

## **Basic Device Management**

This chapter describes how to configure, manage, and verify the basic setting on your Cisco NX-OS device.

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## **Information About Basic Device Management**

This section provides information about basic device management.

### **Device Hostname**

You can change the device hostname displayed in the command prompt from the default (switch) to another character string. When you give the device a unique hostname, you can easily identify the device from the command-line interface (CLI) prompt.

### **Message-of-the-Day Banner**

The message-of-the-day (MOTD) banner displays before the user login prompt on the device. This message can contain any information that you want to display for users of the device.

### **Device Clock**

If you do not synchronize your device with a valid outside timing mechanism, such as an NTP clock source, you can manually set the clock time when your device boots.

### **Clock Manager**

The Cisco Nexus chassis may contain clocks of different types that may need to be synchronized. These clocks are a part of various components (such as the supervisor, LC processors, or line cards) and each may be using a different protocol.

The clock manager provides a way to synchronize these different clocks.

### Time Zone and Summer Time (Daylight Saving Time)

You can configure the time zone and summer time (daylight saving time) setting for your device. These values offset the clock time from Coordinated Universal Time (UTC). UTC is International Atomic Time (TAI) with leap seconds added periodically to compensate for the Earth's slowing rotation. UTC was formerly called Greenwich Mean Time (GMT).

### **User Sessions**

You can display the active user session on your device. You can also send messages to the user sessions. For more information about managing user sessions and accounts, see the Cisco Nexus security configuration guide for your device.

## **Guidelines and Limitations for Basic Device Management**

The following are guidelines and limitations for basic device management:

• The **show tech-support libsdk** command and the **show tech-support mtc-usd** command are not supported. Instead use the **show tech-support module 1** command. (NX-OS 7.0(3)I7(2) and later releases.)

## **Changing the Device Hostname**

You can change the device hostname displayed in the command prompt from the default (switch) to another character string.

#### **SUMMARY STEPS**

- 1. configure terminal
- **2.** {hostname | switchname} name
- 3. exit
- 4. (Optional) copy running-config startup-config

	Command or Action	Purpose
Step 1	configure terminal	Enters global configuration mode.
	Example:	

	Command or Action	Purpose
	<pre>switch# configure terminal switch(config)#</pre>	
Step 2	{hostname   switchname} name	Changes the device hostname. The <i>name</i> argument is
	Example:	alphanumeric, case sensitive, and has a maximum length of 63 characters. The default name is switch.
	Using the <b>hostname</b> command:	Note The switchname command performs the same
	<pre>switch(config)# hostname Engineering1 Engineering1(config)#</pre>	function as the <b>hostname</b> command.
	Using the <b>switchname</b> command:	
	<pre>Engineering1(config) # switchname Engineering2 Engineering2(config) #</pre>	
Step 3	exit	Exits global configuration mode.
	Example:	
	<pre>Engineering2(config)# exit Engineering2#</pre>	
Step 4	(Optional) copy running-config startup-config	Copies the running configuration to the startup
	Example:	configuration.
	Engineering2# copy running-config startup-config	

# **Configuring the MOTD Banner**

You can configure the MOTD to display before the login prompt on the terminal when a user logs in. The MOTD banner has the following characteristics:

- Maximum of 80 characters per line
- Maximum of 40 lines

#### **SUMMARY STEPS**

- 1. configure terminal
- 2. banner motd delimiting-character message delimiting-character
- 3. exit
- 4. (Optional) show banner motd
- 5. (Optional) copy running-config startup-config

	Command or Action	Purpose
Step 1	configure terminal	Enters global configuration mode.
	Example:	
	<pre>switch# configure terminal switch(config)#</pre>	

	Command or Action	Purpose	
Step 2	<b>banner motd</b> delimiting-character message delimiting-character	Configures the MOTD banner. Do not use the <i>delimiting-character</i> in the <i>message</i> text.	
	Example:	<b>Note</b> Do not use " or % as a delimiting character.	
	<pre>switch(config)# banner motd #Welcome to the Switch# switch(config)#</pre>		
Step 3	exit	Exits global configuration mode.	
	Example:		
	<pre>switch(config)# exit switch#</pre>		
Step 4	(Optional) show banner motd	Displays the configured MOTD banner.	
	Example:		
	switch# show banner motd		
Step 5	(Optional) copy running-config startup-config	Copies the running configuration to the startup	
	Example:	configuration.	
	switch# copy running-config startup-config		

# **Configuring the Time Zone**

You can configure the time zone to offset the device clock time from UTC.

#### **SUMMARY STEPS**

- 1. configure terminal
- 2. clock timezone zone-name offset-hours offset-minutes
- 3. exit
- 4. (Optional) show clock
- 5. (Optional) copy running-config startup-config

	Command or Action	Purpose
Step 1	configure terminal	Enters global configuration mode.
	Example:	
	<pre>switch# configure terminal switch(config)#</pre>	
Step 2	<pre>clock timezone zone-name offset-hours offset-minutes Example: switch(config) # clock timezone EST -5 0</pre>	Configures the time zone. The <i>zone-name</i> argument is a 3-character string for the time zone acronym (for example, PST or EST). The <i>offset-hours</i> argument is the offset from the UTC and the range is from –23 to 23 hours. The range for the <i>offset-minutes</i> argument is from 0 to 59 minutes.

	Command or Action	Purpose
Step 3	exit	Exits global configuration mode.
	Example:	
	<pre>switch(config)# exit switch#</pre>	
Step 4	(Optional) show clock	Displays the time and time zone.
	Example:	
	switch# show clock	
Step 5	(Optional) copy running-config startup-config	Copies the running configuration to the startup
	Example:	configuration.
	switch# copy running-config startup-config	

## **Configuring Summer Time (Daylight Saving Time)**

You can configure when summer time, or daylight saving time, is in effect for the device and the offset in minutes.

#### **SUMMARY STEPS**

- 1. configure terminal
- **2. clock summer-time** zone-name start-week start-day start-month start-time end-week end-day end-month end-time offset-minutes
- 3. exit
- 4. (Optional) show clock detail
- 5. (Optional) copy running-config startup-config

	Command or Action	Purpose	
Step 1	configure terminal	Enters global configuration mode.	
	Example:		
	<pre>switch# configure terminal switch(config)#</pre>		
Step 2	clock summer-time zone-name start-week start-day	Configures summer time or daylight saving time.	
	start-month start-time end-week end-day end-month end-time offset-minutes	The <i>zone-name</i> argument is a three character string for the time zone acronym (for example, PST and EST).	
	Example:	The values for the <i>start-day</i> and <i>end-day</i> arguments are	
	<pre>switch(config)# clock summer-time PDT 1 Sunday March 02:00 1 Sunday November 02:00 60</pre>	Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, and Sunday.	

	Command or Action	Purpose
		The values for the <i>start-month</i> and <i>end-month</i> arguments are <b>January</b> , <b>February</b> , <b>March</b> , <b>April</b> , <b>May</b> , <b>June</b> , <b>July</b> , <b>August</b> , <b>September</b> , <b>October</b> , <b>November</b> , and <b>December</b> .
		The value for the <i>start-time</i> and <i>end-time</i> arguments are in the format <i>hh:mm</i> .
		The range for the <i>offset-minutes</i> argument is from 0 to 1440 minutes.
Step 3	exit	Exits global configuration mode.
	Example:	
	<pre>switch(config)# exit switch#</pre>	
Step 4	(Optional) show clock detail	Displays the configured MOTD banner.
	<pre>Example: switch(config) # show clock detail</pre>	
Step 5	(Optional) copy running-config startup-config	Copies the running configuration to the startup
	Example:	configuration.
	switch# copy running-config startup-config	

# **Manually Setting the Device Clock**

You can set the clock manually if your device cannot access a remote time source.

### Before you begin

Configure the time zone.

### **SUMMARY STEPS**

- 1. clock set time day month year
- 2. (Optional) show clock

	Command or Action	Purpose
Step 1	clock set time day month year	Configures the device clock.
	Example:	The format for the <i>time</i> argument is <i>hh:mm:ss</i> .
	switch# clock set 15:00:00 30 May 2008 Fri May 30 15:14:00 PDT 2008	The range for the <i>day</i> argument is from 1 to 31.
		The values for the <i>month</i> argument are <b>January</b> , <b>February</b> , <b>March</b> , <b>April</b> , <b>May</b> , <b>June</b> , <b>July</b> , <b>August</b> , <b>September</b> , <b>October</b> , <b>November</b> , and <b>December</b> .

	Command or Action	Purpose
		The range for the <i>year</i> argument is from 2000 to 2030.
Step 2	(Optional) show clock	Displays the current clock value.
	Example:	
	switch(config) # show clock	

# **Setting the Clock Manager**

You can configure the clock manager to synchronize all the clocks of the components in the Cisco Nexus chassis.

#### **SUMMARY STEPS**

- 1. clock protocol protocol vdc vdc-num
- 2. (Optional) show run clock\_manager

	Command or Action	Purpose	
Step 1	clock protocol protocol vdc vdc-num	Configures the	he clock manager.
	Example: # clock protocol ptp vdc 2	The values for <b>none</b> .	or the <i>protocol</i> argument are <b>ptp</b> , <b>ntp</b> , and
		The followin	g describes the values:
			ynchronizes clocks with Precision Time I (PTP) as described by IEEE 1588.
			lynchronizes clocks with Network Time I (NTP).
		• none—	Use <b>clock set</b> to set supervisor clocks.
		Note	When <b>none</b> is used, the clock in the specified VDC must be configured.
		Note	Once the protocol is configured, the clock in the specified VDC must use that protocol.
			For example, if the <b>clock protocol ptp vdc 2</b> command is entered, then PTP should be configured in VDC 2.
		The range fo	r the <i>vdc</i> argument is 1 to 8.
Step 2	(Optional) show run clock_manager	Displays the	configuration of the clock manager.
	Example:		

Command or Action	Purpose
#show run clock_manager	

# **Managing Users**

You can display information about users logged into the device and send messages to those users.

### **Displaying Information about the User Sessions**

You can display information about the user session on the device.

#### **SUMMARY STEPS**

1. show users

#### **DETAILED STEPS**

	Command or Action	Purpose
Step 1	show users	Displays the user sessions.
	Example:	
	switch# show users	

### **Sending a Message to Users**

You can send a message to active users currently using the device CLI.

#### **SUMMARY STEPS**

- 1. (Optional) show users
- 2. send [session line] message-text

	Command or Action	Purpose
Step 1	(Optional) show users	Displays the active user sessions.
	Example: switch# show users	
Step 2	send [session line] message-text	Sends a message to all active users or to a specific user.
	Example: switch# send Reloading the device is 10 minutes!	The message can be up to 80 alphanumeric characters and is case sensitive.

## **Verifying the Device Configuration**

To verify the configuration, use one of the following commands:

Command	Purpose
show running-config	Displays the running configuration.
show startup-config	Displays the startup configuration.

For detailed information about the fields in the output from these commands, see the Cisco Nexus command reference for your device.

# **Default Settings for Basic Device Parameters**

This table lists the default settings for basic device parameters.

Table 1: Default Basic Device Parameters

Parameters	Default
MOTD banner text	User Access Verification
Clock time zone	UTC

# **Additional References for Basic Device Management**

Related Topic	Document Title
Cisco NX-OS Licensing	Cisco NX-OS Licensing Guide
Command Reference	Cisco Nexus 3548 Switch NX-OS Fundamentals Command Reference

**Additional References for Basic Device Management**