



CHAPTER 2

Connecting, Configuring, and Upgrading the CMP

This chapter explains how to connect and configure the Connectivity Management Processor (CMP) on a Cisco Nexus 7000 Series device. It also explains how to update the software image for the CMP.

This chapter includes the following sections:

- [Connecting to the CMP MGMT Ethernet Port, page 2-1](#)
- [Configuring the CMP, page 2-2](#)
- [Verifying the CMP Configuration, page 2-17](#)
- [Upgrading the CMP Image, page 2-18](#)
- [Default Settings for CMP Parameters, page 2-20](#)

Connecting to the CMP MGMT Ethernet Port

To connect the CMP to the network, follow these steps for each installed supervisor:

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- Step 1** Connect a modular, RJ-45, UTP cable to the CMP MGMT ETH port on the supervisor.
 - Step 2** Route the cable through the central slot in the cable management system on the Cisco Nexus 7000 Series chassis.
 - Step 3** Connect the other end of the cable to the networking device.
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You configure the `cmp-mgmt` interface during the initial setup script on the CP when you first configure your device. See the *Cisco Nexus 7000 Series NX-OS Fundamentals Configuration Guide, Release 4.1* for details on the setup script.



Caution

To prevent an IP address conflict, do not connect the CMP MGMT port to the network until the initial configuration is complete. For more information on Ethernet connections and cable management, see the *Cisco Nexus 7000 Series Hardware Installation and Reference Guide*.

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Configuring the CMP

This section includes the following topics:

- [Accessing the CMP from the CP, page 2-2](#)
- [Logging Out of a CMP Session, page 2-2](#)
- [Configuring the CMP-MGMT Interface, page 2-3](#)
- [Configuring an IPv4 Access Control List on the CMP, page 2-6](#)
- [Logging CMP Messages, page 2-7](#)
- [Changing the Communication Settings, page 2-10](#)
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- [Configuring CMPs on a Dual Supervisor System, page 2-17](#)

Accessing the CMP from the CP

You can access the CMP through a console, SSH, or Telnet session with the CP.



Note

To access the CMP by SSH or Telnet, you must enable those sessions on the CMP (by default, the SSH server session is enabled). To enable or disable SSH or Telnet sessions, see [Table 1-2 on page 1-3](#).

BEFORE YOU BEGIN

Ensure that you are in the default VDC (or use the **switchback** command).

SUMMARY STEPS

1. **attach cmp**

DETAILED STEPS

	Command	Purpose
Step 1	attach cmp Example: switch# attach cmp Connected Escape character is '~,' switch-cmp#	Accesses the CMP on the active supervisor module.

Logging Out of a CMP Session

When you log out of a CMP session, you must end the session then exit the mode.

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BEFORE YOU BEGIN

You must be accessing the CMP.

SUMMARY STEPS

1. **end**
2. **exit**

DETAILED STEPS

	Command	Purpose
Step 1	end Example: switch-cmp# end switch-cmp#	Ends the configuration session.
Step 1	exit Example: switch-cmp exit switch	Exits from the CMP configuration mode.



Note If you are in an attached console session, use the ~, command to exit the CMP.

Configuring the CMP-MGMT Interface

You must configure the CMP-MGMT interface before you can connect to the CMP through a SSH or Telnet session.



Note Unlike when you configure the CP, you do not need to use the **copy running-config startup-config** command configuring the CMP-MGMT interface. Each time that you enter a command when configuring the CMP-MGMT interface, the Cisco NX-OS operating system saves the configuration changes on the CMP flash drive.

The following sections explain each of the different ways that you can configure the CMP-MGMT interface:

- [Using a Setup Script on the CP to Configure the CMP-MGMT Interface, page 2-3](#)
- [Using the NX-OS CLI on the CP to Configure the CMP-MGMT Interface, page 2-4](#)
- [Using the NX-OS CLI on the CMP to Configure the CMP-MGMT Interface, page 2-4](#)

Using a Setup Script on the CP to Configure the CMP-MGMT Interface

The Cisco NX-OS setup script guides you through configuring the CMP-MGMT interface. To use this script, see the *Cisco Nexus 7000 Series NX-OS Fundamentals Configuration Guide, Release 4.1*.

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Using the NX-OS CLI on the CP to Configure the CMP-MGMT Interface

You can use the NX-OS CLI on the CP to configure the CMP-MGMT interface.

BEFORE YOU BEGIN

Ensure that you are in the default VDC (or use the **switchback** command).

SUMMARY STEPS

1. **configure terminal**
2. **interface cmp-mgmt module *slot***
3. **ip address *ip-address/length***
4. **ip default-gateway *ip-address***
5. **show running-config cmp**

DETAILED STEPS

	Command	Purpose
Step 1	configure terminal Example: switch# configure terminal switch(config)#	Enters configuration mode.
Step 2	interface cmp-mgmt module <i>slot</i> Example: switch(config)# interface cmp-mgmt module 5 switch(config-if-cmp)#	Enters interface configuration mode for the cmp-mgmt interface on either the active or the standby supervisor.
Step 3	ip address <i>ip-address/length</i> Example: switch(config-if-cmp)# ip address 192.0.2.1/16	Configures the IP address for this cmp-mgmt interface.
Step 4	ip default-gateway <i>ip-address</i> Example: switch(config-if-cmp)# ip default-gateway 192.0.2.10	Configures the default gateway for this cmp-mgmt interface.
Step 5	show running-config cmp Example: switch(config-if-cmp)# show running-config cmp	(Optional) Displays a summary of the CMP interface configuration.

Using the NX-OS CLI on the CMP to Configure the CMP-MGMT Interface

You can use the NX-OS CLI on the CP to configure the CMP-MGMT interface.

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BEFORE YOU BEGIN

Ensure that you are in the default VDC (or use the **switchback** command).

SUMMARY STEPS

1. **attach cmp**
2. **configure terminal**
3. **ip default-gateway *ip-address***
4. **interface cmp-mgmt**
5. **ip address *ip-address/length***
6. **show running-config**
7. **~,**

DETAILED STEPS

	Command	Purpose
Step 1	attach cmp Example: switch# attach cmp switch-cmp5 login: admin Password: <password>#	Connects to the CMP from the supervisor CP.
Step 2	configure terminal Example: switch-cmp# configure terminal switch-cmp(config)#	Enters configuration mode on the CMP.
Step 3	ip default-gateway <i>ip-address</i> Example: switch-cmp(config)# ip default-gateway 192.0.2.10	Configures the default gateway for the cmp-mgmt interface.
Step 4	interface cmp-mgmt Example: switch-cmp(config)# interface cmp-mgmt switch-cmp(config-if)#	Enters interface configuration mode for the cmp-mgmt interface on either the active or the standby supervisor.
Step 5	ip address <i>ip-address/length</i> Example: switch-cmp(config-if)# ip address 192.0.2.1/16	Configures the IP address for this cmp-mgmt interface.
Step 6	show running-config Example: switch-cmp(config-if)# show running-config	(Optional) Displays the CMP configuration.
Step 7	~, Example: switch-cmp(config-if)# ~, switch#	(Optional) Exits the CMP console and returns to the Cisco NX-OS CLI on the CP.

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Configuring an IPv4 Access Control List on the CMP

You can create an IPv4 access control list (ACL) and apply it to the `cmp-mgmt` interface. For more information on ACLs, see the *Cisco Nexus 7000 Series NX-OS Security Configuration Guide, Release 4.1*.



Note

You can only configure an ACL on the CMP directly. You cannot configure this from Cisco NX-OS software on the supervisor module CP.

BEFORE YOU BEGIN

You are connected to the CMP (see the [“Using the NX-OS CLI on the CMP to Configure the CMP-MGMT Interface”](#) section on page 2-4).

SUMMARY STEPS

1. **configure terminal**
2. **ip access-list** *name*
3. **{permit | deny}** *protocol source destination*
4. **exit**
5. **interface** `cmp-mgmt`
6. **ip access-group** *access-list in*
7. **show running-config**

DETAILED STEPS

	Command	Purpose
Step 1	configure terminal Example: switch-cmp# configure terminal switch-cmp(config)#	Enters global configuration mode on the CMP.
Step 2	ip access-list <i>name</i> Example: switch-cmp(config)# ip access-list acl-01 switch-cmp(config-acl)#	Creates the IPv4 ACL and enters IP ACL configuration mode. The <i>name</i> argument can be up to 64 characters.
Step 3	{permit deny} <i>protocol source destination</i> Example: switch-cmp(config-acl)# permit ip 192.168.2.0/24 0.0.0.0/0	Creates a rule in the IPv4 ACL. The permit and deny commands support many ways of identifying traffic. For more information, see the <i>Cisco NX-OS Security Command Reference</i> .
Step 4	exit Example: switch-cmp(config-acl)# exit switch-cmp(config)#	Exits to configuration mode.

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	Command	Purpose
Step 5	interface cmp-mgmt Example: switch-cmp(config)# interface cmp-mgmt switch-cmp(config-if)#	Enters interface configuration mode for the cmp-mgmt interface on either the active or the standby supervisor.
Step 6	ip access-group access-list in Example: switch-cmp(config-if)# ip access-group acl-01 in	Applies an IPv4 ACL to the cmp-mgmt interface for traffic flowing into the interface.
Step 7	show running-config Example: switch-cmp(config-if)# show running-config	(Optional) Displays the CMP configuration.

Logging CMP Messages

You can save up to 256 CMP messages in a log file, and you can specify a severity threshold for the messages saved. When the file has 256 messages, the CMP automatically removes the oldest message whenever it saves a new message. [Table 1](#) describes the message levels and types of messages that the CMP saves. When you specify a severity level, the CMP saves messages for that level and all levels below it in the log file.

Table 1 CMP Message Severity Levels

Level	Messages Saved	Description
0 - Emergency	–	–
1 - Alert	CP on this SUP has reset.	CMP detected a nonmaskable interrupt on the CP.
2 - Critical	CP is not online (could not establish communication with CP).	CMP cannot communicate with the CP.
	Connected with CP! LOG CP IS ONLINE.	CMP and CP can communicate.
	Connection reset with CP!!	CMP cannot detect the maximum number of CP heartbeats.
3 - Error	–	–
4 - Warning	–	–
5 - Notification	–	–
6 - Informational	–	–
7 - Debugging	–	–

This section includes the following topics:

- [Displaying Saved Messages, page 2-8](#)
- [Configuring the Logging Level, page 2-8](#)
- [Clearing the Log File, page 2-9](#)

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Displaying Saved Messages

You can display all of the messages saved in the CMP log file or a specific number of the most recently saved messages by using the **show logging** command.

BEFORE YOU BEGIN

Ensure that you are in the default VDC (or use the **switchback** command).

SUMMARY STEPS

1. **attach cmp**
2. **show logging logfile** {*number_of_messages*}
3. **~**,

DETAILED STEPS

	Command	Purpose
Step 1	attach cmp Example: switch# attach cmp switch-cmp#	Connects to the CMP from the supervisor CP.
Step 2	show logging logfile { <i>number_of_messages</i> }	Shows the saved logfile messages. If you want to see a specific number of the most recent messages, include the number (1 to 256) at the end of the command.
Step 3	~ , Example: switch-cmp(config)# ~, switch#	(Optional) Exits the CMP console and returns to the Cisco NX-OS CLI on the CP.

Configuring the Logging Level

By default, the CMP saves level 2 messages and below in the log file.

BEFORE YOU BEGIN

Ensure that you are in the default VDC (or use the **switchback** command).

SUMMARY STEPS

1. **attach cmp**
2. **configure terminal**
3. **show logging level**
4. **logging level** [1 | 2 | 3 | 4 | 5 | 6 | 7]
5. **show logging level**
6. **~**,

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DETAILED STEPS

	Command	Purpose
Step 1	attach cmp Example: switch# attach cmp switch-cmp#	Connects to the CMP from the supervisor CP.
Step 2	configure terminal Example: switch-cmp# configure terminal switch-cmp(config)#	Enters the configuration mode on the CMP.
Step 3	show logging level Example: switch-cmp(config)# show logging level switch-cmp(config)#	(Optional) Displays the current logging level.
Step 4	logging level [1 2 3 4 5 6 7] Example: switch-cmp(config)# logging level 3 switch-cmp(config)#	Configures a new logging level threshold.
Step 5	show logging level Example: switch-cmp(config)# show logging level switch-cmp(config)#	(Optional) Displays the current logging level.
Step 6	~, Example: switch-cmp(config)# ~, switch#	(Optional) Exits the CMP console and returns to the Cisco NX-OS CLI on the CP.

Clearing the Log File

You can clear the contents of the log file.

BEFORE YOU BEGIN

Ensure that you are in the default VDC (or use the **switchback** command).

SUMMARY STEPS

1. **attach cmp**
2. **configure terminal**
3. **clear logging logfile**
4. **~,**

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DETAILED STEPS

	Command	Purpose
Step 1	attach cmp Example: switch# attach cmp switch-cmp#	Connects to the CMP from the supervisor CP.
Step 2	configure terminal Example: switch-cmp# configure terminal switch-cmp(config)#	Enters the configuration mode on the CMP.
Step 3	clear logging logfile Example: switch-cmp(config)# clear logging logfile switch-cmp(config)#	Clears the contents of the log file.
Step 4	~, Example: switch-cmp(config)# ~, switch#	(Optional) Exits the CMP console and returns to the Cisco NX-OS CLI on the CP.

Changing the Communication Settings

You can change the communication speed, number of bits in a byte, terminal parity, asynchronous line stop bits, and flow control settings so that the CMP can communicate with its CP.

This section includes the following topics:

- [Changing the Speed, page 2-10](#)
- [Changing the Number of Bits in a Transmitted Character, page 2-11](#)
- [Changing the Parity Checking, page 2-12](#)
- [Changing the Asynchronous Stop Bits, page 2-13](#)

Changing the Speed

The CP and CMP must use the same speed (baud rate). If the CP and CMP use different speeds, you must change the speed used by the CMP so that it matches the CP speed.

BEFORE YOU BEGIN

Ensure that you are in the default VDC (or use the **switchback** command).

SUMMARY STEPS

1. **attach cmp**
2. **configure terminal**
3. **line com1**
4. **show line**

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5. `speed number`
6. `~`,

DETAILED STEPS

	Command	Purpose
Step 1	<code>attach cmp</code> Example: <code>switch# attach cmp</code> <code>switch-cmp#</code>	Connects to the CMP from the supervisor CP.
Step 2	<code>configure terminal</code> Example: <code>switch-cmp# configure terminal</code> <code>switch-cmp(config)#</code>	Enters the configuration mode on the CMP.
Step 3	<code>line com1</code> Example: <code>switch-cmp(config)# line com1</code> <code>switch-cmp(config-com1)#</code>	Configures the main configuration line.
Step 4	<code>show line</code> Example: <code>switch-cmp(config-com1)# show line</code>	(Optional) Displays the communications settings.
Step 5	<code>speed number</code> Example: <code>switch-cmp(config-com1)# speed 9600</code>	Configures a speed at 300, 1200, 2400, 4800, 9600, 19200, 38400, 57600, or 115,200 baud.
Step 6	<code>~</code> , Example: <code>switch-cmp(config)# ~</code> , <code>switch#</code>	(Optional) Exits the CMP console and returns to the Cisco NX-OS CLI on the CP.

Changing the Number of Bits in a Transmitted Character

The CP and CMP must use the same number of data bits in the characters that they transmit. If the CP and CMP use different numbers of data bits, you can change the number used by the CMP so that it matches the CP usage.

BEFORE YOU BEGIN

Ensure that you are in the default VDC (or use the `switchback` command).

SUMMARY STEPS

1. `attach cmp`
2. `configure terminal`
3. `line com1`
4. `show line`

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5. `databits number`
6. `~,`

DETAILED STEPS

	Command	Purpose
Step 1	<p>attach cmp</p> <p>Example: Connected Escape character is '~,'</p> <pre>switch# attach cmp switch-cmp#</pre>	Connects to the CMP from the supervisor CP.
Step 2	<p>configure terminal</p> <p>Example: switch-cmp# configure terminal switch-cmp(config)#</p>	Enters the configuration mode on the CMP.
Step 3	<p>line com1</p> <p>Example: switch-cmp(config)# line com1 switch-cmp(config-com1)#</p>	Configures the main configuration line.
Step 4	<p>show line</p> <p>Example: switch-cmp(config-com1)# show line</p>	(Optional) Displays the communications settings.
Step 5	<p>databits number</p> <p>Example: switch-cmp(config-com1)# databits 8</p>	Configures the number of bits in a character (between 5 and 8).
Step 6	<p>~,</p> <p>Example: switch-cmp(config)# ~, switch#</p>	(Optional) Exits the CMP console and returns to the Cisco NX-OS CLI on the CP.

Changing the Parity Checking

The CP and CMP must use the same type of parity checking. If the CP and CMP use different types, you must change the type used by the CMP so that it matches the CP type.

BEFORE YOU BEGIN

Ensure that you are in the default VDC (or use the **switchback** command).

SUMMARY STEPS

1. **attach cmp**
2. **configure terminal**
3. **line com1**

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4. `show line`
5. `parity {even | odd | none}`
6. `~,`

DETAILED STEPS

	Command	Purpose
Step 1	<code>attach cmp</code> Example: switch# attach cmp switch-cmp#	Connects to the CMP from the supervisor CP.
Step 2	<code>configure terminal</code> Example: switch-cmp# configure terminal switch-cmp(config)#	Enters the configuration mode on the CMP.
Step 3	<code>line com1</code> Example: switch-cmp(config)# line com1 switch-cmp(config-com1)#	Configures the main configuration line.
Step 4	<code>show line</code> Example: switch-cmp(config-com1)# show line	(Optional) Displays the communications settings.
Step 5	<code>parity {even odd none}</code> Example: switch-cmp(config-com1)# parity none	Sets single-bit parity checking to check for even parity, odd parity, or ignore parity.
Step 6	<code>~,</code> Example: switch-cmp(config)# ~, switch#	(Optional) Exits the CMP console and returns to the Cisco NX-OS CLI on the CP.

Changing the Asynchronous Stop Bits

The CP and CMP must use the same number of stop bits. If the CP and CMP use different numbers of stop bits, you must change the number used by the CMP so that it matches the CP number.

BEFORE YOU BEGIN

Ensure that you are in the default VDC (or use the `switchback` command).

SUMMARY STEPS

1. `attach cmp`
2. `configure terminal`
3. `line com1`
4. `stopbits {1 | 2}`

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5. `exit`
6. `show line`
7. `~,`

DETAILED STEPS

	Command	Purpose
Step 1	<code>attach cmp</code> Example: switch# attach cmp switch-cmp#	Connects to the CMP from the supervisor CP.
Step 2	<code>configure terminal</code> Example: switch-cmp# configure terminal switch-cmp(config)#	Enters the configuration mode on the CMP.
Step 3	<code>line com1</code> Example: switch-cmp(config)# line com1 switch-cmp(config-com1)#	Configures the main configuration line.
Step 4	<code>stopbits {1 2}</code> Example: switch-cmp(config-com1)# stopbits 1	Configures the number of stop bits included in a character frame.
Step 5	<code>exit</code> Example: switch-cmp(config-com1)# exit switch-cmp(config)#	Exits COM1 configuration mode.
Step 6	<code>show line</code> Example: switch-cmp(config-com1)# show line	(Optional) Displays the communications settings.
Step 7	<code>~,</code> Example: switch-cmp(config)# ~, switch#	(Optional) Exits the CMP console and returns to the Cisco NX-OS CLI on the CP.

Configuring Flow Control

You can use a hardware version of flow control to regulate the flow of data traffic over the internal serial connection between the CMP and CP. When enabled for both the CMP and CP, flow control delays the flow of frames until earlier frames are processed by the receiving processor.

This section includes the following topics:

- [Enabling or Disabling Flow Control for the CMP, page 2-15](#)
- [Enabling or Disabling Flow Control for the CP, page 2-16](#)

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Enabling or Disabling Flow Control for the CMP

You can enable or disable the CMP to use a hardware version of flow control with the CP.

BEFORE YOU BEGIN

You must enable flow control on the CP (see the “[Enabling or Disabling Flow Control for the CP](#)” section on page 2-16).

Ensure that you are in the default VDC (or use the **switchback** command).

SUMMARY STEPS

1. **attach cmp**
2. **configure terminal**
3. **line com1**
4. **{flowcontrol hardware} | {no flowcontrol hardware}**
5. **exit**
6. **show line com1**
7. **~**,

DETAILED STEPS

	Command	Purpose
Step 1	attach cmp Example: switch# attach cmp switch-cmp#	Connects to the CMP from the supervisor CP.
Step 2	configure terminal Example: switch-cmp# configure terminal switch-cmp(config)#	Enters configuration mode.
Step 3	line com1 Example: switch-cmp(config)# line com1 switch-cmp(config-com1)#	Specifies to configure the CMP serial line.
Step 4	{flowcontrol hardware} {no flowcontrol hardware} Example: switch-cmp(config-com1)# flowcontrol hardware	Enables or disables flow control.
Step 5	show line com1 Example: switch-cmp(config-com1)# show line com1	(Optional) Displays the interface status, which includes the flow control parameters.

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	Command	Purpose
Step 6	exit Example: switch-cmp(config-com1)# exit switch-cmp(config)#	Exits COM1 configurationmode.
Step 7	~, Example: switch-cmp(config)# ~, switch#	(Optional) Exits the CMP console and returns to the Cisco NX-OS CLI on the CP.

Enabling or Disabling Flow Control for the CP

You can enable or disable the CP to use a hardware version of flow-control with the CMP.

BEFORE YOU BEGIN

You must enable flow control on the CMP (see the [Enabling or Disabling Flow Control for the CMP, page 2-15](#)).

SUMMARY STEPS

1. **configure terminal**
2. **line console**
3. **{flowcontrol hardware} | {no flowcontrol hardware}**
4. **show line console**
5. **exit**
6. **exit**

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DETAILED STEPS

	Command	Purpose
Step 1	configure terminal Example: switch# configure terminal switch(config)#	Enters configuration mode.
Step 2	line console Example: switch(config)# line com1 switch(config-com1)#	Specifies the serial line to the CMP.
Step 3	{flowcontrol hardware} {no flowcontrol hardware} Example: switch(config-com1)# flowcontrol hardware switch(config-com1)#	Enables or disables flow control.
Step 4	show line console Example: switch(config-com1)# show line com1 switch(config-com1)	(Optional) Displays the interface status, which includes the flow control parameters.
Step 5	exit Example: switch(config-com1)# exit switch(config)#	Exits the COM1 configuration mode.
Step 6	exit Example: switch(config)# exit switch#	Exits the configuration mode.

Configuring CMPs on a Dual Supervisor System

The CMP runs in active mode on both supervisor modules, even when only one supervisor module is active, so you must configure each CMP individually. You can configure the unique IP address for each CMP from the active CP by using NX-OS commands through either the CLI or scripts. To perform all other CMP configuration functions, connect directly to the CMP you are configuring to perform those functions.

Verifying the CMP Configuration

To display CMP configuration information from the Cisco NX-OS CLI on the CP, use the following commands:

Command	Purpose
show running-config cmp	Displays the running configuration for the CMP.
show startup-config cmp	Displays the startup configuration for the CMP.

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Command	Purpose
<code>show tech-support cmp</code>	Displays the technical support output for the CMP.
<code>show logging logfile include cmp</code>	Displays the logs for the CMP.

To display CMP configuration information from the CMP CLI, use the following commands:

Command	Purpose
<code>show attach sessions</code>	Displays information about active or suspended attach or monitor sessions.
<code>show hardware</code>	Displays information about the CMP hardware.
<code>show interface</code>	Displays information about the cmp-mgmt interface.
<code>show logs</code>	Displays the CMP syslog messages.
<code>show processes</code>	Displays information about the CMP processes.
<code>show running-config</code>	Displays the running configuration for the CMP.
<code>show sprom</code>	Displays the SPROM contents on the CMP.
<code>show ssh</code>	Displays information about SSH on the CMP.
<code>show system resources</code>	Displays information about CMP system resources
<code>show users</code>	Displays the users logged into the system.
<code>show version</code>	Displays the software image versions for the supervisor CP and the CMP.

Upgrading the CMP Image

You can upgrade the CMP image, which is part of the Cisco NX-OS system image and contains a subset of commands to support the CMP features.



Note

The CMP image is independent of the CP image, so the version of the CMP image might not match the version of the CP image. To make sure that the CMP is running the latest compatible image, use the **install all** command from the Cisco NX-OS CLI on the CP.

To upgrade the Cisco NX-OS kickstart image, system image, and CMP image at the same time, use the **install all** command from the Cisco NX-OS CLI on the CP. This command automatically upgrades the software on both CMPs. After the software is upgraded, you must manually reload the CMP on each supervisor. For more information on software images, see the *Cisco Nexus 7000 Series NX-OS Software Upgrade and Downgrade Guide, Release 4.1*.

Use the following procedure if you want to update only the CMP image.

BEFORE YOU BEGIN

Ensure that you are in the default VDC (or use the **switchback** command).

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SUMMARY STEPS

1. `copy {ftp | tftp} remote-location local-location`
2. `show module`
3. `install module active-slot cmp system local-location`
4. `install module standby-slot cmp system local-location`
5. `reload cmp module active-slot`
6. `reload cmp module standby-slot`
7. `show version`

DETAILED STEPS

	Command	Purpose
Step 1	<pre>copy {ftp tftp} remote-location local-location</pre> <p>Example: switch# copy ftp://10.1.7.2/n7000-s1-dk9.4.0.3.bin bootflash:n7000-s1-dk9.4.0.3.bin</p>	Copies the CMP image from an FTP server to the supervisor module.
Step 2	<pre>show module</pre> <p>Example: switch# show module</p>	Displays information about the location and status of modules on the device.
Step 3	<pre>install module active-slot cmp system location</pre> <p>Example: switch# install module 5 cmp system bootflash:/n7000-s1-dk9.4.0.3.bin</p>	<p>Extracts the CMP image from the Cisco NX-OS system image and installs the CMP image on the CMP on the active supervisor module. The location argument consists of the file location and the filename.</p> <p>For more information on installing images, see the <i>Cisco Nexus 7000 Series NX-OS Software Upgrade and Downgrade Guide, Release 4.1</i>.</p>
Step 4	<pre>install module standby-slot cmp system location</pre> <p>Example: switch# install module 6 cmp system bootflash:/n7000-s1-dk9.4.0.3.bin</p>	<p>Extracts the CMP image from the Cisco NX-OS system image and installs the CMP image on the CMP on the standby supervisor module, if present. The location argument consists of the file location and the filename.</p> <p>For more information on installing images, see the <i>Cisco Nexus 7000 Series NX-OS Software Upgrade and Downgrade Guide, Release 4.1</i>.</p>
Step 5	<pre>reload cmp module active-slot</pre> <p>Example: switch# reload cmp module 5</p>	Reloads the CMP for the active supervisor module to complete the upgrade.

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	Command	Purpose
Step 6	<pre>reload cmp module standby-slot</pre> <p>Example: switch# reload cmp module 5</p>	Reloads the CMP for the standby supervisor module, if present, to complete the upgrade.
Step 7	<pre>show version</pre> <p>Example: switch# show version</p>	Displays the BIOS and software image versions of the CMP.

Default Settings for CMP Parameters

Table 2 lists the default settings for CMP parameters.

Table 2 Default CMP Parameter Settings

Parameters	Default
Logging level	2 (critical level)
SSH server	Enabled
Telnet server	Disabled