- Verifying a Detailed Version of an Interface Configuration
- Verifying a Brief Version of all Interfaces
- Verifying the Running Configuration for all Interfaces

Verifying the Interface Configuration in a Brief Version

Before you begin

Log in to the CLI in any command mode.

Procedure

	Command or Action	Purpose
Step 1	switch# show interface <i>{type}</i> <i>{name}</i> brief	Displays a brief version of information about the specified interface configuration.

Example

```
switch# show interface mgmt 0 brief
```

```
-----
Port    VRF          Status IP Address          Speed    MTU
-----
mgmt0   --          up      10.78.1.63         1000    1500
```

Verifying an Interface Configuration in a Detailed Version

Before you begin

Log in to the CLI in any command mode.

Procedure

	Command or Action	Purpose
Step 1	switch# show interface {type} {name}	Displays details about the specified interface configuration.

Example

This example shows how to verify configuration details of an interface:

```
switch# show interface mgmt 0
mgmt0 is up
  Hardware: Ethernet, address: 0050.5689.3321 (bia 0050.5689.3321)
  Internet Address is 172.23.232.141/24
  MTU 1500 bytes, BW 1000000 Kbit, DLY 10 usec,
     reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA
  full-duplex, 1000 Mb/s
  Auto-Negotiation is turned on
    4961 packets input, 511995 bytes
    0 multicast frames, 0 compressed
    0 input errors, 0 frame, 0 overrun, 0 fifo
    245 packets output, 35853 bytes
    0 underrun, 0 output errors, 0 collisions
    0 fifo, 0 carrier errors
```

Verifying All Interfaces in a Brief Version

Before you begin

Log in to the CLI in any command mode.

Procedure

	Command or Action	Purpose
Step 1	switch# show interface brief	Displays a brief version of all interface configurations on your system.

Example

This example show how to verify the configuration of all available interfaces:

```
switch# show interface brief
```

```
-----
Port      VRF      Status IP Address      Speed  MTU
-----
mgmt0    --      up    10.197.128.101  1000  1500
```

```
-----
Ethernet  VLAN    Type Mode   Status Reason      Speed  Port
Interface                                Ch #
-----
Eth3/1    1       eth trunk up    none       10G
Eth4/1    1       eth trunk up    none       10G
Eth5/1    1       eth trunk up    none       10G
```

```
-----
Vethernet VLAN/   Type Mode   Status Reason      MTU  Module
Segment
-----
Veth1    1161   virt access up    none       1500 3
Veth2    1161   virt access up    none       1500 3
Veth3    1161   virt access up    none       1500 3
Veth4    1163   virt access up    none       1500 3
-----
```

Verifying the Running Configuration for All Interfaces

The output for the **show running-config interface** command differs from the output of the **show interface** command.

Before you begin

Log in to the CLI in any command mode.

Procedure

	Command or Action	Purpose
Step 1	switch# show running-config interface	Displays the running configuration for all interfaces on your system.

Example

This example shows how to view the running configuration for all interfaces on a system:

```
switch# show running-config interface
!Command: show running-config interface
!Time: Tue Jul  3 07:02:44 2018

version 5.2(1)SV5(1.1)

interface mgmt0
 ip address 10.197.128.101/27

interface Vethernet1
 inherit port-profile VSG_Secured_1161
 description HPING-1161_8, Net Adapter 1
 vmware dvport 0 dvswitch uuid "50 13 3b cc 83 4a 88 c8-21 c6 c4 e8 c9 34 e8 bd"
 vmware vm mac 0050.5693.9437

interface Vethernet2
 inherit port-profile VSG_Secured_1161
 description HPING-1161_7, Net Adapter 1
 vmware dvport 0 dvswitch uuid "50 13 3b cc 83 4a 88 c8-21 c6 c4 e8 c9 34 e8 bd"
 vmware vm mac 0050.5693.3F26

interface Vethernet3
 inherit port-profile VSG_Secured_1161
 description HPING-1161_6, Net Adapter 1
 vmware dvport 0 dvswitch uuid "50 13 3b cc 83 4a 88 c8-21 c6 c4 e8 c9 34 e8 bd"
 vmware vm mac 0050.5693.0FDB

interface Vethernet4
 inherit port-profile VSG_Data_1163
 description VMware VMkernel, vmk1
 vmware dvport 0 dvswitch uuid "50 13 3b cc 83 4a 88 c8-21 c6 c4 e8 c9 34 e8 bd"
 vmware vm mac 0050.566D.BAF9
```

Saving a Configuration

You can save the running configuration to the startup configuration so that your changes are retained in the configuration file the next time you start the system.

Before you begin

Log in to the CLI in any command mode.

Procedure

	Command or Action	Purpose
Step 1	(Optional) switch# copy running-config startup-config	Saves the change persistently through reboots and restarts by copying the running configuration to the startup configuration.

Example

This example shows how to save a running configuration:

```
switch# copy run start
[#####] 100%
switch#
```

Erasing a Configuration

You can use this procedure to erase a startup configuration.



Caution

The **write erase** command erases the entire startup configuration with the exception of loader functions, the license configuration, and the certificate extension configuration

Before you begin

Log in to the CLI in any command mode.

Procedure

	Command or Action	Purpose
Step 1	switch# write erase [boot debug]	<p>The existing startup configuration is completely erased and all settings revert to their factory defaults.</p> <p>The running configuration is not affected.</p> <p>The following parameters are used with this command:</p> <ul style="list-style-type: none"> • boot—Erases the boot variables and the mgmt0 IP configuration. • debug—Erases the debug configuration.

