Cisco Nexus 5000 Series Basic System Commands

This chapter describes the basic Cisco NX-OS system commands available on Cisco Nexus 5000 Series switches. These commands allow you to navigate and control the switch.

banner motd

To configure the message-of-the-day (MOTD) banner that displays when the user logs in to a Cisco Nexus 5000 Series switch, use the **banner motd** command. To revert to the default, use the **no** form of this command.

banner motd *delimiter message delimiter*

no banner motd

Syntax Description	*delimiter*	The delimiter character indicates the start and end of the message and is not a character that you use in the message. Do not use **"** or **%** as a delimiting character. White space characters will not work.
	message	Message text. The text is alphanumeric, case sensitive, and can contain special characters. It cannot contain the delimiter character you have chosen. The text has a maximum length of 80 characters and a maximum of 40 lines.

Command Default "Nexus 5000 Switch" is the default MOTD string.

Command Modes Interface configuration mode

Command History	Release	Modification
	4.0(0)N1(1a)	This command was introduced.

Usage Guidelines 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.

Examples This example shows how to configure a single-line MOTD banner:

```
switch(config)# banner motd #Unauthorized access to this device is prohibited!#
```

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

```
switch(config)# banner motd #Welcome Authorized Users
> Unauthorized access prohibited!#
```

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

```
switch(config)# no banner motd
```

Related Commands	Command	Description
	show banner motd	Displays the MOTD banner.

boot

To configure the boot variable for the Cisco Nexus 5000 Series kickstart or system software image, use the **boot** command. To clear the boot variable, use the **no** form of this command.

> **boot** {**kickstart** | **system**} [**bootflash:**] [*//server/*] [*directory*] *filename*

> **no boot** {**kickstart** | **system**}

Syntax Description

kickstart	Configures the kickstart image.
system	Configures the system image.
bootflash:	(Optional) Name of the bootflash file system.
//server/	(Optional) Name of the server. Valid values are **///**, **//module-1/**, **//sup-1/**, **//sup-active/**, or **//sup-local/**. The double slash (**//**) is required.
directory	(Optional) Name of a directory. The directory name is case sensitive.
filename	Name of the kickstart or system image file. The filename is case sensitive.

✎
Note There can be no spaces in the *bootflash://server/directory/filename* string. Individual elements of this string are separated by colons (:) and slashes (/).

Command Default None.

Command Modes Interface configuration mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines The Cisco NX-OS software uses the boot variable for loading images when booting up. You must copy the correct image to the switch before you reload.

Examples This example shows how to configure the system boot variable:

```
switch(config)# boot system bootflash:n5000.bin
```

This example shows how to configure the kickstart boot variable:

```
switch(config)# boot kickstart bootflash:n5000-kickstart.bin
```

This example shows how to clear the system boot variable:

```
switch(config)# no boot system
```

This example shows how to clear the kickstart boot variable:

```
switch(config)# no boot kickstart
```

Related Commands

Command	Description
copy	Copies files.
show boot	Displays boot variable configuration information.

cd

To change the current working directory in the device file system, use the **cd** command.

cd [*filesystem***:**] [*//server/*] *directory*

Syntax Description

*filesystem***:**	(Optional) Name of the file system. Valid values are **bootflash** or **volatile**.
//server/	(Optional) Name of the server. Valid values are ***///***, **//module-1/**, **//sup-1/**, **//sup-active/**, or **//sup-local/**. The double slash (**//**) is required.
directory	Name of the destination directory. The directory name is case sensitive.

> **Note** There can be no spaces in the *filesystem://server/directory* string. Individual elements of this string are separated by colons (:) and slashes (/).

Command Default None.

Command Modes EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines Use the **pwd** command to verify the current working directory.

Examples This example shows how to change the current working directory on the current file system:

```
switch# cd my-scripts
```

This example shows how to change the current working directory to another file system:

```
switch# cd volatile:
```

Related Commands

Command	Description
pwd	Displays the current working directory name.

clear cli history

To clear the command history, use the **clear cli history** command.

clear cli history

Syntax Description   This command has no arguments or keywords.

Command Default   None.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   Use the **show cli history** command to display the history of the commands that you entered at the command-line interface (CLI).

Examples   This example shows how to clear the command history:

```
switch# clear cli history
```

Related Commands

Command	Description
show cli history	Displays the command history.

clear cores

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

clear cores

Syntax Description

This command has no arguments or keywords.

Command Default

None.

Command Modes

EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines

Use the **show system cores** command to display information about the core files.

Examples

This example shows how to clear the core file:

```
switch# clear cores
```

Related Commands

Command	Description
show system cores	Displays the core filename.
system cores	Configures the core filename.

clear debug-logfile

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

clear debug-logfile *filename*

Syntax Description	*filename*	Name of the debug log file to clear.

Command Default   None.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   None.

Examples   This example shows how to clear the debug log file:

```
switch# clear debug-logfile syslogd_debugs
```

Related Commands

Command	Description
debug logfile	Configures a debug log file.
debug logging	Enables debug logging.
show debug logfile	Displays the contents of the debug log file.

clear install failure-reason

To clear the reason for software installation failures, use the **clear install failure-reason** command.

clear install failure-reason

Syntax Description   This command has no arguments or keywords.

Command Default   None.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   None.

Examples   This example shows how to clear the reason for software installation failures:

```
switch# clear install failure-reason
```

Related Commands

Command	Description
show install all	Displays status information for the software installation.

clear license

To uninstall a license, use the **clear license** command.

clear license *filename*

Syntax Description

filename	Name of the license file to be uninstalled.

Command Default   None.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   None.

Examples   This example shows how to clear a specific license:

```
switch# clear license fm.lic
```

Related Commands

Command	Description
show license	Displays license information.

clear user

To log out a particular user, use the **clear user** command.

clear user *username*

Syntax Description

username	Name of the user to be logged out.

Command Default

None.

Command Modes

EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines

None.

Examples

This example shows how to log out a specific user:

```
switch# clear user admin
```

Related Commands

Command	Description
show users	Displays the users currently logged on the switch.

cli var name

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

cli var name *variable-name variable-text*

no cli var name *variable-name*

Syntax Description

variable-name	Name of the variable. The name is alphanumeric, case sensitive, and has a maximum of 31 characters.
variable-text	Variable text. The text is alphanumeric, can contain spaces, and has a maximum of 200 characters.

Command Default   None.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

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

`$(variable-name)`

Instances where you can use variables include the following:

- Command scripts
- Filenames

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

The Cisco NX-OS software provides a predefined variable, TIMESTAMP, that you can use to insert the time of day. You cannot change or remove the TIMESTAMP CLI variable.

You cannot change the definition of a CLI variable. You must remove the variable and then create it again with the new definition.

Examples   This example shows how to define a CLI variable:

```
switch# cli var name testvar interface ethernet 1/3
```

This example shows how to reference a CLI variable:

```
switch# show $(testvar)
```

This example shows how to reference the TIMESTAMP variable:

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

This example shows how to remove a CLI variable:

```
switch# cli no var name testvar
```

Related Commands	Command	Description
	run-script	Runs command scripts.
	show cli variables	Displays the CLI variables.

clock set

To manually set the clock on a Cisco Nexus 5000 Series switch, use the **clock set** command.

clock set *time day month year*

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

Command Default   None.

Command Modes   EXEC mode

Command History	Release	Modification
	4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   Use this command when you cannot synchronize the switch with an outside clock source, such as an NTP server.

Examples   This example shows how to manually configure the clock:

```
switch# clock set 12:00:00 04 July 2008
```

Related Commands	Command	Description
	show clock	Displays the clock time.

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clock summer-time

To configure the summer-time (daylight saving time) offset, use the **clock summer-time** command. To revert to the default, use the **no** form of this command.

> **clock summer-time** *zone-name start-week start-day start-month start-time end-week end-day end-month end-time offset-minutes*

> **no clock summer-time**

Syntax Description

zone-name	Time zone string. The time zone string is a three-character string.
start-week	Week of the month to start the summer-time offset. The range is from 1 to 5.
start-day	Day of the month to start the summer-time offset. Valid values are **Monday**, **Tuesday**, **Wednesday**, **Thursday**, **Friday**, **Saturday**, or **Sunday**.
start-month	Month to start the summer-time offset. Valid values are **January**, **February**, **March**, **April**, **May**, **June**, **July**, **August**, **September**, **October**, **November**, and **December**.
start-time	Time to start the summer-time offset. The format is *HH*:*MM*.
end-week	Week of the month to end the summer-time offset. The range is from 1 to 5.
end-day	Day of the month to end the summer-time offset. Valid values are **Monday**, **Tuesday**, **Wednesday**, **Thursday**, **Friday**, **Saturday**, or **Sunday**.
end-month	Month to end the summer-time offset. Valid values are **January**, **February**, **March**, **April**, **May**, **June**, **July**, **August**, **September**, **October**, **November**, and **December**.
end-time	Time to end the summer-time offset. The format is *HH*:*MM*.
offset-minutes	Number of minutes to offset the clock. The range is from 1 to 1440.

Command Default None.

Command Modes Interface configuration mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines None.

Examples This example shows how to configure the offset for summer-time or daylight saving time:

```
switch(config)# clock summer-time PDT 1 Sunday March 02:00 5 Sunday November 02:00 60
```

This example shows how to revert to the default offset for summer-time:

```
switch(config)# no clock summer-time
```

Related Commands	Command	Description
	show clock	Displays clock summer-time offset configuration.

clock timezone

To configure the time zone offset from Coordinated Universal Time (UTC), use the **clock timezone** command. To revert to the default, use the **no** form of this command.

> **clock timezone** *zone-name offset-hours offset-minutes*

> **no clock timezone**

Syntax Description

zone-name	Zone name. The name is a 3-character string for the time zone acronym (for example, PST or EST).
offset-hours	Number of hours offset from UTC. The range is from –23 to 23.
offset-minutes	Number of minutes offset from UTC. The range is from 0 to 59.

Command Default   None.

Command Modes   Interface configuration mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   Use the command to offset the device clock from UTC.

Examples   This example shows how to configure the time zone offset from UTC:

```
switch(config)# clock timezone PST -8 0
```

This example shows how to revert the time zone offset to the default:

```
switch# no clock timezone
```

Related Commands

Command	Description
show clock	Displays the clock time.

configure terminal

To enter configuration mode, use the **configure terminal** command in EXEC mode.

configure terminal

Syntax Description   This command has no arguments or keywords.

Command Default   None.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   Use this command to enter configuration mode. Commands in this mode are written to the running configuration file as soon as you enter them (using the **Enter** key/**Carriage Return**).

After you enter the **configure terminal** command, the system prompt changes from switch# to switch(config)#, indicating that the router is in configuration mode. To leave configuration mode and return to EXEC mode, type **end** or press **Ctrl-Z**.

To view the changes to the configuration that you have made, use the **show running-config** command.

Examples   This example shows how to enter configuration mode:

```
switch# configure terminal
switch(config)#
```

Related Commands

Command	Description
copy running-config startup-config	Saves the running configuration as the startup configuration file.
end	Ends your configuration session by exiting to EXEC mode.
exit (global)	Exits from the current configuration mode to the next highest configuration mode.
show running-config	Displays the current running configuration.

copy

To copy any file from a source to a destination, use the **copy** command.

copy *source-url destination-url*

Syntax Description

source-url	Location URL (or variable) of the source file or directory to be copied. The source can be either local or remote, depending upon whether the file is being downloaded or uploaded.
destination-url	Destination URL (or variable) of the copied file or directory. The destination can be either local or remote, depending upon whether the file is being downloaded or uploaded.

The format of the source and destination URLs varies according to the file or directory location. You can enter either a command-line interface (CLI) variable for a directory or a filename that follows the Cisco NX-OS file system syntax (*filesystem*:[/*directory*][/*filename*]).

The following tables list URL prefix keywords by the file system type. If you do not specify a URL prefix keyword, the router looks for a file in the current directory.

Table 1-1 lists URL prefix keywords for local writable storage file systems. Table 1-2 lists the URL prefix keywords for remote file systems. Table 1-3 lists the URL prefix keywords for nonwritable file systems.

Table 1-1   URL Prefix Keywords for Local Writable Storage File Systems

Keyword	Source or Destination
bootflash:[//*server*/]	Source or destination URL for boot flash memory. The *server* argument value is **module-1**, **sup-1**, **sup-active**, or **sup-local**.
volatile:[//*server*/]	Source or destination URL of the default internal file system. Any files or directories stored in this file system will be erased when the switch reboots. The *server* argument value is **module-1**, **sup-1**, **sup-active**, or **sup-local**.

Table 1-2   URL Prefix Keywords for Remote File Systems

Keyword	Source or Destination
ftp:	Source or destination URL for a FTP network server. The syntax for this alias is as follows: **ftp:**[//*server*][/*path*]/*filename*
scp:	Source or destination URL for a network server that supports Secure Shell (SSH) and accepts copies of files using the secure copy protocol (scp). The syntax for this alias is as follows: **scp:**[//[*username*@]*server*][/*path*]/*filename*

Table 1-2   **URL Prefix Keywords for Remote File Systems (continued)**

Keyword	Source or Destination
sftp:	Source or destination URL for an SSH FTP (SFTP) network server. The syntax for this alias is as follows: **sftp:**[**//**[*username***@**]*server*][**/***path*]**/***filename*
tftp:	Source or destination URL for a TFTP network server. The syntax for this alias is as follows: **tftp:**[**//***server*[**:***port*]][**/***path*]**/***filename*

Table 1-3   **URL Prefix Keywords for Special File Systems**

Keyword	Source or Destination
core:	Local memory for core files. You can copy core files from the core file system.
debug:	Local memory for debug files. You can copy core files from the debug file system.
log:	Local memory for log files. You can copy log files from the log file system.
modflash:	External memory for mod files. You can copy mod files from modflash file system.
system:	Local system memory. You can copy the running configuration to or from the system file system. The system file system is optional when referencing the running-config file in a command.
volatile:	Local volatile memory. You can copy files to or from the volatile file system. All files in the volatile memory are lost when the physical device reloads.

Command Default   The default name for the destination file is the source filename.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   The **copy** command allows you to copy a file (such as a system image or configuration file) from one location to another location. The source and destination for the file is specified using a Cisco NX-OS file system URL, which allows you to specify a local or remote file location. The file system being used (such as a local memory source or a remote server) determines the syntax used in the command.

You can enter on the command line all necessary source- and destination-URL information and the username to use, or you can enter the **copy** command and have the CLI prompt you for any missing information.

S e n d   c o m m e n t s   t o   n x 5 0 0 0 - d o c f e e d b a c k @ c i s c o . c o m

The entire copying process may take several minutes, depending on the network conditions and the size of the file, and differs from protocol to protocol and from network to network.

The colon character (**:**) is required after the file system URL prefix keywords (such as **bootflash**).

In the URL syntax for **ftp:**, **scp:**, **sftp:**, and **tftp:**, the server is either an IPv4 address or a host name.

This section contains usage guidelines for the following topics:

- Copying Files from a Server to Bootflash Memory, page -21
- Copying a Configuration File from a Server to the Running Configuration, page -21
- Copying a Configuration File from a Server to the Startup Configuration, page -21
- Copying the Running or Startup Configuration on a Server, page -21

Copying Files from a Server to Bootflash Memory

Use the **copy** *source-url* **bootflash:** command (for example, **copy tftp:***source-url* **bootflash:**) to copy an image from a server to the local bootflash memory.

Copying a Configuration File from a Server to the Running Configuration

Use the **copy** {**ftp:** | **scp:** | **sftp:** | **tftp:**}*source-url* **running-config** command to download a configuration file from a network server to the running configuration of the device. The configuration is added to the running configuration as if the commands were typed in the CLI. The resulting configuration file is a combination of the previous running configuration and the downloaded configuration file. The downloaded configuration file having precedence over the previous running configuration.

You can copy either a host configuration file or a network configuration file. Accept the default value of *host* to copy and load a host configuration file containing commands that apply to one network server in particular. Enter *network* to copy and load a network configuration file that contains commands that apply to all network servers on a network.

Copying a Configuration File from a Server to the Startup Configuration

Use the **copy** {**ftp:** | **scp:** | **sftp:** | **tftp:**}*source-url* **startup-config** command to copy a configuration file from a network server to the router startup configuration. These commands replace the startup configuration file with the copied configuration file.

Copying the Running or Startup Configuration on a Server

Use the **copy running-config** {**ftp:** | **scp:** | **sftp:** | **tftp:**}*destination-url* command to copy the current configuration file to a network server that uses FTP, scp, SFTP, or TFTP. Use the **copy startup-config** {**ftp:** | **scp:** | **stfp:** | **tftp:**}*destination-url* command to copy the startup configuration file to a network server.

You can use the copied configuration file copy as a backup.

Examples

This example shows how to copy a file within the same directory:

```
switch# copy file1 file2
```

This example shows how to copy a file to another directory:

```
switch# copy file1 my-scripts/file2
```

This example shows how to copy a file to another file system:

```
switch# copy file1 bootflash:
```

This example shows how to copy a file to another supervisor module:

```
switch# copy file1 bootflash://sup-1/file1.bak
```

This example shows how to copy a file from a remote server:

```
switch# copy scp://10.10.1.1/image-file.bin bootflash:image-file.bin
```

Related Commands	**Command**	**Description**
	cd	Changes the current working directory.
	delete	Delete a file or directory.
	dir	Displays the directory contents.
	move	Moves a file.
	pwd	Displays the name of the current working directory.

copy running-config startup-config

To save the running configuration to the startup configuration file so that all current configuration details are available after a reboot, use the **copy running-config startup-config** command. Once this command is entered, the running and the startup copies of the configuration are identical.

>   **copy running-config startup-config**

Syntax Description	This command has no additional arguments or keywords.

Command Default	None.

Command Modes	EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   To view the changes to the configuration that you have made, use the **show startup-config** command.

Examples   The following example shows saving the running configuration to the startup configuration:

```
switch# copy running-config startup-config
```

Related Commands

Command	Description
show running-config	Displays the currently running configuration.
show startup-config	Displays the startup configuration file.

databits

To configure the number of data bits in a character for the terminal port, use the **databits** command. To revert to the default, use the **no** form of this command.

> **databits** *bits*

> **no databits** *bits*

Syntax Description

bits	Number of data bits in a character. The range is from 5 to 8.

Command Default

8 bits

Command Modes

Terminal line configuration

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines

You can configure the console port only from a session on the console port.

Examples

This example shows how to configure the number of data bits for the console port:

```
switch# configure terminal
switch(config)# line console
switch(config-console)# databits 7
```

This example shows how to revert to the default number of data bits for the console port:

```
switch# configure terminal
switch(config)# line console
switch(config-console)# no databits 7
```

Related Commands

Command	Description
show line	Displays information about the console port configuration.

debug logfile

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

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

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

Syntax Description

filename	Name of the file for **debug** command output. The filename is alphanumeric, case sensitive, and has a maximum of 64 characters.
size *bytes*	(Optional) Specifies the size of the log file in bytes. The range is from 4096 to 4194304.

Command Default   None.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   The Cisco NX-OS software creates the logfile 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 log file:

```
switch# debug logfile debug_log
```

This example shows how to revert to the default debug log file:

```
switch# no debug logfile debug_log
```

Related Commands

Command	Description
dir	Displays the contents of a directory.
show debug logfile	Displays the debug logfile contents.

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.

Command Default   Disabled.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   None.

Examples   This example shows how to enable the output logging for the **debug** command:

```
switch# debug logging
```

This example shows how to disable the output logging for the **debug** command:

```
switch# no debug logging
```

Related Commands

Command	Description
debug logfile	Configures the log file for the **debug** command output.

delete

To delete a file or directory, use the **delete** command.

delete [*filesystem***:**] [*//server/*] [*directory*] *filename*

Syntax Description

filesystem:	(Optional) Name of the file system. Valid values are **bootflash**, **debug**, **log**, **modflash**, or **volatile**.
//server/	(Optional) Name of the server. Valid values are **///**, **//module-1/**, **//sup-1/**, **//sup-active/**, or **//sup-local/**. The double slash (**//**) is required.
directory	(Optional) Name of a directory. The directory name is case sensitive.
filename	Name of the file to delete. The filename is case sensitive.

✎
Note   There can be no spaces in the *filesystem://server/directory/filename* string. Individual elements of this string are separated by colons (:) and slashes (/).

Command Default   None.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   Use the **dir** command to locate the file you that want to delete.

The **delete** command will delete a directory and its contents. Exercise caution when using this command to delete directories.

Examples   This example shows how to delete a file:

```
switch# delete bootflash:old_config.cfg
```

This example shows how to delete a directory:

```
switch# delete my_dir
This is a directory.  Do you want to continue (y/n)?  [y] y
```

Related Commands

Command	Description
dir	Displays the contents of a directory.

dir

To display the contents of a directory, use the **dir** command.

dir [*filesystem***:**] [*//server/*] [*directory*]

Syntax Description		
filesystem:	(Optional) Name of the file system. Valid values are **bootflash**, **debug**, **log**, **modflash**, or **volatile**.
//server/	(Optional) Name of the server. Valid values are ***///***, ***//module-1/***, ***//sup-1/***, ***//sup-active/***, or ***//sup-local/***. The double slash (***//***) is required.
directory	(Optional) Name of a directory. The directory name is case sensitive.

> **Note** There can be no spaces in the *filesystem://server/directory* string. Individual elements of this string are separated by colons (:) and slashes (/).

Command Default   Displays the contents of the current working directory.

Command Modes   EXEC mode

Command History	Release	Modification
	4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   The **dir** command displays a listing of the files in the specified directory. For each file, it lists the size of the file in bytes, the last modified time of the file, and the filename of the file. This command then displays the usage statistics for the file system.

Use the **pwd** command to verify the current working directory.

Use the **cd** command to change the current working directory.

Examples   This example shows how to display the contents of the root directory in bootflash:

```
switch# dir bootflash:
```

This example shows how to display the contents of the current working directory:

```
switch# dir
```

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Related Commands	Command	Description
	cd	Changes the current working directory.
	delete	Deletes a file or directory.
	pwd	Displays the name of the current working directory.
	rmdir	Deletes a directory.

echo

To display a text string on the terminal, use the **echo** command.

echo [*text*]

Syntax Description

text	(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.

Command Default   Blank line.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   You can use this command in a command script to display status information or prompts while the script is running.

Examples   This example shows how to display a blank line at the command prompt:

```
switch# echo
```

This example shows how to display a line of text at the command prompt:

```
switch# echo Script run at $(TIMESTAMP).
```

Related Commands

Command	Description
run-script	Runs command scripts.
show cli variables	Displays the CLI variables.

end

To end the current configuration session and return to EXEC mode, use the **end** command in configuration mode.

end

Syntax Description   This command has no arguments or keywords.

Command Default   None.

Command Modes   Configuration mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   This command returns you to EXEC mode regardless of which configuration mode you are in. Use this command when you are done configuring the system and you want to return to EXEC mode to perform verification steps.

Examples   In the following example, the **end** command is used to exit from interface configuration mode and return to EXEC mode. A **show** command is used in EXEC mode to verify the configuration.

```
switch# configure terminal
switch(config)# interface ethernet 1/1
switch(config-if)# switchport host
switch(config-if)# end
switch# show interface ethernet 1/1
```

Related Commands

Command	Description
exit (EXEC)	Terminates the active terminal session by logging off the router.
exit (global)	Exits from the current configuration mode.

exec-timeout

To configure the inactive session timeout on the console port or the virtual terminal, use the **exec-timeout** command. To revert to the default, use the **no** form of this command.

exec-timeout *minutes*

no exec-timeout

Syntax Description	*minutes* Number of minutes. The range is from 0 to 525600. A setting of 0 minutes disables the timeout.

Command Default   Timeout is disabled.

Command Modes   Terminal line configuration

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   You can configure the console port only from a session on the console port.

Examples   This example shows how to configure the inactive session timeout for the console port:

```
switch# configure terminal
switch(config)# line console
switch(config-console)# exec-timeout 30
```

This example shows how to revert to the default inactive session timeout for the console port:

```
switch# configure terminal
switch(config)# line console
switch(config-console)# no exec-timeout
```

This example shows how to configure the inactive session timeout for the virtual terminal:

```
switch# configure terminal
switch(config)# line vty
switch(config-line)# exec-timeout 30
```

This example shows how to revert to the default inactive session timeout for the virtual terminal:

```
switch# configure terminal
switch(config)# line vty
switch(config-line)# no exec-timeout
```

Related Commands	Command	Description
	line console	Enters the console terminal configuration mode.
	line vty	Enters the virtual terminal configuration mode.
	show running-config	Displays the running configuration.

exit (EXEC)

To close an active terminal session by logging off the switch, use the **exit** command in EXEC mode.

exit

Syntax Description   This command has no arguments or keywords.

Command Default   None.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   None.

Examples   In the following example, the **exit** (global) command is used to move from configuration mode to EXEC mode and the **exit** (EXEC) command is used to log off (exit the active session):

```
switch(config)# exit
switch# exit
```

Related Commands

Command	Description
end	Ends your configuration session by exiting to EXEC mode.
exit (global)	Exits from the current configuration mode to the next highest configuration mode.

exit (global)

To exit any configuration mode to the next highest mode in the CLI mode hierarchy, use the **exit** command in any configuration mode.

exit

Syntax Description   This command has no arguments or keywords.

Command Default   None.

Command Modes   All configuration modes

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   Use the **exit** command in configuration mode to return to EXEC mode. Use the **exit** command in interface, VLAN, or zone configuration mode to return to configuration mode. At the highest level, EXEC mode, the **exit** command will exit the EXEC mode and disconnect from the switch (see the description of the **exit (EXEC)** command for details).

Examples   The following example shows how to exit from the interface configuration mode and to return to the configuration mode:

```
switch(config-if)# exit
switch(config)#
```

Related Commands

Command	Description
end	Ends your configuration session by exiting to privileged EXEC mode.
exit (EXEC)	Terminates the active terminal session by logging off the router.

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feature lldp

The Link Layer Discovery Protocol (LLDP), which is a neighbor discovery protocol that is used for network devices to advertise information about themselves to other devices on the network, is enabled on the switch by default.

Command Default   Enabled

Command History

Release	Modification
4.0(0)N1(1a)	This feature was introduced.

Usage Guidelines   You cannot enable or disable LLDP on a Cisco Nexus 5000 Series switch. LLDP is enabled on the switch by default. However, the **feature lldp** command shows as part of the running configuration on the switch.

The Cisco Discovery Protocol (CDP) is a device discovery protocol that runs over Layer 2 (the data link layer) on all Cisco-manufactured devices (routers, bridges, access servers, and switches). CDP allows network management applications to automatically discover and learn about other Cisco devices connected to the network.

To support non-Cisco devices and to allow for interoperability between other devices, the switch supports the Link Layer Discovery Protocol (LLDP). LLDP is a neighbor discovery protocol that is used for network devices to advertise information about themselves to other devices on the network. This protocol runs over the data-link layer, which allows two systems running different network layer protocols to learn about each other.

Related Commands

Command	Description
lldp	Configures the global LLDP options on the switch.
lldp (Interface)	Configures the LLDP feature on an interface.
show feature	Displays that LLDP is enabled on the switch.

find

To find filenames beginning with a character string, use the **find** command.

> **find** *filename-prefix*

Syntax Description

| *filename-prefix* | First part or all of a filename. The filename prefix is case sensitive. |

Command Default

None.

Command Modes

EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines

The **find** command searches all subdirectories under the current working directory. You can use the **cd** and **pwd** commands to navigate to the starting directory.

Examples

This example shows how to display filenames beginning with "n5000":

```
switch# find n5000
```

Related Commands

Command	Description
cd	Changes the current working directory.
pwd	Displays the name of the current working directory.

format

To format the bootflash device, which erases its contents and restores it to its factory-shipped state, use the **format** command.

format bootflash:

Syntax Description

bootflash:	Name of the bootflash file system.

Command Default None.

Command Modes EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines None.

Examples This example shows how to format the bootflash device:

```
switch# format bootflash:
```

Related Commands

Command	Description
cd	Changes the current working directory.
dir	Displays the directory contents.
pwd	Displays the name of the current working directory.

gunzip

To uncompress a compressed file, use the **gunzip** command.

gunzip [*filesystem***:**] [*//server/*] [*directory*] *filename*

Syntax Description

filesystem:	(Optional) Name of the file system. Valid values are **bootflash**, **modflash**, or **volatile**.
//server/	(Optional) Name of the server. Valid values are **///**, **//module-1/**, **//sup-1/**, **//sup-active/**, or **//sup-local/**. The double slash (**//**) is required.
directory	(Optional) Name of a directory. The directory name is case sensitive.
filename	Name of the file to uncompress. The filename is case sensitive.

> ✎
>
> **Note**   There can be no spaces in the *filesystem://server/directory/filename* string. Individual elements of this string are separated by colons (:) and slashes (/).

Command Default   None.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   The compressed filename must have the .gz extension.

The Cisco NX-OS software uses Lempel-Ziv 1977 (LZ77) coding for compression.

Examples   This example shows how to uncompress a compressed file:

```
switch# gunzip run_cnfg.cfg.gz
```

Related Commands

Command	Description
dir	Displays the directory contents.
gzip	Compresses a file.

gzip

To compress a file, use the **gzip** command.

gzip [*filesystem***:**] [*//server/*] [*directory*] *filename*

Syntax Description	*filesystem:*	(Optional) Name of the file system. Valid values are **bootflash**, **modflash**, or **volatile**.
	//server/	(Optional) Name of the server. Valid values are **///**, **//module-1/**, **//sup-1/**, **//sup-active/**, or **//sup-local/**. The double slash (**//**) is required.
	directory	(Optional) Name of a directory. The directory name is case sensitive.
	filename	Name of the file to compress. The filename is case sensitive.

> **Note** There can be no spaces in the *filesystem://server/directory/filename* string. Individual elements of this string are separated by colons (:) and slashes (/).

Command Default   None.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   After you run this command, the named file is replaced with a compressed file that has the .gz extension added to its filename.

The Cisco NX-OS software uses Lempel-Ziv 1977 (LZ77) coding for compression.

Examples   This example shows how to compress a file:

```
switch# gzip run_cnfg.cfg
```

Related Commands

Command	Description
dir	Displays the directory contents.
gunzip	Uncompresses a compressed file.

hostname

To configure the hostname for the switch, use the **hostname** command. To revert to the default, use the **no** form of this command.

hostname *name*

no hostname

Syntax Description	*name*	Hostname for the switch. The name is alphanumeric, case sensitive, can contain special characters, and can have a maximum of 32 characters.

Command Default   "switch" is the default hostname.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   The Cisco NX-OS software uses the hostname in command-line interface (CLI) prompts and in default configuration filenames.

The **hostname** command performs the same function as the **switchname** command.

Examples   This example shows how to configure the hostname for a Cisco Nexus 5000 Series switch:

```
switch# configure terminal
switch(config)# hostname Engineering2
Engineering2(config)#
```

This example shows how to revert to the default hostname:

```
Engineering2# configure terminal
Engineering2(config)# no hostname
switch(config)#
```

Related Commands

Command	Description
show hostname	Displays the switch hostname.
show switchname	Displays the switch hostname.
switchname	Configures the switch hostname.

install all

To install the kickstart and system images on a Cisco Nexus 5000 Series switch, use the **install all** command.

install all [**kickstart** *kickstart-url*] [**system** *system-url*]

Syntax Description

kickstart	(Optional) Specifies the kickstart image file.
kickstart-url	The full address of the kickstart image file. The name is case sensitive.
system	(Optional) Specifies the system image file.
system-url	The full address of the system image file. The name is case sensitive.

The format of the kickstart and system URLs varies according to the file system, directory, and file location.

The following tables list URL prefix keywords by the file system type. If you do not specify a URL prefix keyword, the router looks for a file in the current directory.

Table 1-4 lists URL prefix keywords for local writable storage file systems. Table 1-5 lists the URL prefix keywords for remote file systems. For remote file systems, if it is not otherwise specified, the path is the default for the user on the remote server.

Table 1-4   URL Prefix Keywords for Local Writable Storage File Systems

Keyword	Source or Destination
bootflash:[**//***server***/**]	Source URL for boot flash memory. The *server* argument value is **module-1**, **sup-1**, **sup-active**, or **sup-local**.
modflash:[**//***server***/**]	Source URL of an external flash file system. The *server* argument value is **module-1**, **sup-1**, **sup-active**, or **sup-local**.
volatile:[**//***server***/**]	Source URL of the default internal file system. Any files or directories stored in this file system are erased when the switch reboots. The *server* argument value is **module-1**, **sup-1**, **sup-active**, or **sup-local**.

Table 1-5   URL Prefix Keywords for Remote File Systems

Keyword	Source or Destination
ftp:	Source URL for a FTP network server. The syntax for this alias is as follows: **ftp:**[**//***server*][**/***path*]**/***filename*
scp:	Source URL for a network server that supports Secure Shell (SSH) and uses the secure copy protocol (scp). The syntax is as follows: **scp:**[**//**[*username***@**]*server*][**/***path*]**/***filename*

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Table 1-5   *URL Prefix Keywords for Remote File Systems*

Keyword	Source or Destination
sftp:	Source URL for an SSH FTP (SFTP) network server. The syntax is as follows: **sftp:**[//[*username@*]*server*][/*path*]/*filename*
tftp:	Source URL for a TFTP network server. The syntax is as follows: **tftp:**[//*server*[:*port*]][/*path*]/*filename*

Command Default If you do not enter any parameters, the boot variable values are used.

Command Modes EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines If you do not enter the information about the server or username when downloading and installing the image files from a remote server, you are prompted for the information.

This command sets the kickstart and system boot variables and copies the image files to the redundant supervisor module.

You can use **install all** command to downgrade the Cisco NX-OS software on the switch. To determine if the downgrade software is compatible with the current configuration on the switch, use the **show incompatibility system** command and resolve any configuration incompatibilities.

This command only installs Cisco NX-OS software on devices with dual supervisor modules. To install new software on a switch with a single supervisor, you must use the **reload** command.

Examples This example shows how to install the Cisco NX-OS software from the bootflash: directory:

```
switch# install all kickstart bootflash:nx-os_kick.bin system bootflash:nx-os_sys.bin
```

This example shows how to install the Cisco NX-OS software using the values configured in the kickstart and system boot variables:

```
switch# configure terminal
switch(config)# boot kickstart bootflash:nx-os_kick.bin
switch(config)# boot system bootflash:nx-os_sys.bin
switch(config)# exit
switch# copy running-config startup-config
switch# install all
```

This example shows how to install the Cisco NX-OS software from an SCP server:

```
switch# install all kickstart scp://adminuser@10.10.1.1/nx-os_kick.bin system
bootflash:scp://adminuser@10.10.1.1/nx-os_sys.bin
```

Related Commands	Command	Description
	reload	Reloads the device with new Cisco NX-OS software.
	show incompatibility system	Displays configuration incompatibilities between Cisco NX-OS system software images.
	show version	Displays information about the software version.

install license

To install a license, use the **install license** command.

install license [*filesystem***:**] [*//server/*] [*directory*] *src-filename* [*target-filename*]

Syntax Description

filesystem:	(Optional) Name of the file system. Valid values are **bootflash** or **volatile**.
//server/	(Optional) Name of the server. Valid values are **///**, **//module-1/**, **//sup-1/**, **//sup-active/**, or **//sup-local/**. The double slash (**//**) is required.
directory	(Optional) Name of a directory. The directory name is case sensitive.
src-filename	Name of the source license file.
target-filename	(Optional) Name of the target license file.

✎

Note   There can be no spaces in the *filesystem://server/directory/filename* string. Individual elements of this string are separated by colons (:) and slashes (/).

Command Default   All licenses for the Cisco Nexus 5000 Series switches are factory installed. Manual installation is not required.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   If a target filename is provided after the source location, the license file is installed with that name. Otherwise, the filename in the source URL is used. This command also verifies the license file before installing it.

Examples   This example shows how to install a file named license-file that resides in the bootflash: directory:

```
switch# install license bootflash:license-file
```

Related Commands

Command	Description
show license	Displays license information.
show license host-id	Displays the serial number of the chassis to use for licensing.
show license usage	Displays license usage information.

line console

To specify the console port and enter console port configuration mode, use the **line console** command.

line console

Syntax Description   This command has no arguments or keywords.

Command Default   None.

Command Modes   Interface configuration mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   You can configure the console line only from a console port session.

Examples   This example shows how to enter console port configuration mode:

```
switch# configure terminal
switch(config)# line console
switch(config-console)#
```

Related Commands

Command	Description
databits	Configures the number of data bits in a character for a port.
exec-timeout	Configures the inactive terminal timeout for a port.
modem	Configures the modem settings for a port.
parity	Configures the parity settings for a port.
show line	Displays information about the console port configuration.
speed	Configures the transmit and receive speed for a port.
stopbits	Configures the stop bits for a port.

line vty

To specify the virtual terminal and enter line configuration mode, use the **line vty** command.

line vty

Syntax Description   This command has no arguments or keywords.

Command Default   None.

Command Modes   Interface configuration mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   None.

Examples   This example shows how to enter console port configuration mode:

```
switch# configure terminal
switch(config)# line vty
switch(config-line)#
```

Related Commands

Command	Description
exec-timeout	Configures the inactive terminal timeout for a port.
session-limit	Configures the maximum number of the concurrent virtual terminal sessions.
show line	Displays information about the console port configuration.

modem in

To enable the modem connection on the console port, use the **modem in** command. To disable the modem connection, use the **no** form of this command.

> **modem in**

> **no modem in**

Syntax Description   This command has no arguments or keywords.

Command Default   Timeout is disabled.

Command Modes   Terminal line configuration

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   You can configure the console port only from a session on the console port.

Examples   This example shows how to enable a modem connection on the console port:

```
switch# configure terminal
switch(config)# line console
switch(config-console)# modem in
```

This example shows how to disable a modem connection on the console port:

```
switch# configure terminal
switch(config)# line console
switch(config-console)# no modem in
```

Related Commands

Command	Description
line console	Enters console port configuration mode.
show line	Displays information about the console port configuration.

modem init-string

To download the initialization string to a modem connected to the console port, use the **modem init-string** command. To revert to the default, use the **no** form of this command.

modem init-string {**default** | **user-input**}

no modem init-string

Syntax Description		
default	Downloads the default initialization string.
user-input	Downloads the user-input initialization string.

Command Default   The default initialization string is ATE0Q1&D2&C1S0=1\015.

Command Modes   Terminal line configuration

Command History	Release	Modification
	4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   You can configure the console port only from a session on the console port.

The default initialization string ATE0Q1&D2&C1S0=1\015 is defined as follows:

- AT—Attention
- E0 (required)—No echo
- Q1—Result code on
- &D2—Normal data terminal ready (DTR) option
- &C1—Enable tracking the state of the data carrier
- S0=1—Pick up after one ring
- \015 (required)—Carriage return in octal

Use the **modem set-string** command to configure the user-input initialization string.

Examples   This example shows how to download the default initialization string to the modem connected to the console port:

```
switch# configure terminal
switch(config)# line console
switch(config-console)# modem init-string default
```

This example shows how to download the user-input initialization string to the modem connected to the console port:

```
switch# configure terminal
switch(config)# line console
switch(config-console)# modem init-string user-input
```

This example shows how to remove the initialization string to the modem connected to the console port:

```
switch# configure terminal
switch(config)# line console
switch(config-console)# no modem init-string
```

Related Commands	Command	Description
	line console	Enters console port configuration mode.
	modem set-string	Configures the user-input initialization string for a modem.
	show line	Displays information about the console port configuration.

modem set-string user-input

To configure the user-input initialization string to download to a modem connected to the console port, use the **modem set-string user-input** command. To revert to the default, use the **no** form of this command.

> **modem set-string user-input** *string*

> **no modem set-string**

Syntax Description

string	User-input string. This string is alphanumeric and case sensitive, can contain special characters, and has a maximum of 100 characters.

Command Default None.

Command Modes Terminal line configuration

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines You can configure the console port only from a session on the console port.

Examples This example shows how to configure the user-input initialization string for the modem connected to the console port:

```
switch# configure terminal
switch(config)# line console
switch(config-console)# modem init-string user-input ATE0Q1&D2&C1S0=3\015
```

This example shows how to revert to the default user-input initialization string for the modem connected to the console port:

```
switch# configure terminal
switch(config)# line console
switch(config-console)# no modem set-string
```

Related Commands

Command	Description
line console	Enters console port configuration mode.
modem init-string	Downloads the user-input initialization string to a modem.
show line	Displays information about the console port configuration.

move

To move a file from one directory to another, use the **move** command.

move {[*filesystem***:**] [**//***server***/**] [*directory*] *source-filename*} [*filesystem***:**] [**//***server***/**] [*directory*] [*destination-filename*]

Syntax Description		
filesystem:	(Optional) Name of the file system. Valid values are **bootflash**, **debug**, **modflash**, or **volatile**.	
//server/	(Optional) Name of the server. Valid values are **///**, **//module-1/**, **//sup-1/**, **//sup-active/**, or **//sup-local/**. The double slash (**//**) is required.	
directory	(Optional) Name of a directory. The directory name is case sensitive.	
source-filename	Name of the file to move. The filename is case sensitive.	
destination-filename	(Optional) Name of the destination file. The filename is alphanumeric, case sensitive, and has a maximum of 64 characters.	

Command Default   The default filename for the destination file is the same as the source file.

Command Modes   EXEC mode

Command History	Release	Modification
	4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   You can make a copy of a file by using the **copy** command.

$\mathcal{Q}$

Tip   You can rename a file by moving it within the same directory.

Examples   This example shows how to move a file to another directory:

```
switch# move file1 my_files/file2
```

This example shows how to move a file to another file system:

```
switch# move file1 volatile:
```

This example shows how to move a file to another supervisor module:

```
switch# move file1 bootflash://sup-1/file1.bak
```

Related Commands	Command	Description
	cd	Changes the current working directory.
	copy	Makes a copy of a file.
	delete	Deletes a file or directory.
	dir	Displays the directory contents.
	pwd	Displays the name of the current working directory.

parity

To configure the parity for the console port, use the **parity** command. To revert to the default, use the **no** form of this command.

parity {**even** | **none** | **odd**}

no parity {**even** | **none** | **odd**}

Syntax Description		
	even	Specifies even parity.
	none	Specifies no parity.
	odd	Specifies odd parity.

Command Default   The **none** keyword is the default.

Command Modes   Terminal line configuration

Command History	Release	Modification
	4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   You can configure the console port only from a session on the console port.

Examples   This example shows how to configure the parity for the console port:

```
switch# configure terminal
switch(config)# line console
switch(config-console)# parity even
```

This example shows how to revert to the default parity for the console port:

```
switch# configure terminal
switch(config)# line console
switch(config-console)# no parity even
```

Related Commands	Command	Description
	show line	Displays information about the console port configuration.

ping

To determine the network connectivity to another network device, use the **ping** command.

ping {*dest-address* | *hostname*} [**count** {*number* | **unlimited**}] [**df-bit**] [**interval** *seconds*]
    [**packet-size** *bytes*] [**source** *src-address*] [**timeout** *seconds*] [**vrf** {**management** | *vrf_name*}]

Syntax Description

dest-address	IPv4 address of destination device. The format is *A.B.C.D*.
hostname	Hostname of destination device. The hostname is case sensitive.
count	(Optional) Specifies the number of transmissions to send.
number	Number of pings. The range is from 1 to 655350. The default is 5.
unlimited	Allows an unlimited number of pings.
df-bit	(Optional) Enables the do-not-fragment bit in the IPv4 header. The default is disabled.
interval *seconds*	(Optional) Specifies the interval in seconds between transmissions. The range is from 0 to 60. The default is 1 second.
packet-size *bytes*	(Optional) Specifies the packet size in bytes to transmit. The range is from 1 to 65468. The default is 56 bytes.
source *scr-address*	(Optional) Specifies the source IPv4 address to use. The format is *A.B.C.D*. The default is the IPv4 address for the management interface of the device.
timeout *seconds*	(Optional) Specifies the nonresponse timeout interval in seconds. The range is from 1 to 60. The default is 2 seconds.
vrf {**management**	*vrf_name*}	(Optional) Specifies the virtual routing and forwarding (VRF) to use. The name is case sensitive. The default is the default VRF.

Command Default

For the default values, see the "Syntax Description" section for this command.

Command Modes

EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines

None.

Examples

This example shows how to determine connectivity to another network device:

```
switch# ping 172.28.231.246
```

Send comments to nx5000-docfeedback@cisco.com

Related Commands	Command	Description
	traceroute	Displays the routes that packets take when traveling to an IP address.

reload

To reload the entire Cisco Nexus 5000 Series switch, use the **reload** command.

reload

Syntax Description   This command has no arguments or keywords,

Command Default   Reloads the entire device.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   The **reload** command disrupts traffic on the device.

✎

Note   The **reload** command does not save the running configuration. Use the **copy running-config startup-config** command to save the current configuration on the device.

Examples   This example shows how to reload the Cisco Nexus 5000 Series switch:

```
switch# copy running-config startup-config
switch# reload
This command will reboot the system. (y/n)?  [n] y
```

Related Commands

Command	Description
copy running-config startup-config	Copies the current running configuration to the startup configuration.
show version	Displays information about the software version.

rmdir

To remove a directory, use the **rmdir** command.

rmdir [*filesystem***:** [*//server/*]] *directory*

Syntax Description		
filesystem:	(Optional) Name of the file system. Valid values are **bootflash**, **modflash**, or **volatile**.	
//server/	(Optional) Name of the server. Valid values are **///**, **//module-1/**, **//sup-1/**, **//sup-active/**, or **//sup-local/**. The double slash (**//**) is required.	
directory	Name of a directory to delete. The directory name is case sensitive.	

✎
Note   There can be no spaces in the *filesystem://server/directory* string. Individual elements of this string are separated by colons (:) and slashes (/).

Command Default   None.

Command Modes   EXEC mode

Command History	Release	Modification
	4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   None.

Examples   This example shows how to remove a directory:

```
switch# rmdir my_files
```

Related Commands	Command	Description
	cd	Changes the current working directory.
	delete	Deletes a file or directory.
	dir	Displays the directory contents.
	pwd	Displays the name of the current working directory.

run-script

To run a command script file at the command-line interface (CLI), use the **run-script** command.

run-script [*filesystem***:**[**//***module***/**]][*directory***/**]*filename*

Syntax Description

*filesystem***:**	(Optional) Name of a file system. The name is case sensitive.
//*module***/**	(Optional) Identifier for a supervisor module. Valid values are **sup-active**, **sup-local**, **sup-remote**, or **sup-standby**. The identifiers are case sensitive.
*directory***/**	(Optional) Name of a directory. The name is case sensitive.
filename	Name of the command file. The name is case sensitive.

✎
Note   There can be no spaces in the *filesystem://server/directory/filename* string. Individual elements of this string are separated by colons (:) and slashes (/).

Command Default   None.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   You must create the command file on a remote device and download it to the Cisco Nexus 5000 Series switch using the **copy** command.

Examples   This example shows how to run a command script file:

```
switch# run-script script-file
```

Related Commands

Command	Description
cd	Changes the current working directory.
copy	Copies files.
dir	Displays the directory contents.
echo	Displays a test string on the terminal.
pwd	Displays the name of the current working directory.
sleep	Causes the CLI to pause for a defined number of seconds.

send

To send a message to the active user sessions, use the **send** command.

send [**session** *line*] *text*

Syntax Description		
session *line*	(Optional) Specifies a user session.	
text	Text string. The text string can be up to 80 alphanumeric characters and is case sensitive.	

Command Default   Sends a message to all active user sessions.

Command Modes   EXEC mode

Command History	Release	Modification
	4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   You can use the **show users** command to display information about the active user sessions.

Examples   This example shows how to send a message to all active user sessions on the switch:

```
switch# send The system will reload in 15 minutes!
The system will reload in 15 minutes!
```

This example shows how to send a message to a specific user session:

```
switch# send session pts/0 You must log off the switch.
```

Related Commands	Command	Description
	show users	Displays the active user sessions on the switch.

setup

To enter the basic device setup dialog, use the **setup** command.

setup [**ficon**]

Syntax Description

ficon	(Optional) Runs the basic ficon setup command facility.

Command Default   None.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   The setup script uses the factory-default values, not the values that you have configured. You can exit the dialog at any point by pressing **Ctrl-C**.

Examples   This example shows how to enter the basic device setup script:

```
switch# setup
```

Related Commands

Command	Description
show running-config	Displays the running configuration.

session-limit

To configure the maximum number of the concurrent virtual terminal sessions on a device, use the **session-limit** command. To revert to the default, use the **no** form of this command.

session-limit *sessions*

no session-limit *sessions*

Syntax Description	*sessions*	Maximum number of sessions. The range is from 1 to 64.

Command Default   32 sessions.

Command Modes   Terminal line configuration

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   None.

Examples   This example shows how to configure the maximum number of concurrent virtual terminal sessions:

```
switch# configure terminal
switch(config)# line vty
switch(config-line)# session-limit 48
```

This example shows how to revert to the default maximum number of concurrent virtual terminal sessions:

```
switch# configure terminal
switch(config)# line vty
switch(config-line)# no session-limit 48
```

Related Commands

Command	Description
line vty	Enters the virtual terminal configuration mode.
show running-config	Displays the running configuration.

show banner motd

To display the message-of-the-day (MOTD) banner, use the **show banner motd** command.

show banner motd

Syntax Description   This command has no arguments or keywords.

Command Default   None.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   None.

Examples   This example shows how to display the MOTD banner:

```
switch# show banner motd
Unauthorized access is prohibited!
```

Related Commands

Command	Description
banner motd	Configures the MOTD banner.

show boot

To display the boot variable configuration, use the **show boot** command.

show boot [**variables**]

Syntax Description

variables	(Optional) Displays a list of boot variables.

Command Default   Displays all configured boot variables.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   None.

Examples   This example shows how to display all configured boot variables:

```
switch# show boot
```

This example shows how to display the list of boot variable names:

```
switch# show boot variables
```

Related Commands

Command	Description
boot	Configures the boot variable for the kickstart or system image.

show cli alias

To display the command alias configuration, use the **show cli alias** command.

show cli alias [**name** *alias-name*]

Syntax Description	**name** *alias-name*	(Optional) Specifies the name of a command alias. The alias name is not case sensitive.

Command Default	Displays all configured command alias variables.

Command Modes	EXEC mode

Command History	**Release**	**Modification**
	4.0(0)N1(1a)	This command was introduced.

Usage Guidelines	None.

Examples

This example shows how to display all configured command aliases:

```
switch# show cli alias
```

This example shows how to display a specific command alias:

```
switch# show cli alias name ethint
```

Related Commands	**Command**	**Description**
	cli alias name	Configures command aliases.

show cli history

To display the command history, use the **show cli history** command.

show cli history [*lines*] [**unformatted**]

Syntax Description	*lines*	(Optional) Displays the last number of lines from the end of the command history.
	unformatted	(Optional) Displays the commands without line numbers or time stamps.

Command Default   Displays the entire formatted history.

Command Modes   EXEC mode

Command History	Release	Modification
	4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   None.

Examples   This example shows how to display all of the command history:

```
switch# show cli history
```

This example shows how to display the last 10 lines of the command history:

```
switch# show cli history 10
```

This example shows how to display unformatted command history:

```
switch# show cli history unformatted
```

Related Commands	Command	Description
	clear cli history	Clears the command history.

show cli variables

To display the configuration of the CLI variables, use the **show cli variables** command.

show cli variables

Syntax Description   This command has no arguments or keywords.

Command Default   None.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   None.

Examples   This example shows how to display the CLI variables:

```
switch# show cli variables
```

Related Commands

Command	Description
cli var name	Configures CLI variables.

show clock

To display the current date and time, use the **show clock** command.

show clock [**detail**]

Syntax Description	detail	(Optional) Displays the summer-time (daylight saving time) offset configuration.

Command Default   None.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   None.

Examples   This example shows how to display the current clock setting:

```
switch# show clock
```

This example shows how to display the current clock setting and the summer-time (daylight saving time) configuration:

```
switch# show clock detail
```

Related Commands

Command	Description
clock set	Sets the clock time.
clock summer-time	Configures the summer-time (daylight saving time) offset.

show copyright

To display the Cisco NX-OS software copyright information, use the **show copyright** command.

show copyright

Syntax Description   This command has no arguments or keywords.

Command Default   None.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   None.

Examples   This example shows how to display the Cisco NX-OS copyright information:

```
switch# show copyright
```

show debug logfile

To display the contents of the debug logfile, use the **show debug logfile** command.

show debug logfile *filename*

Syntax Description	*filename*	Name of the debug log file.

Command Default   None.

Command Modes   EXEC mode

Command History	Release	Modification
	4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   The log files are located in the log: file system.

Examples   This example shows how to display the contents of a debug log file:

```
switch# show debug logfile dmesg
```

Related Commands .	Command	Description
	debug logfile	Configures the debug log file.

show environment

To display information about the hardware environment status, use the **show environment** command.

show environment [**fan** | **power** | **temperature**]

Syntax Description

fan	(Optional) Displays information about the fan environment.
power	(Optional) Displays information about the power capacity and distribution.
temperature	(Optional) Displays information about the temperature environment.

Command Default   None.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   None.

Examples   This example shows how to display information about the hardware environment:

```
switch# show environment
```

This example shows how to display information about the power environment:

```
switch# show environment power
```

show file

To display the contents of a file on the local memory, use the **show file** command.

show file [*filesystem***:**] [*//server/*] [*directory*] *filename*

Syntax Description

filesystem:	(Optional) Name of the file system. Valid values are **bootflash**, **modflash**, or **volatile**.
//server/	(Optional) Name of the server. Valid values are ***///***, **//module-1/**, **//sup-1/**, **//sup-active/**, or **//sup-local/**. The double slash (**//**) is required.
directory	(Optional) Name of a directory. The directory name is case sensitive.
filename	Name of the file to delete. The filename is case sensitive.

✎

Note There can be no spaces in the *filesystem://server/directory/filename* string. Individual elements of this string are separated by colons (:) and slashes (/).

Command Default None.

Command Modes EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines None.

Examples This example shows how to display the contents of a file:

```
switch# show file ent-mod.lic
```

If the file that you want to display is a directory, the command will return an error message:

```
switch# show file bootflash:///routing-sw
/bin/showfile: /bootflash/routing-sw: Is a directory
```

Related Commands

Command	Description
cd	Changes the current working directory.
dir	Displays the directory contents.
pwd	Displays the name of the current working directory.

show hardware internal

To display information about the physical device hardware, use the **show hardware internal** command.

show hardware internal

Syntax Description   This command has no arguments or keywords.

Command Default   None.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   None.

Examples   This example shows how to display information about the physical device hardware:

```
switch# show hardware internal
```

Related Commands

Command	Description
show inventory	Displays hardware inventory information.
show module	Displays information about the modules.

show hostname

To display the hostname for the switch, use the **show hostname** command.

show hostname

Syntax Description   This command has no arguments or keywords.

Command Default   None.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   The **show switchname** command also displays the switch hostname.

Examples   This example shows how to display the hostname for the switch:

```
switch# show hostname
```

Related Commands

Command	Description
hostname	Configures the hostname for the switch.
show switchname	Displays the hostname.
switchname	Configures the hostname for the switch.

show incompatibility system

To display the configuration incompatibilities between the running system image and an earlier system image prior to downgrading the Cisco NX-OS software, use the **show incompatibility system** command.

show incompatibility system {*filesystem***:** *//server/* [*directory*] *filename*}

Syntax Description

filesystem:	Name of the file system. Valid values are **bootflash** or **volatile**.
//server/	Name of the server. Valid values are **///**, **//module-1/**, **//sup-1/**, **//sup-active/**, or **//sup-local/**. The double slash (**//**) is required.
directory	(Optional) Name of a directory. The directory name is case sensitive.
filename	Name of the file to compare with the loaded software image. The filename is case sensitive.

Note   There can be no spaces in the *filesystem://server/directory/filename* string. Individual elements of this string are separated by colons (:) and slashes (/).

Command Default   None.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   None.

Examples   This example shows how to display the configuration incompatibilities:

```
switch# show incompatibility system bootflash://sup-local/old_image.bin
```

Related Commands

Command	Description
install all	Installs the kickstart and system images.
reload	Reloads the device with new Cisco NX-OS software.
show version	Displays information about the software version.

show install all

To display information related to the operation of the **install all** command, use the **show install all** command.

show install all {**failure-reason** | **impact** [**kickstart** | **system**] | **status**}

Syntax Description

failure-reason	Displays the software installation failure reason.
impact	Displays the impact of installing the images referred to in the boot variables.
kickstart	(Optional) Displays the impact of installing the kickstart image referred to in the kickstart boot variable.
system	(Optional) Displays the impact of installing the system image referred to in the kickstart boot variable.
status	Displays the status of the software installation process.

Command Default   None.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   None.

Examples   This example shows how to display the installation failure reason:

```
switch# show install all failure-reason
```

This example shows how to display the impact of installing new images:

```
switch# show install all impact
```

This example shows how to display the status of the software installation process:

```
switch# show install all status
```

Related Commands

Command	Description
install all	Installs the software on the physical device.
show boot	Displays the boot variable configuration.

show inventory

To display the physical inventory information for the switch hardware, use the **show inventory** command.

> **show inventory**

Syntax Description   This command has no arguments or keywords.

Command Default   Displays all hardware inventory information.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   None.

Examples   This example shows how to display the switch hardware inventory information:

```
switch# show inventory
```

Related Commands

Command	Description
show hardware internal	Displays information about the physical hardware.
show module	Displays information about the modules.

show license

To display license information, use the **show license** command.

show license [**brief** | **file** *filename*]

Syntax Description

brief	(Optional) Displays a list of license files installed on a device.
file *filename*	(Optional) Displays information for a specific license file.

Command Default   Displays information about the installed licenses.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   None.

Examples   This example shows how to display a specific license installed on the switch:

```
switch# show license file fm.lic
```

This example shows how to display a list of license files installed on a device:

```
switch# show license brief
```

This example shows how to display all licenses installed on a device:

```
switch# show license
```

Related Commands

Command	Description
install license	Installs a license.
show license host-id	Displays the serial number of the chassis to use for licensing.
show license usage	Displays license usage information.

show license host-id

To display the serial number (host ID) of the switch chassis to use for licensing, use the **show license host-id** command.

show license host-id

Syntax Description   This command has no arguments or keywords.

Command Default   None.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   The serial number is the entire string that appears after the colon (:).

Examples   This example shows how to display the host ID, required to request node-locked licenses:

```
switch# show license host-id
```

Related Commands

Command	Description
install license	Installs a license.
show license	Displays license information.
show license usage	Displays license usage information.

show license usage

To display license usage information, use the **show license usage** command.

show license usage [*PACKAGE*]

Syntax Description

PACKAGE	(Optional) Displays a list of licensed features in use for the specified license package.

Command Default   Displays license usage for the switch.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   None.

Examples   This example shows how to display information about the current license usage:

```
switch# show license usage
```

This example shows how to display a list of features in use for a specific license:

```
switch# show license usage FC_FEATURES_PKG
```

Related Commands

Command	Description
install license	Installs a license.
show license	Displays license information.
show license host-id	Displays the serial number of the chassis to use for licensing.

show line

To display terminal port configuration information, use the **show line** command.

show line [**console**]

Syntax Description	**console**	(Optional) Displays only information about the console port configuration.

Command Default

Displays information about the the terminal port configuration.

Command Modes

EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines

None.

Examples

This example shows how to display information about the terminal port configuration information:

```
switch# show line
```

This example shows how to display only the information about the console port configuration:

```
switch# show line console
```

Related Commands

Command	Description
line console	Enters the console port configuration mode.

show module

To display module information, use the **show module** command.

show module [*module_number*]

Syntax Description	*module_number*	(Optional) Number of the module. The valid range is from 1 to 3.

Command Default   Displays module information for all modules in the switch chassis.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   None.

Examples   This example shows how to display information for all modules in the chassis:

```
switch# show module
```

This example shows how to display information for a specific module:

```
switch# show module 2
```

Related Commands

Command	Description
show hardware internal	Displays information about the physical hardware.
show inventory	Displays hardware inventory information.

show processes

To display the process information for the switch, use the **show processes** command.

show processes [**vdc** *vdc_number*]

Syntax Description	**vdc** *vdc-number*	(Optional) Displays process information for a specific virtual device context (VDC). There is only one VDC on a Cisco Nexus 5000 Series switch.

Command Default   Displays information for all processes running on the switch.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   None.

Examples   This example shows how to display the process information for a device:

```
switch# show processes
```

Related Commands

Command	Description
show processes cpu	Displays the CPU utilization information for processes.
show processes log	Displays the contents of the process log.
show processes memory	Displays the memory allocation information for processes.

show processes cpu

To display the CPU utilization information for processes on the device, use the **show processes cpu** command.

show processes cpu

Syntax Description	This command has no arguments or keywords.

Command Default	Displays information for all processes in the local device.

Command Modes	EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines	None.

Examples

This example shows how to display the CPU utilization information for the processes:

```
switch# show processes cpu
```

Related Commands

Command	Description
show processes	Displays the process information for the switch.
show processes log	Displays the contents of the process log.
show processes memory	Displays the memory allocation information for processes.

show processes log

To display the contents of the process log, use the **show processes log** command.

show processes log [**details** | **pid** *process-id*]

Syntax Description

details	(Optional) Displays detailed information from the process log.
pid *process-id*	(Optional) Displays detailed information from the process log for a specific process. The process ID range is from 1 to 2147483647.

Command Default   Displays summary information for all processes on the device.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   None.

Examples   This example shows how to display summary information from the process log:

```
switch# show processes log
```

This example shows how to display detailed information from the process log:

```
switch# show processes log details
```

This example shows how to display detailed information from the process log for a specific process:

```
switch# show processes log pid 3632
```

Related Commands

Command	Description
show processes	Displays the process information for the switch.
show processes cpu	Displays the CPU utilization information for processes.
show processes memory	Displays the memory allocation information for processes.

show processes memory

To display the memory allocation information for processes, use the **show processes memory** command.

show processes memory [**shared** [**detail**]]

Syntax Description

shared	(Optional) Displays the shared memory allocation.
detail	(Optional) Displays the shared memory in bytes instead of the default kilobytes.

Command Default   Displays memory allocated to the processes.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   None.

Examples   This example shows how to display information about memory allocation for processes:

```
switch# show processes memory
```

This example shows how to display information about shared memory allocation for processes:

```
switch# show processes memory shared
```

Related Commands

Command	Description
show processes	Displays the process information for the switch.
show processes cpu	Displays the CPU utilization information for processes.
show processes log	Displays the contents of the process log.

show running-config

To display the running configuration, use the **show running-config** command.

show running-config [**all**]

Syntax Description	all	(Optional) Displays all the default and configured information.

Command Default   Displays only the configured information.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   None.

Examples   This example shows how to display the changes that you have made to the running configuration:

```
switch# show running-config
```

This example shows how to display the entire running configuration, including the default values:

```
switch# show running-config all
```

Related Commands

Command	Description
copy running-config startup-config	Copies the running configuration to the startup configuration.
show running-config diff	Displays the differences between the running configuration and the startup configuration.
show startup-config	Displays the startup configuration.

show running-config diff

To display the differences between the running configuration and the startup configuration, use the **show running-config diff** command.

    show running-config diff

Syntax Description   This command has no arguments or keywords.

Command Default   None

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   Table 1-6 describes the notations used in the command output.

Table 1-6   *show running-config diff Notations*

Notation	Description

`*******************`
`--- line1, line2 ----`
`*** line1, line2 ****`
	Indicates ranges of lines where differences occur. The range of lines indicated with asterisks (*) is for the startup configuration and the range indicated with dashes (–) is for the startup configuration.

`+ text`	Indicates that the line is in the running configuration but is not in the startup configuration.
`– text`	Indicates that the line is not in the running configuration but it is in the startup configuration.
`! text`	Indicates that line exists in both configurations but in different orders.

Examples   This example shows how to display the difference between the running configuration and the startup configuration:

```
switch# show running-config diff
```

Related Commands	Command	Description
	copy running-config startup-config	Copies the running configuration to the startup configuration.
	show running-config	Displays the differences between the running configuration and the startup configuration.
	show startup-config	Displays the startup configuration.

show sprom

To display the contents of the serial PROM (SPROM) on the switch, use the **show sprom** command.

show sprom {**all** | **backplane** | **module** *module_number* | **powersupply** *powersupply_number* | **sup**}

Syntax Description

all	Displays the SPROM contents for all components on the physical device.
backplane	Displays the SPROM contents for the backplane.
module *module_number*	Displays the SPROM contents for a I/O module. The module number range is from 1 to 3.
powersupply *powersupply_number*	Displays the SPROM contents for a power supply. The power supply number range is 1 or 2.
sup	Displays the SPROM contents for the active supervisor module.

Command Default   None.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   The SPROM on the switch contains detailed information about the hardware, including serial, part, and revision numbers. If you need to report a problem with a system component, you can extract serial number information using the **show sprom** command.

Examples   This example shows how to display SPROM information for all components on the physical device:

```
switch# show sprom all
```

This example shows how to display SPROM information for the backplane:

```
switch# show sprom backplane
```

Related Commands

Command	Description
show hardware internal	Displays information about the physical hardware.
show inventory	Displays hardware inventory information.

show startup-config

To display the startup configuration, use the **show startup-config** command.

show startup-config

Syntax Description   This command has no arguments or keywords.

Command Default   None.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   None.

Examples   This example shows how to display the startup configuration:

```
switch# show startup-config
```

Related Commands

Command	Description
copy running-config startup-config	Copies the running configuration to the startup configuration.
show running-config	Displays the running-configuration.
show running-config diff	Displays the differences between the running configuration and the startup configuration.

show switchname

To display the hostname for the device, use the **show switchname** command.

show switchname

Syntax Description   This command has no arguments or keywords.

Command Default   None.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   The **show hostname** command also displays the switch hostname.

Examples   This example shows how to display the hostname for the switch:

```
switch# show switchname
```

Related Commands

Command	Description
hostname	Configures the hostname for the switch.
show hostname	Displays the hostname.
switchname	Configures the hostname for the switch.

show system cores

To display the core filename, use the **show system cores** command.

show system cores

Syntax Description   This command has no arguments or keywords.

Command Default   None.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   Use the **system cores** command to configure the system core filename.

Examples   This example shows how to display destination information for the system core files:

```
switch# show system cores
```

Related Commands

Command	Description
system cores	Configures the system core filename.

Send comments to nx5000-docfeedback@cisco.com

show system reset-reason

To display the reset history for the switch, use the **show system reset-reason** command.

show system reset-reason

Syntax Description   This command has no arguments or keywords.

Command Default   None.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   None.

Examples   This example shows how to display the reset-reason history for the switch:

```
switch# show system reset-reason
```

show system uptime

To display the amount of time since the last system restart, use the **show system uptime** command.

show system uptime

Syntax Description   This command has no arguments or keywords.

Command Default   None.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   None.

Examples   This example shows how to display the amount of time since the last system restart:

```
switch# show system uptime
```

show tech-support

To display information for Cisco technical support, use the **show tech-support** command.

   show tech-support [**brief** | **commands** | *feature*]

Syntax Description

brief	(Optional) Displays information only about the status of the device.
commands	(Optional) Displays the complete list of commands that are executed by the **show tech-support** command.
feature	(Optional) Specific feature name. Use the command-line interface (CLI) context-sensitive help (for example, **show tech-support ?**) for the list of features.

Command Default   Displays information for all features.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   The output from the **show tech-support** command is very long. To better manage this output, you can redirect the output to a file.

Examples   This example shows how to display technical support information:

```
switch# show tech-support
```

This example shows how to redirect the technical support information to a file:

```
switch# show tech-support > bootflash:TechSupport.txt
```

This example shows how to display the brief technical support information for the switch:

```
switch# show tech-support brief
```

This example shows how to display the technical support information for a specific feature:

```
switch# show tech-support aaa
```

This example shows how to display the commands used to generate the technical support information:

```
switch# show tech-support commands
```

show terminal

To display information about the terminal configuration for a session, use the **show terminal** command.

> **show terminal**

Syntax Description   This command has no arguments or keywords.

Command Default   None.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   None.

Examples   This example shows how to display information about the terminal configuration for a session:

```
switch# show terminal
```

Related Commands

Command	Description
terminal length	Configures the terminal display length for the session.
terminal session-timeout	Configures the terminal inactive session timeout for a session.
terminal type	Configures the terminal type for a session.
terminal width	Configures the terminal display width for a session.

show version

To display information about the software version, use the **show version** command.

show version [**image** *filename*]

Syntax Description

image *filename*	(Optional) Displays the version information for a system or kickstart image file.

Command Default   Displays software version information for the running kickstart and system images.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   None.

Examples   This example shows how to display the version information for the kickstart and system image running on the device:

```
switch# show version
```

This example shows how to display the version information for an image file:

```
switch# show version image bootflash:old_image
```

sleep

To cause the command-line interface (CLI) to pause before displaying the prompt, use the **sleep** command.

sleep *seconds*

Syntax Description	*seconds* Number of seconds. The range is from 0 to 2147483647.

Command Default   None.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   You can use this command in command scripts to delay the execution of the script.

Examples   This example shows how to cause the CLI to pause for 5 seconds before displaying the prompt:

```
switch# sleep 5
```

Related Commands

Command	Description
run-script	Runs command scripts.

speed

To configure the transmit and receive speed for the console port, use the **speed** command. To revert to the default, use the **no** form of this command.

speed *speed*

no speed *speed*

Syntax Description		
speed	Speed in bits per second. Valid speeds are 300, 1200, 2400, 4800, 9600, 19200, 38400, 57600, or 115200.	

Command Default   The default console port speed is 9600 bits per second.

Command Modes   Terminal line configuration

Command History	Release	Modification
	4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   You can configure the console port only from a session on the console port.

Examples   This example shows how to configure the speed for the console port:

```
switch# configure terminal
switch(config)# line console
switch(config-console)# speed 57600
```

This example shows how to revert to the default speed for the console port:

```
switch# configure terminal
switch(config)# line console
switch(config-console)# no speed 57600
```

Related Commands	Command	Description
	line console	Enters the console terminal configuration mode.
	show running-config	Displays the running configuration.

stopbits

To configure the stop bits for the console port, use the **stopbits** command. To revert to the default, use the **no** form of this command.

> **stopbits** {**1** | **2**}

> **no stopbits** {**1** | **2**}

Syntax Description	**1**	Specifies one stop bit.
	2	Specifies two stop bits.

Command Default   1 stop bit.

Command Modes   Terminal line configuration

Command History	**Release**	**Modification**
	4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   You can configure the console port only from a session on the console port.

Examples   This example shows how to configure the number of stop bits for the console port:

```
switch# configure terminal
switch(config)# line console
switch(config-console)# stopbits 2
```

This example shows how to revert to the default number of stop bits for the console port:

```
switch# configure terminal
switch(config)# line console
switch(config-console)# no stopbits 2
```

Related Commands	**Command**	**Description**
	line console	Enters the console terminal configuration mode.
	show running-config	Displays the running configuration.

system cores

To configure the destination for the system core, use the **system cores** command. To revert to the default, use the **no** form of this command.

system cores tftp:*tftp_URL* [**vrf management**]

no system cores

Syntax Description		
tftp:	Specifies a TFTP server.	
tftp_URL	The URL for the destination file system and file. Use the following format: [*//server*[:*port*]][*/path/*]*filename*	
vrf management	(Optional) Specifies to use the default virtual routing and forwarding (VRF).	

Command Default	None.

Command Modes	Interface configuration mode

Command History	**Release**	**Modification**
	4.0(0)N1(1a)	This command was introduced.

Usage Guidelines	None.

Examples

This example shows how to configure a core file:

```
switch# configure terminal
switch(config)# system cores tftp://serverA:69/core_file
```

This example shows how to disable system core logging:

```
switch# configure terminal
switch(config)# no system cores
```

Related Commands	**Command**	**Description**
	show system cores	Displays the core filename.

system startup-config unlock

To unlock the startup configuration file, use the **system startup-config unlock** command.

system startup-config unlock *process_id*

Syntax Description

| *process_id* | Identifier of the process that has locked the startup-configuration file. |

Command Default None.

Command Modes EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines Use the **show system internal sysmgr startup-config locks** command to display the locks on the startup configuration file.

Examples This example shows how to unlock the startup-configuration file:

```
switch# system startup-config unlock 10
```

switchname

To configure the hostname for the device, use the **switchname** command. To revert to the default, use the **no** form of this command.

switchname *name*

no switchname

Syntax Description

name	Hostname for the switch. The name is alphanumeric, case sensitive, can contain special characters, and can have a maximum of 32 characters.

Command Default   "switch" is the default hostname.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   The Cisco NX-OS software uses the hostname in command-line interface (CLI) prompts and in default configuration filenames.

The **switchname** command performs the same function as the **hostname** command.

Examples   This example shows how to configure the hostname for a Cisco Nexus 5000 Series switch:

```
switch# configure terminal
switch(config)# switchname Engineering2
Engineering2(config)#
```

This example shows how to revert to the default hostname:

```
Engineering2# configure terminal
Engineering2(config)# no switchname
switch(config)#
```

Related Commands

Command	Description
hostname	Configures the switch hostname.
show hostname	Displays the switch hostname.
show switchname	Displays the switch hostname.

tail

To display the last lines of a file, use the **tail** command.

tail [*filesystem***:** [*//server/*]] [*directory*] *filename* [*lines*]

Syntax Description

*filesystem***:**	(Optional) Name of the file system. Valid values are **bootflash**, **modflash**, or **volatile**.
//server/	(Optional) Name of the server. Valid values are **///**, **//module-1/**, **//sup-1/**, **//sup-active/**, or **//sup-local/**. The double slash (**//**) is required.
directory	(Optional) Name of a directory. The directory name is case sensitive.
filename	Name of the file to display. The filename is case sensitive.
lines	(Optional) Number of lines to display. The range is from 0 to 80.

Note There can be no spaces in the *filesystem://server/directory/filename* string. Individual elements of this string are separated by colons (:) and slashes (/).

Command Default

Displays the last 10 lines.

Command Modes

EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines

None.

Examples

This example shows how to display the last 10 lines of a file:

```
switch# tail bootflash:startup.cfg
```

This example shows how to display the last 20 lines of a file:

```
switch# tail bootflash:startup.cfg 20
```

Related Commands

Command	Description
cd	Changes the current working directory.
copy	Copies files.

Command	Description
dir	Displays the directory contents.
pwd	Displays the name of the current working directory.

terminal length

To set the number of lines of output to display on the terminal screen for the current session before pausing, use the **terminal length** command. To revert to the default, use the **no** form of this command.

> **terminal length** *lines*

> **terminal no length**

Syntax Description	*lines*	Number of lines to display. The range is from 0 to 511. Use 0 to not pause while displaying output.

Command Default   The initial default for the console is 0 (do not pause output). The initial default for virtual terminal sessions is defined by the client software. The default for the **no** form is 24 lines.

Command Modes   EXEC mode

Command History	**Release**	**Modification**
	4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   The session pauses after displaying the number of lines set in the terminal length. Press the space bar to display another screen of lines or press the **Enter** key to display another line. To return to the command prompt, press **Ctrl-C**.

The terminal length setting applies only to the current session.

Examples   This example shows how to set the number of lines of command output to display on the terminal before pausing:

```
switch# terminal length 28
```

This example shows how to revert to the default number of lines:

```
switch# terminal no length
```

Related Commands	**Command**	**Description**
	show terminal	Displays the terminal session configuration.

terminal session-timeout

To set the terminal inactivity timeout for the current session, use the **terminal session-timeout** command. To revert to the default, use the **no** form of this command.

terminal session-timeout *minutes*

terminal no session-timeout

Syntax Description

minutes	Number of minutes. The range is from 0 to 525600 minutes (8760 hours). Use 0 to disable the terminal inactivity timeout.

Command Default   Terminal session timeout is disabled (0 minutes).

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   The terminal session inactivity timeout setting applies only to the current session.

Examples   This example shows how to set the terminal inactivity timeout for the session to 10 minutes:

```
switch# terminal session-timeout 10
```

This example shows how to revert to the default terminal inactivity timeout for the session:

```
switch# terminal no session-timeout
```

Related Commands

Command	Description
show terminal	Displays the terminal session configuration.

terminal terminal-type

To set the terminal type for the current session, use the **terminal terminal-type** command. To revert to the default, use the **no** form of this command.

terminal terminal-type *type*

terminal no terminal-type

Syntax Description

type	Type of terminal. The type string is case sensitive, must be a valid type (for example, ansi, vt100, or xterm), and has a maximum of 80 characters.

Command Default For a virtual terminal, the terminal type is set during negotiation with the client software. Otherwise, vt100 is the default.

Command Modes EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines The terminal type setting applies only to the current session.

Examples This example shows how to set the terminal type:

```
switch# terminal type xterm
```

This example shows how to revert to the default terminal type:

```
switch# terminal no type
```

Related Commands

Command	Description
show terminal	Displays the terminal session configuration.

terminal width

To set the number of character columns on the terminal screen for the current line for a session, use the **terminal width** command. To revert to the default, use the **no** form of this command.

terminal width *columns*

terminal no width

Syntax Description

columns	Number of columns. The range is from 24 to 511.

Command Default   For a virtual terminal, the width is set during negotiation with the client software. Otherwise, 80 columns is the default.

Command Modes   EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   The terminal width setting applies only to the current session.

Examples   This example shows how to set the number of columns to display on the terminal:

```
switch# terminal width 70
```

This example shows how to revert to the default number of columns:

```
switch# terminal no width
```

Related Commands

Command	Description
show terminal	Displays the terminal session configuration.

traceroute

To discover the routes that packets take when traveling to an IP address, use the **traceroute** command.

traceroute {*dest_addr* | *hostname*} [**vrf** {**management** | *vrf_name*}] [**source** *src_addr*]

Syntax Description

dest_ddr	IP address of the destination device. The format is *A.B.C.D*.
hostname	Name of the destination device. The name is case sensitive.
vrf {**management**	*vrf_name*}	(Optional) Specifies the virtual routing and forwarding (VRF) to use. The name is case sensitive.
source *src_addr*	(Optional) Specifies a source IP address. The format is *A.B.C.D*.

Command Default   None.

Command Modes   Interface configuration mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   None.

Examples   This example shows how to discover a route to a network device:

```
switch# traceroute 172.28.255.18 vrf management
```

Related Commands

Command	Description
ping	Displays the network connectivity to another network device.

update license

To update an existing license, use the **update license** command.

update license [*filesystem***:** [**//***server***/**]] [*directory*] *src-filename* [*target-filename*]

Syntax Description

*filesystem***:**	(Optional) Name of the file system. Valid values are **bootflash** or **volatile**.
//*server***/**	(Optional) Name of the server. Valid values are **///**, **//module-1/**, **//sup-1/**, **//sup-active/**, or **//sup-local/**. The double slash (**//**) is required.
directory	(Optional) Name of a directory. The directory name is case sensitive.
src-filename	Name of the source license file.
target-filename	(Optional) Name of the target license file.

> **Note** There can be no spaces in the *filesystem://server/directory/filename* string. Individual elements of this string are separated by colons (:) and slashes (/).

Command Default None.

Command Modes EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.

Usage Guidelines None.

Examples This example shows how to update a license:

```
switch# update license bootflash:fm.lic fm-update.lic
```

Related Commands

Command	Description
show license	Displays license information.

write erase

To erase configurations in persistent memory areas, use the **write erase** command.

write erase [**boot** | **debug**]

Syntax Description	boot	(Optional) Erases only the boot configuration.
	debug	(Optional) Erases only the debug configuration.

Command Default   Erases all configuration in persistent memory.

Command Modes   EXEC mode

Command History	Release	Modification
	4.0(0)N1(1a)	This command was introduced.

Usage Guidelines   You can use this command to erase the startup configuration in the persistent memory when information is corrupted or otherwise unusable. Erasing the startup configuration returns the switch to its initial state.

Examples   This example shows how to erase the startup configuration:

```
switch# write erase
```

This example shows how to erase the debug configuration in the persistent memory:

```
switch# write erase debug
```

Related Commands	Command	Description
	copy running-config startup-config	Copies the running configuration to the startup configuration.
	show running-config	Displays the startup configuration.

write erase