

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

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.
llserverl	(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.



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

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 .
	(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.



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:

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

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

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	Descrip	tıon
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filename	Name of the debug log file to clear.
juename	Name of the debug log the to clear.

Command Default

None

Command Modes

EXEC mode

Command History

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

Examples

This example shows how to clear the debug log file:

switch# clear debug-logfile syslogd_debugs

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.	

Examples

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

switch# clear install failure-reason

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

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Command Default

None

Command Modes

EXEC mode

Command History

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

Examples

This example shows how to clear a specific license:

switch# clear license fm.lic

Command	Description
show license	Displays license information.

clear user

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

clear user username

Syntax D	escription
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isername	Name of the user to be logged ou	ıt.
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Command Default

None

Command Modes

EXEC mode

Command History

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

Examples

This example shows how to log out a specific user:

switch# clear user admin

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

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 <i>HH:MM:SS</i> .
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

Command	Description
show clock	Displays the clock time.

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 <i>HH:MM</i> .
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 <i>HH:MM</i> .
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

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

Command	Description
show clock	Displays the clock time.

configure session

To create or modify a configuration session, use the **configure session** command.

configure session name

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name	Name of the session. The name is a case-sensitive alphanumeric string up to
	63 characters.

Command Default

None

Command Modes

EXEC mode

Command History

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

Examples

This example shows how to create a configuration session:

switch# configure session MySession
switch(config-s)#

Command	Description
show configuration	Displays information about the configuration sessions.
session	

configure terminal

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

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)#

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 <i>server</i> 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 <i>server</i> 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.

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 1-22
- Copying a Configuration File from a Server to the Running Configuration, page 1-22
- Copying a Configuration File from a Server to the Startup Configuration, page 1-22
- Copying the Running or Startup Configuration on a Server, page 1-22

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

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

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

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J	viilax	DESCI	ription

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

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

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.

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

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.



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] \boldsymbol{y}

Command	Description
dir	Displays the contents of a directory.
save	Saves the configuration session to a file.

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 .
	(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.



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

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).

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 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

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
```

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.

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.

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

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)#

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.

feature fcoe

To enable virtual and native Fibre Channel interfaces after installing the FC_FEATURES_PKG license, use the **feature fcoe** command. To disable Fibre Channel interfaces and return the FC_FEATURES_PKG license to the license manager software, use the **no** form of the command.

feature fcoe

no feature fcoe

Syntax Description

This command has no arguments or keywords.

Command Default

FCoE is disabled.

Command Modes

Configuration mode

Command History

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

Usage Guidelines

You must save the configuration, and then reboot the switch to enable or disable the FCoE feature.

Examples

This example shows how to enable FCoE on the switch:

switch(config)# feature fcoe

Command	Description
fcoe mode	Creates a VLAN interface.

feature interface-vlan

To enable the creation of VLAN interfaces, use the **feature interface-vlan** command. To disable the VLAN interface feature, use the **no** form of this command.

feature interface-vlan

no feature interface-vlan

Syntax Description

This command has no arguments or keywords.

Command Default

VLAN interfaces are disabled.

Command Modes

Configuration mode

Command History

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

Usage Guidelines

You must use the **feature interface-vlan** or the **svi enable** command before you can create VLAN interfaces.

Examples

This example shows how to enable the interface VLAN feature on the switch:

switch(config)# feature interface-vlan

Command	Description
interface vlan	Creates a VLAN interface.

feature lacp

To enable Link Aggregation Control Protocol (LACP), which bundles a number of physical ports together to form a single logical channel, use the **feature lacp** command. To disable LACP on the switch, use the **no** form of this command.

feature lacp

no feature lacp

Syntax Description

This command has no arguments or keywords.

Command Default

LACP is disabled.

Command Modes

Configuration mode

Command History

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

Usage Guidelines

You must remove all the LACP configuration parameters from all EtherChannels on the switch before you can disable LACP.

Even after you enable LACP globally, you do not have to run LACP on all EtherChannels on the switch. You enable LACP on each channel mode using the **channel-group mode** command.

Examples

This example shows how to enable LACP EtherChannels on the switch:

switch(config)# feature lacp

Command	Description
show lacp	Displays information on LACP.

feature IIdp

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.

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.

feature private-vlan

To enable private VLANs, use the **feature private-vlan** command. To return to the default settings, use the **no** form of this command.

feature private-vlan

no feature private-vlan

Syntax Description

None

Command Default

Private VLANs are disabled.

Command Modes

Configuration mode

Command History

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

Usage Guidelines

The private VLAN commands are not available until you enable the private VLAN feature.

You cannot disable the private VLANs if there are operational ports on the switch that are in private VLAN mode.



A PVLAN isolated port on a Cisco Nexus 5000 Series switch running the current release of Cisco NX-OS does not support IEEE 802.1q encapsulation and cannot be used as a trunk port.

Examples

This example shows how to enable private VLAN functionality on the switch:

switch(config)# feature private-vlan

Command	Description
private-vlan	Configures a VLAN as either a community, isolated, or primary private VLAN.
show vlan private-vlan	Displays information on private VLANs. If the feature is not enabled, this command is not available.

feature tacacs+

To enable TACACS+, use the feature tacacs+ command. To disable TACACS+, use the no form of this command.

feature tacacs+

no feature tacacs+

Syntax Description

This command has no arguments or keywords.

Command Default

Disabled.

Command Modes

Configuration mode

Command History

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

Usage Guidelines

You must use the **feature tacacs+** command before you configure TACACS+.



When you disable TACACS+, the Cisco NX-OS software removes the TACACS+ configuration.

Examples

This example shows how to enable TACACS+:

switch(config)# feature tacacs+

This example shows how to disable TACACS+:

switch(config) # no feature tacacs+

Command	Description
show tacacs+	Displays TACACS+ information.

feature udld

To enable the Cisco-proprietary Unidirectional Link Detection (UDLD) protocol), which allows ports that are connected through fiber optics or copper Ethernet cables to monitor the physical configuration of the cables and detect when a unidirectional link exists, use the **feature udld** command. To disable UDLD on the switch, use the **no** form of this command.

feature udld

no feature udld

Syntax Description

This command has no arguments or keywords.

Command Default

UDLD is disabled.

Command Modes

Configuration mode

Command History

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

Usage Guidelines

This example shows how to enable UDLD on the switch:

switch(config)# feature udld

Command	Description
show udld	Displays the administrative and operational UDLD status.

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.
jeterienie prejuit	Tirst part of all of a firemanie.		pretin is ease semsitive.

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

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:	1
--------------------	------------	---

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.

Examples

This example shows how to format the bootflash device:

switch# format bootflash:

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 .
	(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.



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

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 .
llserverl	(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.



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

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)#

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 <i>server</i> argument value is module-1 , sup-1 , sup-active , or sup-local .
modflash:[//server/]	Source URL of an external flash file system. The <i>server</i> 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 <i>server</i> 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:
	<pre>scp:[//[username@]server][/path]/filename</pre>

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.

The **install all** command upgrades the switch software and also upgrades the Fabric Extender software of all attached chassis. The Fabric Extender remains online passing traffic while the software is copied. Once the software images have successfully been installed, the parent switch and the Fabric Extender chassis are rebooted automatically. This is done to maintain the software version compatibility between parent switch and the Fabric Extender.

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.

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

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.
llserverl	(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.



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

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)#

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.

Examples

This example shows how to enter console port configuration mode:

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

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

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
```

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 ATEOQ1&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
```

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 .
	(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.





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

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

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 {vrf-name | default | management}]

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 <i>A.B.C.D</i> . 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 {vrf-name default management}	(Optional) Specifies the virtual routing and forwarding (VRF) to use. The name is case sensitive.

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.

Examples

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

switch# ping 172.28.231.246

Command	Description
ping6	Determines connectivity to another device using IPv6 addressing.
traceroute	Displays the routes that packets take when traveling to an IP address.

ping6

To determine the network connectivity to another device using IPv6 addressing, use the **ping6** command.

ping6 {dest-address | hostname} [count {number | unlimited}] [interface intf-id] [interval
 seconds] [packet-size bytes] [source address] [timeout seconds] [vrf {vrf-name | default |
 management}]

Syntax Description

dest-address	Specifies the destination IPv6 address. 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.
interface intf-id	(Optional) Specifies the interface to send the IPv6 packet. The valid interface types are Ethernet, loopback, EtherChannel, and VLAN.
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.
source address	(Optional) Specifies the source IPv6 address to use. The format is A:B::C:D. The default is the IPv6 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.
<pre>vrf {vrf-name default management}</pre>	(Optional) Specifies the virtual routing and forwarding (VRF) to use. The name is case sensitive.

Command Default

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

Command Modes

EXEC mode

Command History

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

Examples

This example shows how to determine connectivity to another device using IPv6 addressing: switch# ping6 2001:0DB8::200C:417A vrf management

Command	Description
ping	Determines connectivity to another device using IPv4 addressing.
traceroute6	Displays the routes that packets take when traveling to an IPv6 address.

reload

To reload the switch and all attached Fabric Extender chassis or a specific Fabric Extender, use the **reload** command.

reload {all | fex chassis_ID}

Syntax Description

all	Reboot the entire Cisco Nexus 5000 Series switch and all attached Fabric Extender chassis.
fex chassis_ID	Reboot a specific Fabric Extender chassis. Chassis ID is 100 to 199.

Command Default

Reloads the Cisco Nexus 5000 Series switch.

Command Modes

EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.
4.0(1a)N2(1)	Support for the Cisco Nexus 2000 Series Fabric Extender was added.

Usage Guidelines

The **reload** command disrupts traffic on the switch and Fabric Extender.



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

This example shows how to reload a Fabric Extender:

switch# reload fex 101 WARNING: This command will reboot FEX 101 Do you want to continue? (y/n) [n] y

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 .
	(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.



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.

Examples

This example shows how to remove a directory:

switch# rmdir my_files

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



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

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.

save

To save the current configuration session to a file, use the save command.

save location

Syntax Description

location	Location of the file. The location can be in bootflash or volatile. The file
	name can be any alphanumeric string up to 63 characters.

Command Default

None

Command Modes

Session configuration mode

Command History

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

Examples

This example shows how to save a configuration session to a file in bootflash:

switch# configure session MySession
switch(config-s)# save bootflash:sessions/MySession

Command	Description
configure session	Creates or modifies a configuration session.
delete	Deletes a file from a location.

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.

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	Jescri	ptıon
--------	--------	-------

ficon	(Optional)	Runs the basic ficon setu	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

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.

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

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.

Examples

This example shows how to display the MOTD banner:

switch# show banner motd

Unauthorized access is prohibited!

Command	Description
banner motd	Configures the MOTD banner.

show boot

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

show boot [variables]

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J	/IILAA	Descri	DUIDII

variables	(Optional)	Displays a	list of boot	variables.
valuation .	(Optional)	Dispinysu	1150 01 0000	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.	

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

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.

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

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.	

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

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.

Examples

This example shows how to display the CLI variables:

switch# show cli variables

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]

•			
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v	/IILUA	DUSUII	puvii

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.

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

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.

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	
0	EVEC 1	
Command Modes	EXEC mode	
Command History	Release	Modification
	4.0(0)N1(1a)	This command was introduced.
Usage Guidelines	The log files are loca	ated in the log: file system.
Examples	This example shows	how to display the contents of a debug log file:
-Aumproo	switch# show debug	
	SWITCH# SHOW debug	Togille dimesg
B. I. (10)	Command	Description
Related Commands .		•
	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.

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 .
l/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.



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.

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

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.

Examples

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

switch# show hardware internal

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

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 .
llserverl	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.



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.

Examples

This example shows how to display the configuration incompatibilities:

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

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.

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

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 [fex chassis_ID]

Sı	ntax	Des	crit	otion
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fex chassis_ID	(Optional) Specifies the Fabric Extender chassis ID. Chassis ID is 100 to
	199.

Command Default

Displays all hardware inventory information.

Command Modes

EXEC mode

Command History

Release	Modification
4.0(0)N1(1a)	This command was introduced.
4.0(1a)N2(1)	This command was modified to provide Fabric Extender support.

Examples

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

switch# show inventory

This example shows how to display the hardware inventory information for an attached Fabric Extender: switch# show inventory fex 101

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.

Examples

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

switch# show license file fc5020.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

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 (:) as shown in the example.

Examples

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

switch# show license host-id
License hostid: VDH=FLC12300568

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]

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	mtav	11000	PIP	tion
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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.

Examples

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

switch# show license usage

Feature	Ins Lic Count	Status Expiry Date Comments
FM_SERVER_PKG	No -	Unused -
ENTERPRISE_PKG	Yes -	Unused Never -
FC_FEATURES_PKG	Yes -	In use Never -

Table 1-6 describes the columns used in the **show license usage** command output.

Table 1-6 show license usage Columns

Column	Description
Feature	Name of the license package.
Ins	License installation status. "No" indicates that the license is not installed and "Yes" indicates that the license is installed.
Lic Count	License count. "-" indicates that the count is not used for this license package. A number in this field indicates that number of current usages of the license by features. This field is not supported.
Status	License status. "Unused" indicates that no features that require the license are enabled. "In use" indicates that one or more features are using the license.

Table 1-6 show license usage Columns (continued)

Column	Description
Expiry Date	License expiry date. The field is blank if the license is not installed. If the license is installed, the field displays "Never" to indicate that the license has no time limit or displays the date of expiry for the license.
Comments	Additional information. "Grace" with a time period remaining in days ("D") and hours ("H") indicates that the grace license is in use and "license missing" indicates that an error has occurred.

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

switch# show license usage FC_FEATURES_PKG

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 of	only information about the co	onsole port configuration.
---------	------------------------	-------------------------------	----------------------------

Command Default

Displays information about the terminal port configuration.

Command Modes

EXEC mode

Command History

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

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

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 | **fex** [chassis_ID | **all**]]

Syntax Description

module-number	(Optional) Number of the module. The valid range is from 1 to 3.
fex	(Optional) Displays information about the attached Fabric Extender units.
chassis_ID	(Optional) Specifies a Fabric Extender chassis ID. Chassis ID is 100 to 199.
all	(Optional) Displays information about all the attached Fabric Extender units.

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.
4.0(1a)N2(1)	This command was modified to provide Fabric Extender support.

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

This example shows how to display information about an attached Fabric Extender:

switch# show module fex 101

This example shows how to display information about all attached Fabric Extender units:

switch# show module fex all

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]

/ntax		

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.

Examples

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

switch# show processes

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.

Examples

This example shows how to display the CPU utilization information for the processes: switch# show processes cpu

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.
	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.

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

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.

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

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]

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all	(O	ptional) Displays al	I 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.

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

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 1-7 describes the notations used in the command output.

Table 1-7 show running-config diff Notations

Notation	Description
**************************************	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

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 | fex {chassis_ID {all | backplane | powersupply ps-num} | all} | module module-number | powersupply ps-num | sup}

Syntax Description

all	Displays the SPROM contents for all components on the physical device.
backplane	Displays the SPROM contents for the backplane.
fex	(Optional) Displays information about the attached Fabric Extender units.
chassis_ID	(Optional) Specifies a Fabric Extender chassis ID. Chassis ID is 100 to 199.
module module-number	Displays the SPROM contents for a I/O module. The module number range is from 1 to 3.
powersupply ps-num	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.
4.0(1a)N2(1)	This command was modified to provide Fabric Extender support.

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

This example shows how to display SPROM information for an attached Fabric Extender:

switch# show sprom fex 101

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.

Examples

This example shows how to display the startup configuration:

switch# show startup-config

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

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

Command	Description
system cores	Configures the system core filename.

show system reset-reason

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

show system reset-reason [fex chassis_ID]

Syntax De	escription
-----------	------------

fex chassis_ID	(Optional) Specifies the Fabric Extender chassis ID. Chassis ID is 100 to
	199.

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.
4.0(1a)N2(1)	This command was modified to provide Fabric Extender support.

Examples

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

switch# show system reset-reason

This example shows how to display the reset-reason history for an attached Fabric Extender:

switch# show system reset-reason fex 101

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.

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.

Examples

This example shows how to display information about the terminal configuration for a session: switch# show terminal

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 [fex chassis_ID | image filename]

Syntax Description

fex chassis_ID	(Optional) Specifies the Fabric Extender chassis ID. Chassis ID is 100 to 199.
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.
4.0(1a)N2(1)	This command was modified to provide Fabric Extender support.

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

This example shows how to display the version information for an attached Fabric Extender:

switch# show version fex 101

sleep

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

sleep seconds

ntax		

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

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

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 $\{1 \mid 2\}$

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

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.

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

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

switch# system startup-config unlock 10

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 4.0(0)N1(1a)	Modification This command was introduced.
Usage Guidelines		internal sysmgr startup-config locks command to display the locks on the startup
Examples	This example shows how to unlock the startup-configuration file:	

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)#

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.	



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.

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

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

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

ntax		

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

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

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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

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

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 {vrf-name | default | management}] [source src-addr]

Syntax Description

dest-addr	IP address of the destination device. The format is <i>A.B.C.D</i> .
hostname	Name of the destination device. The name is case sensitive.
<pre>vrf {vrf-name default management}</pre>	(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 <i>A.B.C.D</i> . The default is the IPv4 address for the management interface of the switch.

Command Default

None

Command Modes

EXEC mode

Command History

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

Examples

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

switch# traceroute 172.28.255.18 vrf management

Command	Description
ping	Displays the network connectivity to another network device.
traceroute6	Discovers the route to a device using IPv6 addressing.

traceroute6

To discover the routes that packets take when traveling to an IPv6 address, use the **traceroute6** command.

traceroute6 {dest-addr | hostname} [vrf {vrf-name | default | management}] [source src-addr]

Syntax Description

dest-addr	IPv6 address of the destination device. The format is A:B::C:D.
hostname	Name of the destination device. The name is case sensitive.
<pre>vrf {vrf-name default management}</pre>	(Optional) Specifies the virtual routing and forwarding (VRF) to use. The name is case sensitive.
source src-addr	(Optional) Specifies a source IPv6 address. The format is A:B::C:D. The default is the IPv6 address for the management interface of the switch.

Command Default

None

Command Modes

EXEC mode

Command History

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

Examples

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

switch# traceroute6 2001:0DB8::200C:417A vrf management

Command	Description
ping6	Determines connectivity to another device using IPv6 addressing.
traceroute	Discovers the route to a device using IPv4 addressing.

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 .
	(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.



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.

Examples

This example shows how to update a license:

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

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

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