Basic System Commands

This chapter describes the basic Cisco NX-OS system commands available on Cisco Nexus 3000 Series switches. These commands allow you to navigate and control the switch.

Note The internal CLI commands are not supported.

banner motd

To configure the message-of-the-day (MOTD) banner that displays when the user logs in to a Cisco Nexus 3000 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	Delimiter character that 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 3000 Switch” is the default MOTD string.

Command Modes

Interface configuration mode

Command History

Release	Modification
5.0(3)U1(1)	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.

This command does not require a license.

Examples

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

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

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

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

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

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

Related Commands

Command	Description
show banner motd	Displays the MOTD banner.

boot

To configure the boot variable for the Cisco Nexus 3000 Series NX-OS software image, use the **boot** command. To clear the boot variable, use the **no** form of this command.

boot nxos bootflash: [*//server/*] [*directory*] *filename*

no boot nxos

Note These commands are available beginning with Cisco NX-OS Release 7.0(3)I2(1). In previous releases, the command requires a kickstart or system image and uses the following syntax: **boot {kickstart | system} bootflash:** [//server/] [directory] filename

Syntax Description

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

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

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.
7.0(3)I2(1)	Kickstart and system images are no longer used. A single image binary is now used for booting Cisco Nexus 3000 Series platforms and the Cisco Nexus 9000 Series platforms.

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.

This command does not require a license.

Examples

This example shows how to configure the NX-OS boot variable:

```
switch(config)# boot nxos bootflash:nxos.7.0.3.I2.1.bin
```

This example shows how to clear the NX-OS boot variable:

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

Related Commands

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

bootmode

Use the bootmode command to load an executable image and to enter the command-line interface.

bootmode [-g | -p | -p2g | -g2p]

Syntax Description

-g	(Optional) Specifies to load GRUB (from bootflash or local disk) and enter EXEC mode on next system reboot.
-p	(Optional) Specifies to load PXE (from network) and enter EXEC mode on next system reboot.
-p2g	(Optional) Specifies to load PXE followed by GRUB and enter EXEC mode on next system reboot.
-g2p	(Optional) Specifies to load GRUB followed by PXE and enter EXEC mode on next system reboot.

Command Default

None

Usage Guidelines

When you enter the bootmode command without any arguments, the switch displays the current boot mode.

When you run bootmode command with options, they are executed immediately and apply only to the next boot operation.

Examples

This example shows how to specify the bootmode command:

```
loader> bootmode
loader> Boot Mode is: GRUB boot only
```

This example shows how to specify the bootmode command with option -p:

```
loader> bootmode –p
Current Boot Mode is: GRUB boot only
Set Boot Mode to: PXE boot only
```

This example shows how to specify the bootmode command with option -p2g:

```
loader> bootmode -p2g
Current Boot Mode is: PXE boot only
Set Boot Mode to: PXE boot first, follow by bootflash if netboot failed
```

cd

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

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

Syntax Description

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

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

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

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

This command does not require a license.

Examples

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

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

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

```
switch# cd volatile:
```

Related Commands

Command	Description
pwd	Displays the current working directory name.

clear cli history

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

clear cli history

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	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).

This command does not require a license.

Examples

This example shows how to clear the command history:

```
switch# clear cli history
```

Related Commands

Command	Description
show cli history	Displays the command history.

clear cores

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

clear cores

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

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

This command does not require a license.

Examples

This example shows how to clear the core file:

```
switch# clear cores
```

Related Commands

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

clear debug-logfile

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

clear debug-logfile *filename*

Syntax Description

filename	Name of the debug log file to clear.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to clear the debug log file:

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

Related Commands

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

clear install failure-reason

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

clear install failure-reason

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

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

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

Related Commands

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

clear license

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

clear license *filename*

Syntax Description		
	filename	Name of the license file to be uninstalled.

Command Default None

Command Modes EXEC mode

Command History	Release	Modification
	5.0(3)U1(1)	This command was introduced.

Usage Guidelines This command does not require a license.

Examples This example shows how to clear a specific license:

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

Related Commands	Command	Description
	show license	Displays license information.

clear user

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

clear user *username*

Syntax Description		
	username	Name of the user to be logged out.

Command Default None

Command Modes EXEC mode

Command History	Release	Modification
	5.0(3)U1(1)	This command was introduced.

Usage Guidelines This command does not require a license.

Examples This example shows how to log out a specific user:

```
switch# clear user admin
```

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

cli var name

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

cli var name *variable-name variable-text*

no cli var name *variable-name*

Syntax Description

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

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	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.

This command does not require a license.

Examples

This example shows how to define a CLI variable:

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

This example shows how to reference a CLI variable:

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

This example shows how to reference the TIMESTAMP variable:

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

This example shows how to remove a CLI variable:

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

Related Commands

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

clock set

To manually set the clock on a Cisco Nexus 3000 Series switch, use the **clock set** command.

clock set *time day month year*

Syntax Description

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

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	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.

This command does not require a license.

Examples

This example shows how to manually configure the clock:

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

Related Commands

Command	Description
show clock	Displays the clock time.

clock summer-time

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

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

no clock summer-time

Syntax Description

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

Command Default

None

Command Modes

Interface configuration mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

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

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

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

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

Related Commands

Command	Description
show clock	Displays the 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
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

Use this command to offset the device clock from UTC.

This command does not require a license.

Examples

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

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

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

```
switch# no clock timezone
```

Related Commands

Command	Description
show clock	Displays the clock time.

configure session

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

configure session *name*

Syntax Description		
	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
	5.0(3)U1(1)	This command was introduced.

Usage Guidelines This command does not require a license.

Examples This example shows how to create a configuration session:

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

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

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
5.0(3)U1(1)	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 switch 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.

This command does not require a license.

Examples

This example shows how to enter configuration mode:

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

Related Commands

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

copy

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

copy *source-url destination-url*

Syntax Description

source-url	Location URL (or variable) of the source file or directory to be copied. The source can be either local or remote, depending upon whether the file is being downloaded or uploaded. For more information, see the "Usage Guidelines" section.
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. For more information, see the "Usage Guidelines" section.

Command Default

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

Command Modes

EXEC mode

Command History

Release	Modification
6.0(2)U2(1)	Added support for running the configuration file on startup.
5.0(3)U1(1)	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 pr6.0(2)A3(2)otocol 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:**, **tftp**, and **http:**, the server is either an IPv4 address or a hostname.

Format of Source and Destination URL

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 switch looks for a file in the current directory.

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

Table 1 URL Prefix Keywords for Local Writable Storage File Systems

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

Table 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*
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*
http:	Source or destination URL for an HTTP network server. The syntax for this alias is as follows: **http:**[*//server*][*/path*]*/filename*

Table 3 URL Prefix Keywords for Special File Systems

Keyword	Source or Destination
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.

Table 3 URL Prefix Keywords for Special File Systems (continued)

Keyword	Source or Destination
usb1:	Source or destination URL for the external Universal Serial Bus (USB) Flash memory devices.
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.

This section contains usage guidelines for the following topics:

- Copying Files from a Server to Bootflash Memory, page 24
- Copying a Configuration File from a Server to the Running Configuration, page 24
- Copying a Configuration File from a Server to the Startup Configuration, page 24
- Copying the Running or Startup Configuration on a Server, page 24

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:** | **http:**}*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 has 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:** | **http:**}*source-url* **startup-config** command to copy a configuration file from a network server to the switch startup configuration. These commands replace the startup configuration file with the copied configuration file.

The startup configuration file is stored as an ASCII text file and all commands in the configuration file are run during the next startup to generate the binary configuration file. This is equivalent to booting with “write erase” and applying configuration commands sequentially on reload.

Note Because all commands in the startup configuration file are run as configuration commands, this can delay the ASCII configuration file from taking effect.

Copying the Running or Startup Configuration on a Server

Use the **copy running-config** {**ftp:** | **scp:** | **sftp:** | **tftp:** | **http:**}*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.

This command does not require a license.

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://192.168.1.1/image-file.bin bootflash:image-file.bin
```

Related Commands

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

copy running-config startup-config

To save the running configuration to the startup configuration file so that all current configuration details are available after a reboot, use the **copy running-config startup-config** command.

copy running-config startup-config

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

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

Note Once you enter the **copy running-config startup-config** command, the running and the startup copies of the configuration are identical.

This command does not require a license.

Examples

This example shows how to save the running configuration to the startup configuration:

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

Related Commands

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

databits

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

databits *bits*

no databits *bits*

Syntax Description

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

Command Default

8 bits

Command Modes

Terminal line configuration mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

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

This command does not require a license.

Examples

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

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

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

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

Related Commands

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

debug logfile

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

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

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

Syntax Description

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

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	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.

This command does not require a license.

Examples

This example shows how to specify a debug log file:

```
switch# debug logfile debug_log
```

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

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

Related Commands

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

debug logging

To enable **debug** command output logging, use the **debug logging** command. To disable debug logging, use the **no** form of this command.

debug logging

no debug logging

Syntax Description

This command has no arguments or keywords.

Command Default

Disabled

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

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

```
switch# debug logging
```

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

```
switch# no debug logging
```

Related Commands

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

delete

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

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

Syntax Description

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

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

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	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.

This command does not require a license.

Examples

This example shows how to delete a file:

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

This example shows how to delete a directory:

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

Related Commands

Command	Description
dir	Displays the contents of a directory.
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**.
//server/	(Optional) Name of the server. Valid values are **///**, **//module-1/**, **//sup-1/**, **//sup-active/**, or **//sup-local/**. The double slash (**//**) is required.
directory	(Optional) Name of a directory. The directory name is case sensitive.

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

Command Default

Displays the contents of the current working directory.

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	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.

This command does not require a license.

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
```

Related Commands

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

echo

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

echo [*text*]

Syntax Description

text	(Optional) Text string to display. The text string is alphanumeric, case sensitive, can contain spaces, and has a maximum length of 200 characters. The text string can also contain references to CLI variables.

Command Default

Blank line

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	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.

This command does not require a license.

Examples

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

```
switch# echo
```

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

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

Related Commands

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

end

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

end

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
5.0(3)U1(1)	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.

This command does not require a license.

Examples

This example shows how 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
```

Related Commands

Command	Description
exit (EXEC)	Terminates the active terminal session by logging off the switch.
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 mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

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

This command does not require a license.

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
switch(config-console)#
```

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
switch(config-console)#
```

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
switch(config-line)#
```

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
```

```
switch(config-line)#
```

Related Commands

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

exit (EXEC)

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

exit

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how the **exit (global)** command is used to move from configuration mode to EXEC mode and the **exit** (EXEC) command is used to log off (exit the active session):

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

Related Commands

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

exit (global)

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

exit

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

All configuration modes

Command History

Release	Modification
5.0(3)U1(1)	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).

This command does not require a license.

Examples

This example shows how to exit from the interface configuration mode and to return to the configuration mode:

```
switch# configure terminal
switch(config)# interface ethernet 1/1
switch(config-if)# exit
switch(config)#
```

Related Commands

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

fast-reload

To reload the switch, use the **fast-reload** command.

fast-reload [**kickstart** *kickstart_url*| **save-config** | **system** *system_url*}

Note Beginning with Release 7.0(3)I2(1), a single image binary is now used for booting the N3000 platform. Kickstart and system images are no longer used. For example: **fast-reload nxos** <*single_image_binary*>.

Syntax Description

kickstart *kickstart_url*	Reloads the boot variable for the Cisco Nexus 3000 Series or the Cisco Nexus 3100 Series kickstart software image
save-config	Saves the running-config to startup-config after fast-reload
system *system_url*	Reloads the boot variable for the Cisco Nexus 3000 Series or the Cisco Nexus 3100 Series system software image

Command Default

Reloads Cisco Nexus 3000 Series and Cisco Nexus 3100 Series switches.

Command Modes

EXEC mode

Command History

Release	Modification
6.0(2)U2(1)	This command was introduced.
7.0(3)I2(1)	A single image binary is now used for booting the N3000 platform. Kickstart and system images are no longer used.

Usage Guidelines

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

The following are the URL prefix keywords for local writable storage file systems, remote file systems, and special file systems. If you do not specify a URL prefix keyword, the switch looks for a file in the current directory.

Keyword	Source
bootflash:	Source URL for boot flash memory.
modflash:	Source URL of an external flash file system for mod files.
volatile:	Source URL of the default internal file system. Any files or directories stored in this file system are erased when the switch reboots.

Keyword	Source
usb1:	Source or destination URL for the external Universal Serial Bus (USB) Flash memory devices.
ftp:	Source URL for a FTP network server. The syntax for this alias is as follows: ftp:[//server][/path]/filename
scp:	Source URL for a network server that supports Secure Shell (SSH) and uses the secure copy protocol (scp). The syntax is as follows: scp:[//[username@]server][/path]/filename
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

Caution The **fast-reload** command may briefly disrupt traffic on the switch.

To ensure that subsequent fast reboot operations use the new kickstart and system images as the boot variables, specify the **save-config** option while running the **fast-reload** command. If the **save-config** option is not specified, the **fast-reload** command does not save the boot variables and subsequent fast reboot operations use the old kickstart and system images as boot variables.

Examples

This example shows how to use the **fast-reload** command to reload Cisco Nexus 3000 Series and Cisco Nexus 3100 switches:

```
switch# fast-reload kickstart bootflash:///ei479.k system bootflash:///ei488.s
.
Notifying services about fast-reload.

fast-reload can proceed!!

Do you want to continue with the installation (y/n)?  [n] y
[207486.428671]  writing reset reason 133, <NULL>
2010 Nov 17 03:26:50 switch %$ VDC-1 %$ Nov 17 03:26:49 %KERN-0-SYSTEM_MSG: [207
486.428671]  writing reset reason 133, <NULL> - kernel
2010 Nov 17 03:26:57 switch %$ VDC-1 %$ %USER-0-SYSTEM_MSG: Fastboot Begin - bcm
_usd
[207496.060397] Starting new kernel
[207496.099000] Calling kexec callback
[207496.100002] Moving to new kernel
[207496.100002] Calling into reboot_code_buffer code
[    0.000000] Isanimg at 0xc100000 Size 170414080
 Usage: init 0123456SsQqAaBbCcUu
INIT: POST INIT Starts at Wed Nov 17 03:27:05 UTC 2010
Loading System Software Wed Nov 17 03:27:19 UTC 2010
System Software(/isan-upgrade/isan.bin) Loaded Wed Nov 17 03:27:32 UTC 2010
ethernet switching mode
```

```
INIT: Entering runlevel: 3
Mounting other filesystems:  [
Set name-type for VLAN subsystem. Should be visible in /proc/net/vlan/config
Added VLAN with VID == 4042 to IF -:muxif:-
2010 Nov 17 03:27:38 switch %$ VDC-1 %$ %USER-0-SYSTEM_MSG: FAST REBOOT ENABLED
- bcm_usd
2010 Nov 17 03:27:39 switch %$ VDC-1 %$ %USER-2-SYSTEM_MSG: CLIS: loading cmd fi
les begin  - clis
2010 Nov 17 03:27:50 switch %$ VDC-1 %$ %USER-2-SYSTEM_MSG: CLIS: loading cmd fi
les end  - clis
2010 Nov 17 03:27:50 switch %$ VDC-1 %$ %USER-2-SYSTEM_MSG: CLIS: init begin  -
clis
2010 Nov 17 03:28:18 switch %$ VDC-1 %$ %USER-0-SYSTEM_MSG: Before ASIC reset  -
 bcm_usd
2010 Nov 17 03:28:20 switch %$ VDC-1 %$ %USER-0-SYSTEM_MSG: Starting bcm_attach
- bcm_usd
2010 Nov 17 03:28:21 switch %$ VDC-1 %$ %VDC_MGR-2-VDC_ONLINE: vdc 1 has come on
line
2010 Nov 17 03:28:23 switch %$ VDC-1 %$ %USER-0-SYSTEM_MSG: Finished bcm_attach.
.. - bcm_usd
2010 Nov 17 03:28:24 switch %$ VDC-1 %$ %-2-ASIC_DONE:
2010 Nov 17 03:28:30 switch %$ VDC-1 %$ %ETHPC-2-PORTS_UP:
2010 Nov 17 03:28:54 switch %$ VDC-1 %$ %USER-0-SYSTEM_MSG: Fastboot done - bcm_
usd
```

Related Commands

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

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

Global configuration mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

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

This command does not require a license.

Examples

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

```
switch(config)# feature interface-vlan
```

Related Commands

Command	Description
interface vlan	Creates a VLAN interface.
show feature	Displays whether or not VLAN interface is enabled on the switch.

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

Global configuration mode

Command History

Release	Modification
5.0(3)U1(1)	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.

This command does not require a license.

Examples

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

```
switch(config)# feature lacp
```

Related Commands

Command	Description
show lacp	Displays information on LACP.
show feature	Displays whether or not LACP is enabled on the switch.

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

Global configuration mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to enable UDLD on the switch:

```
switch(config)# feature udld
```

Related Commands

Command	Description
show udld	Displays the administrative and operational UDLD status.
show feature	Displays whether or not UDLD is enabled on the switch.

find

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

find *filename-prefix*

Syntax Description		
	filename-prefix	First part or all of a filename. The filename prefix is case sensitive.

Command Default None

Command Modes EXEC mode

Command History	Release	Modification
	5.0(3)U1(1)	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.

This command does not require a license.

Examples This example shows how to display filenames beginning with “n3000”:

```
switch# find n3000
```

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

format

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

format bootflash:

Syntax Description

bootflash:	Specifies the name of the bootflash file system.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to format the bootflash device:

```
switch# format bootflash:
```

Related Commands

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

gunzip

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

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

Syntax Description

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

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

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	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.

This command does not require a license.

Examples

This example shows how to uncompress a compressed file:

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

Related Commands

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

gzip

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

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

Syntax Description

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

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

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	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.

This command does not require a license.

Examples

This example shows how to compress a file:

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

Related Commands

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

hostname

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

hostname *name*

no hostname

Syntax Description

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

Command Default

"switch" is the default hostname.

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	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.

This command does not require a license.

Examples

This example shows how to configure the hostname for a Cisco Nexus 3000 Series switch:

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

This example shows how to revert to the default hostname:

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

Related Commands

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

install all

To install the kickstart and system images on a Cisco Nexus 3000 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	Full address of the kickstart image file. The name is case sensitive.
system	(Optional) Specifies the system image file.
system-url	Full address of the system image file. The name is case sensitive.

Command Default

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

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

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 switch looks for a file in the current directory.

Table 4 lists URL prefix keywords for local writable storage file systems. Table 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 4 URL Prefix Keywords for Local Writable Storage File Systems

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

Table 5 URL Prefix Keywords for Remote File Systems

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

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.

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

This command does not require a license.

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:n3000-uk9-kickstart.5.0.3.U1.1.bin
switch(config)# boot system bootflash:n3000-uk9.5.0.3.U1.1.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@192.168.1.1/n3000-uk9-kickstart.5.0.3.U1.1.bin system
bootflash:scp://adminuser@192.168.1.1/n3000-uk9.5.0.3.U1.1.bin
```

Related Commands

Command	Description
reload	Reloads the device with new Cisco NX-OS software.
show incompatibility system	Displays configuration incompatibilities between Cisco NX-OS system software images.
show install all	Displays information related to the install operation.
show version	Displays information about the software version.

install license

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

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

Syntax Description

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

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

Command Default

All licenses for the Cisco Nexus 3000 Series switches are factory installed. Manual installation is not required.

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	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.

This command does not require a license.

Examples

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

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

Related Commands

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

line console

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

line console

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

Interface configuration mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

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

This command does not require a license.

Examples

This example shows how to enter console port configuration mode:

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

Related Commands

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

line vty

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

line vty

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

Interface configuration mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to enter console port configuration mode:

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

Related Commands

Command	Description
access-class	Restricts incoming and outgoing connections in VTY configuration mode.
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 mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

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

This command does not require a license.

Examples

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

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

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

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

Related Commands

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

modem init-string

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

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

no modem init-string

Syntax Description

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

Command Default

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

Command Modes

Terminal line configuration mode

Command History

Release	Modification
5.0(3)U1(1)	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.

This command does not require a license.

Examples

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

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

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

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

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

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

Related Commands

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

modem set-string user-input

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

modem set-string user-input *string*

no modem set-string

Syntax Description

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

Command Default

None

Command Modes

Terminal line configuration mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

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

This command does not require a license.

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 set-string user-input ATE0Q1&D2&C1S0=3\015
```

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

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

Related Commands

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

move

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

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

Syntax Description

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

Command Default

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

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

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

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

This command does not require a license.

Examples

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

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

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

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

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

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

Related Commands

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

parity

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

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

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

Syntax Description

even	Specifies even parity.
none	Specifies no parity.
odd	Specifies odd parity.

Command Default

The **none** keyword is the default.

Command Modes

Terminal line configuration mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

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

This command does not require a license.

Examples

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

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

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

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

Related Commands

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

ping

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

ping {*dest-address* | *hostname*} [**count** {*number* | **unlimited**}] [**df-bit**] [**interval** *seconds*] [**packet-size** *bytes*] [**parent-interface** {**ethernet** *slot/port* | **loopback** *if_number* | **port-channel** *number*} **member-interface** {**ethernet** *slot/port* | **loopback** *if_number* | **port-channel** *number*}] [**source** *src-address*] [**timeout** *seconds*] [**vrf** {*vrf-name* | **default** | **management**}]

Syntax Description

dest-address	IPv4 address of the destination device. The format is *A.B.C.D*.
hostname	Hostname of the 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.
parent-interface	(Optional) Specifies the parent interface to ping.
ethernet *slot/port*	Specifies the Ethernet interface and the slot number and port number. The slot number is from 1 to 255, and the port number is from 1 to 128.
loopback *if_number*	Specifies the loopback interface. The loopback interface number is from 0 to 1023.
port-channel *number*	Specifies the EtherChannel interface and EtherChannel number. The range is from 1 to 4096.
member-interface	Specifies the member interface to ping.
source *scr-address*	(Optional) Specifies the source IPv4 address to use. The format is *A.B.C.D*. The default is the IPv4 address for the management interface of the device.
timeout *seconds*	(Optional) Specifies the nonresponse timeout interval in seconds. The range is from 1 to 60. The default is 2 seconds.
vrf *vrf-name*	(Optional) Specifies the virtual routing and forwarding (VRF) instance to use. The name is case sensitive and can be a maximum of 32 characters.
default	(Optional) Specifies the default VRF.
management	(Optional) Specifies the management VRF.

Command Default

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

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.
5.0(3)U2(1)	Support was added to ping parent interfaces.

Usage Guidelines

This command does not require a license.

Examples

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

```
switch# ping 192.168.2.246
```

Related Commands

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

ping multicast

To determine the network connectivity to IPv4 multicast interfaces, use the **ping multicast** command.

ping multicast *multicast-grp-address* **interface** {**ethernet** *slot/port* | **loopback** *if_number* | **mgmt** *mgmt_intf* | **port-channel** *number*} [[**count** {*number* | **unlimited**}] [**df-bit**] [**interval** *seconds*] [**packet-size** *bytes*] [**parent-interface** {**ethernet** *slot/port* | **loopback** *if_number* | **port-channel** *number*} **member-interface** {**ethernet** *slot/port* | **loopback** *if_number* | **port-channel** *number*}] [**source** *src-address*] [**timeout** *seconds*] [**vrf** {*vrf-name* | **default** | **management**}]]

Syntax Description

multicast-grp-address	Multicast group address of the destination device.
interface	Specifies the interface to send the IPv4 multicast packets.
ethernet *slot/port*	Specifies an IEEE 802.3z Ethernet interface. The slot number is from 1 to 255, and the port number is from 1 to 128.
loopback *if_number*	Specifies the loopback interface. The loopback interface number is from 0 to 1023.
mgmt *mgmt_intf*	Specifies the management interface. The management interface is 0.
port-channel *number*	Specifies the EtherChannel interface and EtherChannel number. The range is from 1 to 4096.
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.
parent-interface	Specifies the parent interface to ping.
source *scr-address*	(Optional) Specifies the source IPv4 address to use. The format is *A.B.C.D*. The default is the IPv4 address for the management interface of the device.
timeout *seconds*	(Optional) Specifies the nonresponse timeout interval in seconds. The range is from 1 to 60. The default is 2 seconds.
vrf *vrf-name*	(Optional) Specifies the virtual routing and forwarding (VRF) instance to use. The name is case sensitive and can be a maximum of 32 characters.
default	(Optional) Specifies the default VRF.
management	(Optional) Specifies the management VRF.

Command Default

None

Command Modes

EXEC mode
Global configuration mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.
5.0(3)U2(1)	Support was added to ping parent interfaces and multicast group addresses.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to send multicast packets to an Ethernet interface:

```
switch# ping multicast 239.128.1.0 interface ethernet 1/5
```

Related Commands

Command	Description
ping	Determines connectivity to another device using IPv4 addressing.
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** {**ethernet** *slot*/*port* | **loopback** *if_number* | **port-channel** *number*}] [**interval** *seconds*] [**packet-size** *bytes*] [**source** *address*] [**timeout** *seconds*] [**vrf** {*vrf-name* | **default** | **management**}]

Syntax Description

dest-address	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	(Optional) Specifies the interface to send the IPv6 packet.
ethernet *slot*/*port*	Specifies an IEEE 802.3z Ethernet interface. The slot number is from 1 to 255, and the port number is from 1 to 128.
loopback *if_number*	Specifies the loopback interface. The loopback interface number is from 0 to 1023.
port-channel *number*	Specifies the EtherChannel interface and EtherChannel number. The range is from 1 to 4096.
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.
vrf *vrf-name*	(Optional) Specifies the virtual routing and forwarding (VRF) instance to use. The name is case sensitive and can be a maximum of 32 alphanumeric characters.
default	(Optional) Specifies the default VRF.
management	(Optional) Specifies the management VRF.

Command Default

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

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to determine connectivity to another device using IPv6 addressing:

```
switch# ping6 2001:0DB8::200C:417A vrf management
```

Related Commands

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, use the **reload** command.

reload {**all**}

Syntax Description		
	all	Reboots the switch.

Command Default Reloads the Cisco Nexus 3000 Series switch.

Command Modes EXEC mode

Command History	Release	Modification
	5.0(3)U1(1)	This command was introduced.

Usage Guidelines

Caution The **reload** command disrupts traffic on the switch.

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 switch.

This command does not require a license.

Examples This example shows how to reload the Cisco Nexus 3000 Series switch:

```
switch# copy running-config startup-config
switch# reload
WARNING: This command will reboot the system
Do you want to continue? (y/n) [n] y
```

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

rmdir

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

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

Syntax Description

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

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

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to remove a directory:

```
switch# rmdir my_files
```

Related Commands

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

run-script

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

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

Syntax Description

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

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

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

You must create the command file on a remote device and download it to the Cisco Nexus 3000 Series switch using the **copy** command.

This command does not require a license.

Examples

This example shows how to run a command script file:

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

Related Commands

Command	Description
cd	Changes the current working directory.
copy	Copies files.
dir	Displays the directory contents.
echo	Displays a test string on the terminal.

Command	Description
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
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

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
```

Related Commands

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
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

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

This command does not require a license.

Examples

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

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

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

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

Related Commands

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

setup

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

setup [**ficon**]

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

Command Default None

Command Modes EXEC mode

Command History	Release	Modification
	5.0(3)U1(1)	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**.

This command does not require a license.

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

```
switch# setup
```

Related Commands	Command	Description
	show running-config	Displays the running configuration.

session-limit

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

session-limit *sessions*

no session-limit *sessions*

Syntax Description

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

Command Default

32 sessions

Command Modes

Terminal line configuration mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

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

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

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

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

Related Commands

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

show banner motd

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

show banner motd

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to display the MOTD banner:

```
switch# show banner motd
Nexus 3000 Switch
switch#
```

Related Commands

Command	Description
banner motd	Configures the MOTD banner.

show boot

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

show boot [**variables**]

Syntax Description

variables	(Optional) Displays a list of boot variables.

Command Default

Displays all configured boot variables.

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

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
List of boot variables are:
    system
    kickstart
switch#
```

Related Commands

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

show cli alias

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

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

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

Command Default Displays all configured command alias variables.

Command Modes EXEC mode

Command History	Release	Modification
	5.0(3)U1(1)	This command was introduced.

Usage Guidelines This command does not require a license.

Examples This example shows how to display all configured command aliases:

```
switch# show cli alias
CLI alias commands
==================
alias  :show cli alias
switch#
```

This example shows how to display a specific command alias:

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

Related Commands	Command	Description
	cli alias name	Configures command aliases.

show cli history

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

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

Syntax Description		
	lines	(Optional) 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
	5.0(3)U1(1)	This command was introduced.

Usage Guidelines This command does not require a license.

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

```
switch# show cli history
0  08:32:13   sh feature
 1  08:47:15   show ssh server
 2  08:47:21   conf t
 3  08:47:23     fea ssh
 5  08:47:27   show ssh server
 6  08:47:32     no fea ssh
 7  08:47:58   show ssh names
 8  08:59:24     policy-map type qos my_policy
 9  08:59:39   show class type qos
10  08:59:51       class type qos class-default
11  08:59:59     class-map type qos c1
12  09:00:03     ex
<--Output truncated-->
switch#
```

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

```
switch# show cli history 10
38  10:28:05   sho sprom all
39  10:29:40   show sprom sup
41  10:31:09   show sprom backplane
43  10:38:42   show system resources
44  10:39:28   show boot
46  10:39:36   show boot variables
47  10:40:20   show banner motd
48  10:40:45   sh cli alias
50  10:41:20   sh cli history
```

```
52  10:43:03   sh cli history 10
switch#
```

This example shows how to display unformatted command history:

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

Related Commands

Command	Description
clear cli history	Clears the command history.

show cli variables

To display the configuration of the command-line interface (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
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to display the CLI variables:

```
switch# show cli variables
VSH Variable List
-----------------
SWITCHNAME="QS5"
TIMESTAMP="2010-05-22-10.44.20"
switch#
```

Related Commands

Command	Description
cli var name	Configures CLI variables.

show clock

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

show clock [**detail**]

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

Command Default None

Command Modes EXEC mode

Command History	Release	Modification
	5.0(3)U1(1)	This command was introduced.

Usage Guidelines This command does not require a license.

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

```
switch# show clock
10:44:44.891 UTC Sat May 22 2010
switch#
```

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

```
switch# show clock detail
10:45:02.685 UTC Sat May 22 2010
switch#
```

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

show configuration session

To display information about configuration sessions, use the **show configuration session** command.

show configuration session [*session-name* | **status** | **summary**]

Syntax Description

session-name	(Optional) Configuration session name. The name can be a maximum of 64 alphanumeric characters.
status	(Optional) Displays the status of the configuration session.
summary	(Optional) Displays summary information of the active configuration sessions.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to display the status of the active configuration session:

```
switch# show configuration session status
```

This example shows how to display the summary information of the active configuration sessions:

```
switch# show configuration session summary
```

Related Commands

Command	Description
configure session	Creates a configuration session.

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
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

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

```
switch# show copyright
Cisco Nexus Operating System (NX-OS) Software
TAC support: http://www.cisco.com/tac
Copyright (c) 2002-2011, Cisco Systems, Inc. All rights reserved.
The copyrights to certain works contained in this software are
owned by other third parties and used and distributed under
license. Certain components of this software are licensed under
the GNU General Public License (GPL) version 2.0 or the GNU
Lesser General Public License (LGPL) Version 2.1. A copy of each
such license is available at
http://www.opensource.org/licenses/gpl-2.0.php and
http://www.opensource.org/licenses/lgpl-2.1.php
switch#
```

Related Commands

Command	Description
show version	Displays the switch software version.

show debug logfile

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

show debug logfile *filename*

Syntax Description		
	filename	Name of the debug log file.

Command Default None

Command Modes EXEC mode

Command History	Release	Modification
	5.0(3)U1(1)	This command was introduced.

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

This command does not require a license.

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

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

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

show environment

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

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

Syntax Description

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

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
7.0(3)I2(1)	The output for **show environment fan details** has changed
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

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

```
switch# show environment


Fan:
----------------------------------------------------
Fan             Model                Hw         Status
----------------------------------------------------
Chassis-1       N3K-C3064-FAN        --         ok
PS-1            N2200-PAC-400W       --         ok
PS-2            N5K-PAC-750W         --         failure


Temperature
-----------------------------------------------------------------------
Module   Sensor     MajorThresh   MinorThres   CurTemp     Status
                    (Celsius)     (Celsius)    (Celsius)
-----------------------------------------------------------------------
1         D0        55            44           31          ok
1         D1        68            61           36          ok
1         D2        61            52           32          ok
1         D3        61            52           37          ok


<--Output truncated-->
switch#
```

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

```
switch# show environment temperature


Temperature
-----------------------------------------------------------------
Module   Sensor     MajorThresh   MinorThres   CurTemp     Status
                    (Celsius)     (Celsius)    (Celsius)
-----------------------------------------------------------------
1         D0        55            44           32          ok
1         D1        68            61           36          ok
1         D2        61            52           32          ok
1         D3        61            52           37          ok
switch#
```

This example shows how to display detailed information about the fan environment:

```
switch# show environment fan detail


Fan:
-----------------------------------------------------
Module  Fan  Airflow        Speed(%)  Speed(RPM)
             Direction
-----------------------------------------------------
1       1    Front-to-Back  40        11739
1       2    Front-to-Back  40        8955
1       3    Front-to-Back  40        11637
1       4    Front-to-Back  40        9060
1       5    Front-to-Back  40        11764
1       6    Front-to-Back  40        8955
1       7    Front-to-Back  40        11894
1       8    Front-to-Back  40        9075


Power Supply:
-----------------------------------
Module  Airflow        Configured
        Direction      Speed (RPM)
-----------------------------------
1       Front-to-Back  9000
2       Back-to-Front  9000
switch#
```

Beginning in Release 7.0(3)I2(1), the output for **show environment fan details** is as follows:

```
switch# show environment fan detail
-----------------------------------------------
Mod Total Fabric Utilization
Bandwidth Ingress % Egress %
-----------------------------------------------
Fan:
-------------------------------------------------------------------------------
Fan Model Hw Direction Status
-------------------------------------------------------------------------------
Fan1(sys_fan1) N3K-C3132-FAN 0.0 front-to-back Ok
Fan2(sys_fan2) N3K-C3132-FAN 0.0 front-to-back Ok
Fan3(sys_fan3) N3K-C3132-FAN 0.0 front-to-back Ok
Fan4(sys_fan4) N3K-C3132-FAN 0.0 front-to-back Ok
Fan_in_PS1 N2200-PAC-400W -- front-to-back Ok
Fan_in_PS2 N2200-PAC-400W -- front-to-back Ok
Fan Zone Speed: Zone 1: 0x33
```

```
Fan Air Filter : NotSupported
Fan:
----------------------------------------------------------------------
Fan Tray Fan Fan Direction Speed(%) Speed(RPM)
----------------------------------------------------------------------
Fan1(sys_fan1) fan1 front-to-back 41 6398
Fan1(sys_fan1) fan2 front-to-back 42 4843
Fan2(sys_fan2) fan1 front-to-back 41 6405
Fan2(sys_fan2) fan2 front-to-back 40 4703
Fan3(sys_fan3) fan1 front-to-back 40 6271
Fan3(sys_fan3) fan2 front-to-back 41 4774
Fan4(sys_fan4) fan1 front-to-back 41 6405
Fan4(sys_fan4) fan2 front-to-back 41 4808
switch#
```

Related Commands

Command	Description
show module	Displays module information.

show feature

To display the status of features on a switch, use the **show feature** command.

show feature

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.
5.0(3)U2(2)	Support for Bidirectional Forwarding Detection (BFD) and Precision Time Protocol (PTP) was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to display the state of all features on a switch that runs Cisco NX-OS Release 5.0(3)U1(1):

```
switch# show feature
Feature Name          Instance  State
--------------------  --------  --------
bgp                   1         disabled
dhcp                  1         disabled
eigrp                 1         disabled
eigrp                 2         disabled
eigrp                 3         disabled
eigrp                 4         disabled
hsrp_engine           1         disabled
interface-vlan        1         disabled
lacp                  1         disabled
ldap                  1         disabled
msdp                  1         disabled
ospf                  1         disabled
ospf                  2         disabled
ospf                  3         disabled
ospf                  4         disabled
pim                   1         disabled
private-vlan          1         disabled
privilege             1         disabled
rip                   1         disabled
rip                   2         disabled
rip                   3         disabled
rip                   4         disabled
sshServer             1         disabled
```

```
tacacs                1         disabled
telnetServer          1         enabled
udld                  1         disabled
vrrp                  1         disabled
vtp                   1         disabled
switch#
```

This example shows how to display the state of all features on a switch that runs Cisco NX-OS Release 5.0(3)U2(2):

```
switch# show feature
Feature Name          Instance  State
--------------------  --------  --------
bfd                   1         enabled
bfd_app               1         enabled
bgp                   1         disabled
dhcp                  1         disabled
eigrp                 1         disabled
eigrp                 2         disabled
eigrp                 3         disabled
eigrp                 4         disabled
fcoe-npv              1         disabled
hsrp_engine           1         disabled
interface-vlan        1         disabled
lacp                  1         disabled
ldap                  1         disabled
lldp                  1         enabled
msdp                  1         disabled
ospf                  1         disabled
ospf                  2         disabled
ospf                  3         disabled
ospf                  4         disabled
pim                   1         disabled
poe                   1         disabled
private-vlan          1         disabled
privilege             1         disabled
ptp                   1         disabled
rip                   1         disabled
rip                   2         disabled
rip                   3         disabled
rip                   4         disabled
sshServer             1         disabled
tacacs                1         disabled
telnetServer          1         enabled
udld                  1         disabled
vpc                   1         disabled
vrrp                  1         disabled
vtp                   1         disabled
switch#
```

Related Commands

Command	Description
feature	Enables or disables a feature on the switch.

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**, **debug**, **modflash**, **usb1**, 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.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

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

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

This command does not require a license.

Examples

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

```
switch# show file base.lic
FEATURE LAN_BASE_SERVICES_PKG cisco 1 permanent uncounted \
                HOSTID=VDH=SSI14430C31 \
                NOTICE="<LicFileID>testFileName</LicFileID><LicLineID>0</LicLine
ID> \
                <PAK>dummyPak</PAK>" SIGN=3B68DB3CB4F0


switch#
```

This example shows the error message that appears if the file that you want to display is a directory:

```
switch# show file bootflash:///routing-sw
/bin/showfile: /bootflash/routing-sw: No such file or directory

switch#
```

Related Commands

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

show 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
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

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

This command does not require a license.

Examples

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

```
switch# show hostname
```

Related Commands

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

show incompatibility system

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

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

Syntax Description

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

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

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to display the configuration incompatibilities:

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

Related Commands

Command	Description
install all	Installs the kickstart and system images.
reload	Reloads the device with the 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
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to display the installation failure reason:

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

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

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

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

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

Related Commands

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

show inventory

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

show inventory

Syntax Description

This command has no arguments or keywords.

Command Default

Displays all hardware inventory information.

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

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

```
switch# show inventory
NAME: "Chassis", DESCR: "Nexus3000 Chassis"
PID:                    , VID:     , SN: SSI14430C31

NAME: "Module 1", DESCR: "48x10GE + 16x10G/4x40G Supervisor"
PID:                    , VID:     , SN:

NAME: "Fan 1", DESCR: "Chassis fan module"
PID: N3K-C3064-FAN      , VID: N/A , SN: N/A

NAME: "Power supply 1", DESCR: "AC power supply"
PID: N2200-PAC-400W     , VID: V02 , SN: LIT14291UFS

NAME: "Power supply 2", DESCR: "AC power supply"
PID: N5K-PAC-750W       , VID: V01 , SN: LIT14291Q4B
switch#
```

Related Commands

Command	Description
show module	Displays information about the modules.

show license

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

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

Syntax Description

brief	(Optional) Displays a list of license files installed on a device.
default	(Optional) Displays the services that use the default license.
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
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

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

```
switch# show license file l3-license.lic
l3-license.lic:
FEATURE LAN_ENTERPRISE_SERVICES_PKG cisco 1 permanent uncounted \
 HOSTID=VDH=SSI14430C31 \
 NOTICE="<LicFileID>testFileName</LicFileID><LicLineID>0</LicLineID> \
 <PAK>dummyPak</PAK>" SIGN=1B7020B6BAFA


switch#
```

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

```
switch# show license brief
base.lic
l3-license.lic
switch#
```

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

```
switch# show license
```

This example shows how to display the services that use the default license:

```
switch# show license default
Feature                              Default License Count
--------------------------------------------------------------------------------
LAN_BASE_SERVICES_PKG                -
```

```
LAN_ENTERPRISE_SERVICES_PKG           -
--------------------------------------------------------------------------------
switch#
```

Related Commands

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

show license host-id

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

show license host-id

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

The serial number is the entire string that appears after the colon (:) as shown in the example.

This command does not require a license.

Examples

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

```
switch# show license host-id
License hostid: VDH=SSI14430C31
switch#
```

Related Commands

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

show license usage

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

show license usage [*PACKAGE*]

Syntax Description

PACKAGE	(Optional) 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
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

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

```
switch# show license usage
Feature                      Ins  Lic   Status Expiry Date Comments
                                Count
--------------------------------------------------------------------------------
LAN_BASE_SERVICES_PKG         Yes   -   Unused Never       -
LAN_ENTERPRISE_SERVICES_PKG   Yes   -   In use Never       -
--------------------------------------------------------------------------------
switch#
```

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

Table 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 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 LAN_BASE_SERVICES_PKG
```

Related Commands

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

show line

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

show line [**console** [**connected** | **user-input-string**]]

Syntax Description

console	(Optional) Displays only information about the console port configuration.
connected	(Optional) Displays whether the line is currently connected physically.
user-input-string	(Optional) Displays the user-input initialization string.

Command Default

Displays information about the terminal port configuration.

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

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

```
switch# show line
line Console:
    Speed:        9600 baud
    Databits:     8 bits per byte
    Stopbits:     1 bit(s)
    Parity:       none
    Modem In: Disable
    Modem Init-String -
        default : ATE0Q1&D2&C1S0=1\015

line Aux:
    Speed:        9600 baud
    Databits:     8 bits per byte
    Stopbits:     1 bit(s)
    Parity:       none
    Modem In: Disable
    Modem Init-String -
        default : ATE0Q1&D2&C1S0=1\015
    Hardware Flowcontrol: ON

switch#
```

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

```
switch# show line console
line Console:
    Speed:        9600 baud
```

```
    Databits:     8 bits per byte
    Stopbits:     1 bit(s)
    Parity:       none
    Modem In: Disable
    Modem Init-String -
        default : ATE0Q1&D2&C1S0=1\015

switch#
```

This example shows how to display the status of the physical connection:

```
switch# show line console connected
Line console is connected
switch#
```

This example shows how to display the user-input initialization string for a modem:

```
switch# show line console user-input-string
```

Related Commands

Command	Description
line console	Enters the console port configuration mode.

show module

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

show module [*module-number*]

Syntax Description

module-number	(Optional) Number of the module. The valid range is from 1 to 3.

Command Default

Displays module information for all modules in the switch chassis.

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

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

```
switch# show module
Mod Ports  Module-Type                       Model                  Status
--- -----  --------------------------------- ---------------------- ------------
1    64     48x10GE + 16x10G/4x40G Superviso -SUP                    active *

Mod  Sw              Hw      World-Wide-Name(s) (WWN)
---  --------------  ------  --------------------------------------------------
1    5.0(3)U1(1)     0.0     --

Mod  MAC-Address(es)                         Serial-Num
---  --------------------------------------  ----------
1    0005.0505.050d to 0005.0505.0534
switch#
```

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

```
switch# show module 1
Mod Ports  Module-Type                       Model                  Status
--- -----  --------------------------------- ---------------------- ------------
1    64     48x10GE + 16x10G/4x40G Superviso -SUP                    active *

Mod  Sw              Hw      World-Wide-Name(s) (WWN)
---  --------------  ------  --------------------------------------------------
1    5.0(3)U1(1)     0.0     --

Mod  MAC-Address(es)                         Serial-Num
---  --------------------------------------  ----------
1    0005.0505.050d to 0005.0505.0534
switch#
```

Related Commands

Command	Description
show inventory	Displays hardware inventory information.

show processes

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

show processes

Syntax Description

This command has no arguments or keywords.

Command Default

Displays information for all processes running on the switch.

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

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

```
switch# show processes

PID    State  PC        Start_cnt    TTY   Process
-----  -----  --------  -----------  ----  -------------
    1      S  b7f9e468            1     -  init
    2      S         0            1     -  migration/0
    3      S         0            1     -  ksoftirqd/0
    4      S         0            1     -  desched/0
    5      S         0            1     -  migration/1
    6      S         0            1     -  ksoftirqd/1
    7      S         0            1     -  desched/1
    8      S         0            1     -  events/0
    9      S         0            1     -  events/1
   10      S         0            1     -  khelper
   15      S         0            1     -  kthread
   24      S         0            1     -  kacpid
  182      S         0            1     -  kblockd/0
  183      S         0            1     -  kblockd/1
  196      S         0            1     -  khubd
<--Output truncated-->
switch#
```

Related Commands

Command	Description
show processes cpu	Displays the CPU utilization information for processes.

Command	Description
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
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

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

```
switch# show processes cpu

PID    Runtime(ms)  Invoked   uSecs  1Sec    Process
-----  -----------  --------  -----  ------  -----------
    1          415     18901     21    0.0%  init
    2           10      3931      2    0.0%  migration/0
    3         2282  45391585      0    0.0%  ksoftirqd/0
    4           26      7882      3    0.0%  desched/0
    5            9      3706      2    0.0%  migration/1
    6          596  23862071      0    0.0%  ksoftirqd/1
    7           23      6629      3    0.0%  desched/1
:
<--snip-->
:
15250            1         2    525    0.0%  vsh
15251           18         5   3777    0.0%  ps

CPU util  :   5.9% user,   0.5% kernel,   93.6% idle
switch#
```

Related Commands

Command	Description
show processes	Displays the process information for the switch.

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

show processes log

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

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

Syntax Description

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

Command Default

Displays summary information for all processes on the device.

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

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

```
switch# show processes log
Process          PID     Normal-exit  Stack  Core   Log-create-time
---------------  ------  -----------  -----  -----  ---------------
bcm_usd          4181              N      Y      N  Sun Jan 31 19:15:44 2010
bcm_usd          4294              N      Y      N  Sun May 23 09:10:22 2010
bcm_usd          4313              N      Y      N  Mon Apr 12 09:24:59 2010
bcm_usd          4331              N      Y      N  Mon Apr 12 07:17:09 2010
carmelusd        4156              N      N      N  Fri Feb 12 18:58:29 2010
carmelusd        4468              N      N      N  Fri Feb 12 23:48:48 2010
ethpm            4471              N      N      N  Sun May  2 05:02:54 2010
fwm              4195              N      Y      N  Sun Jan 31 16:19:10 2010
fwm              4345              N      Y      N  Mon May  3 12:54:59 2010
ipfib            4360              N      Y      N  Mon Apr 12 07:16:58 2010
ipfib            4367              N      Y      N  Mon Apr 12 09:24:49 2010
ipqosmgr         4326              N      Y      N  Fri May 21 19:44:02 2010
<--Output truncated-->
switch#
```

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 4181
```

Related Commands

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

show processes memory

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

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

Syntax Description

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

Command Default

Displays memory allocated to the processes.

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.
7.0(3)|2(1)	The StkSize, RSSMem, and LibMem columns are no longer displayed in the table for memory allocation processes.

Usage Guidelines

This command does not require a license.

Examples

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

```
switch# show processes memory

PID    MemAlloc StkSize   RSSMem   LibMem    StackBase/Ptr      Process
----   -------  -------  -------   -------   -------------     ---------
    1    147456    86016   495616  1126400 bffffea0/bffff990  init
    2         0        0        0        0        0/0         migration/0
    3         0        0        0        0        0/0         ksoftirqd/0
    4         0        0        0        0        0/0         desched/0
    5         0        0        0        0        0/0         migration/1
    6         0        0        0        0        0/0         ksoftirqd/1
    7         0        0        0        0        0/0         desched/1
    8         0        0        0        0        0/0         events/0
    9         0        0        0        0        0/0         events/1
   10         0        0        0        0        0/0         khelper
   15         0        0        0        0        0/0         kthread
<--Output truncated-->
switch#
```

Starting with Release 7.0(3)|2(1), the output of the **show processes memory** command is updated as follows:

```
switch# show processes memory

PID    MemAlloc    StackBase/Ptr      Process
```

```
----   -------     -------------     ---------
    1    147456 bffffea0/bffff990    init
    2         0        0/0           migration/0
    3         0        0/0           ksoftirqd/0
    4         0        0/0           desched/0
    5         0        0/0           migration/1
    6         0        0/0           ksoftirqd/1
    7         0        0/0           desched/1
    8         0        0/0           events/0
    9         0        0/0           events/1
   10         0        0/0           khelper
   15         0        0/0           kthread
<--Output truncated-->
switch#
```

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

```
switch# show processes memory shared
Component            Shared Memory      Size              Used  Available    Ref
                           Address   (kbytes)          (kbytes)   (kbytes)  Count
smm                     0X50000000      1024                 3       1021     36
cli                     0X50110000     30720*            12530      18190     11
npacl                   0X51F20000      4096*                2       4094      2
am                      0X52330000      1024*               83        941      6
u6rib-ufdm              0X52440000       320*              188        132      2
urib                    0X524A0000     32768*             734      32034     18
mrib                    0X544B0000     59392*            3238      56154      4
urib-redist             0X57EC0000      4096*                0       4096     18
mrib-mfdm               0X582D0000      4096*                9       4087      2
urib-ufdm               0X586E0000      2048*                0       2048      2
u6rib                   0X588F0000     16384*             545      15839      9
u6rib-notify            0X59900000      2048*              795       1253      9
icmpv6                  0X59B10000      1024                 0       1024      6
ip                      0X59C20000      2048                65       1983     16
ipv6                    0X59E30000      1024                 9       1015      7
igmp                    0X59F40000      4096*             1173       2923      2
rpm                     0X5A350000      1024                 0       1024      7
mcastfwd                0X5A460000      1024               146        878      3
pim                     0X5A570000      2048               225       1823      4
bgp                     0X5A780000      1024               464        560      1

Shared memory totals - Size: 168 MB, Used: 20 MB, Available: 148 MB

'+' - Dynamic shared memory segment.
'*' - Non-default sized share memory segment.
switch#
```

Related Commands

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

show running-config

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

show running-config [**all**]

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

Command Default Displays only the configured information.

Command Modes EXEC mode

Command History	Release	Modification
	5.0(3)U1(1)	This command was introduced.

Usage Guidelines This command does not require a license.

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

```
switch# show running-config

!Command: show running-config
!Time: Thu Jun  3 09:12:13 2010

version 5.0(3)U1(1)
feature telnet
feature bgp
feature interface-vlan
feature hsrp

username admin password 5 $1$qlbQ8MOw$/WpKb1OE1R6BwZU9yfFL51  role network-admin
ip domain-lookup
hostname QS5
hardware profile multicast max-limit 2000
policy-map type network-qos jumbo
  class type network-qos class-default
    mtu 9216
system qos
  service-policy type network-qos jumbo
slot 2
slot 22
slot 39
<--Output truncated-->
switch#
```

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

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

```
!Command: show running-config all
!Time: Thu Jun  3 09:14:34 2010

version 5.0(3)U1(1)
license grace-period

feature telnet
feature ssh
cfs distribute
cfs ipv4 mcast-address 239.255.70.83
cfs ipv6 mcast-address ff15::efff:4653
no cfs ipv4 distribute
no cfs ipv6 distribute
feature bgp
feature interface-vlan
feature hsrp
no hsrp timers extended-hold

username admin password 5 $1$qlbQ8MOw$/WpKb1OE1R6BwZU9yfFL51  role network-admin
password strength-check
<--Output truncated-->
switch#
```

Related Commands

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

show running-config diff

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

show running-config diff

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

Table 7 describes the notations used in the command output.

Table 7 show running-config diff Notations

Notation	Description
********** *--- line1, line2 ----* **** line1, line2 *****	Indicates ranges of lines where differences occur. The range of lines indicated with asterisks (*) is for the startup configuration and the range indicated with dashes (–) is for the startup configuration.
+ text	Indicates that the line is in the running configuration but is not in the startup configuration.
– text	Indicates that the line is not in the running configuration but it is in the startup configuration.
! text	Indicates that the line exists in both configurations but in different orders.

This command does not require a license.

Examples

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

```
switch# show running-config diff
*** Startup-config
--- Running-config
***************
*** 5,19 ****

  version 5.0(3)U1(1)
  feature telnet
```

```
  feature bgp
  feature interface-vlan

- username adminbackup password 5 !  role network-operator
  username admin password 5 $1$qlbQ8MOw$/WpKb1OE1R6BwZU9yfFL51  role network-adm
in
  ip domain-lookup
  hostname QS5
  policy-map type network-qos jumbo
    class type network-qos class-default
      mtu 9216
  system qos
    service-policy type network-qos jumbo
--- 4,19 ----

  version 5.0(3)U1(1)
  feature telnet
  feature bgp
<--Output truncated-->
switch#
```

Related Commands

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

show sprom

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

show sprom {**all** | **backplane** | **module** *module-number* | **powersupply** *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.
module *module-number*	Displays the SPROM contents for an I/O module. The module number range is from 1 to 3.
powersupply *ps-num*	Displays the SPROM contents for a power supply module. The power supply module number 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
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

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

This command does not require a license.

Examples

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

```
switch# show sprom all
DISPLAY backplane sprom contents:
Common block:
 Block Signature : 0xabab
 Block Version   : 3
 Block Length    : 160
 Block Checksum  : 0xd2a
 EEPROM Size     : 65535
 Block Count     : 4
 FRU Major Type  : 0x0
 FRU Minor Type  : 0x0
 OEM String      : Cisco Systems, Inc.
 Product Number  :
 Serial Number   : SSI14430C31
<--Output truncated-->
switch#
```

This example shows how to display SPROM information for the active supervisor module:

```
switch# show sprom sup
DISPLAY supervisor sprom contents:
Common block:
 Block Signature : 0xabab
 Block Version   : 3
 Block Length    : 160
 Block Checksum  : 0xa97
 EEPROM Size     : 65535
 Block Count     : 3
 FRU Major Type  : 0x0
 FRU Minor Type  : 0x0
 OEM String      : Cisco Systems, Inc.
 Product Number  :
 Serial Number   :
 Part Number     :
 Part Revision   :
 Mfg Deviation   :
 H/W Version     : 0.0
 Mfg Bits        : 0
 Engineer Use    : 0
 snmpOID         : 0.0.0.0.0.0.0.0
 Power Consump   : 0
 RMA Code        : 0-0-0-0
 CLEI Code       :
 VID             :
Supervisor Module specific block:
 Block Signature : 0x6002
<--Output truncated-->
switch#
```

This example shows how to display SPROM information for a power supply module:

```
switch# show sprom powersupply 2
DISPLAY power-supply sprom contents:
Common block:
 Block Signature : 0xabab
 Block Version   : 3
 Block Length    : 160
 Block Checksum  : 0x183c
 EEPROM Size     : 65535
 Block Count     : 2
 FRU Major Type  : 0xab01
 FRU Minor Type  : 0x0
 OEM String      : Cisco Systems, Inc.
 Product Number  : N5K-PAC-750W
 Serial Number   : LIT14291Q4B
 Part Number     : 341-0361-01
 Part Revision   : A0
<--Output truncated-->

switch#
```

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

```
switch# show sprom backplane
DISPLAY backplane sprom contents:
Common block:
 Block Signature : 0xabab
 Block Version   : 3
 Block Length    : 160
 Block Checksum  : 0xd2a
 EEPROM Size     : 65535
 Block Count     : 4
```

```
 FRU Major Type  : 0x0
 FRU Minor Type  : 0x0
 OEM String      : Cisco Systems, Inc.
 Product Number  :
 Serial Number   : SSI14430C31
 Part Number     :
 Part Revision   :
 Mfg Deviation   :
 H/W Version     : 0.0
 Mfg Bits        : 0
 Engineer Use    : 0
 snmpOID         : 0.0.0.0.0.0.0.0
 Power Consump   : 0
 RMA Code        : 0-0-0-0
 CLEI Code       :
 VID             :
Chassis specific block:
 Block Signature : 0x6001
<--Output truncated-->
switch#
```

Related Commands

Command	Description
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
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to display the startup configuration:

```
switch# show startup-config

!Command: show startup-config
!Time: Thu Jun  3 09:17:23 2010
!Startup config saved at: Wed Jun  2 08:25:11 2010

version 5.0(3)U1(1)
feature telnet
feature bgp
feature interface-vlan

username adminbackup password 5 !  role network-operator
username admin password 5 $1$qlbQ8MOw$/WpKb1OE1R6BwZU9yfFL51  role network-admin
ip domain-lookup
hostname QS5
policy-map type network-qos jumbo
  class type network-qos class-default
    mtu 9216
system qos
  service-policy type network-qos jumbo
slot 2
slot 22
<--Output truncated-->
switch#
```

Related Commands

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

show switchname

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

show switchname

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

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

This command does not require a license.

Examples

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

```
switch# show switchname
switch
switch#
```

Related Commands

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

show system config reload-pending

To display all the commands entered by you that require reload.

show system config reload-pending

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
6.0(2)U6(7)	This command was introduced.

Usage Guidelines

None.

Examples

This example shows what appears when you enter this command:

```
switch(config)# show system config reload-pending

Following config commands require copy r s + reload :
=====================================================
1) hardware qos min-buffer qos-group
2) hardware profile multicast max-limit
3) system vlan <vlan-id> reserve
4) hardware profile tcam region racl
5) hardware profile tcam region e-racl
6) hardware profile tcam region e-vacl
=====================================================
```

Related Commands

Command	Description
system config reload-pending syslog-interval	Configures the interval at which syslog will appear.

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
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

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

This command does not require a license.

Examples

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

```
switch# show system cores
```

Related Commands

Command	Description
system cores	Configures the system core filename.

show system reset-reason

Command	Description
system config reload-pending syslog-interval	Configures the interval at which syslog will appear.

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

show system reset-reason

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

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

```
switch# show system reset-reason
----- reset reason for Supervisor-module 1 (from Supervisor in slot 1) ---
1) No time
    Reason: Unknown
    Service:
    Version: 5.0(3)U1(1)

2) No time
    Reason: Unknown
    Service:
    Version: 5.0(3)U1(1)

3) At 543557 usecs after Fri Jul  9 18:20:45 2010
    Reason: Reset due to upgrade
    Service:
    Version: 5.0(3)U1(1)

4) At 572283 usecs after Fri Jul  9 05:12:27 2010
    Reason: Reset due to upgrade
    Service:
    Version: 5.0(3)U1(1)

switch#
```

Related Commands

Command	Description
clear install failure-reason	Clears the reason for software installation failures.

show system resources

To display the system resources, use the **show system resources** command.

show system resources

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

Any command mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to display the system resources on a switch that runs Cisco NX-OS Release 5.0(3)U1(1):

```
switch(config)# show system resources
Load average:   1 minute: 0.18   5 minutes: 0.15   15 minutes: 0.10
Processes   :   296 total, 1 running
CPU states  :   15.8% user,   2.0% kernel,   82.2% idle
Memory usage:   4007124K total,   1327428K used,   2679696K free

switch(config)#
```

Related Commands

Command	Description
show processes cpu	Displays the CPU utilization information for processes on the device.

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
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

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

```
switch# show system uptime
System start time:          Wed Jun  2 10:41:07 2010
System uptime:              0 days, 22 hours, 38 minutes, 7 seconds
Kernel uptime:              0 days, 22 hours, 40 minutes, 15 seconds
Active supervisor uptime:   0 days, 22 hours, 38 minutes, 7 seconds
switch#
```

Related Commands

Command	Description
reload	Reloads the switch.

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
5.0(3)U1(1)	This command was introduced.
6.0(2)U5(1)	The command was enhanced to include output of the **show policy-map int control-plane** and **show interface ethernet slot/port transceiver details** commands.
7.0(3)I2(1)	The command was enhanced to include the additional sub-options: *biosd*, *bloggerd*, and *bloggerd-all*. The **show tech-support bcm-usd** command is displayed after entering the **attach module <***module-number***>** command.

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 (for example, **show tech-support** > *filename*) in the local writable storage file system or the remote file system.

You can use one of the following redirection methods:

- > *filename*—Redirects the output to a file.
- >> *filename*—Redirects the output to a file in append mode.

This command does not require a license.

Examples

Starting with Release 7.0(3)I2(1), the command was enhanced to include the additional sub-options: *biosd*, *bloggerd*, and *bloggerd-all*.

```
switch(config)# show tech-support b?
*** No matching command found in current mode, matching in (exec) mode ***
  biosd         Gather bios install log for trouble shooting
  bloggerd      Gather detailed information for bloggerd troubleshooting
  bloggerd-all  Gather detailed information for bloggerd troubleshooting from
```

```
               ALL modules
  bootvar      Gather detailed information for bootvar troubleshooting
  brief        Gather summary information for troubleshooting
```

This example shows how to display technical support information:

```
switch# show tech-support
---- show tech-support ----
`show switchname`
QS5
`show system uptime`
System start time:          Wed Jun  2 10:41:07 2010
System uptime:              0 days, 22 hours, 38 minutes, 48 seconds
Kernel uptime:              0 days, 22 hours, 40 minutes, 56 seconds
Active supervisor uptime:   0 days, 22 hours, 38 minutes, 48 seconds
`show interface mgmt0`
mgmt0 is up
<--Output truncated-->
switch#
```

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
Switch Name           : switch
Switch Type           :
Kickstart Image       : 5.0(3)U1(1) bootflash:///n3000-uk9-kickstart.5.0.3.U1.1.bin
System Image          : 5.0(3)U1(1) bootflash:///n3000-uk9.5.0.3.U1.1.bin
IP Address/Mask       : 192.168.0.160/24


--------------------------------------------------------------------------------
Ethernet      VLAN   Type Mode   Status  Reason                   Speed     Port
Interface                                                                   Ch #
--------------------------------------------------------------------------------
Eth1/1        1      eth  access down    Administratively down       10G(D) --
Eth1/2        1      eth  access up      none                        10G(D) --
Eth1/3        1      eth  access down    SFP not inserted            10G(D) --
<--Output truncated-->
switch#
```

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

```
switch# show tech-support aaa
`show running-config aaa all`

!Command: show running-config aaa all
!Time: Thu Jun  3 09:21:28 2010

version 5.0(3)U1(1)
aaa authentication login default local
aaa authorization ssh-publickey default local
aaa authorization ssh-certificate default local
aaa accounting default local
aaa user default-role
aaa authentication login default fallback error local
aaa authentication login console fallback error local
no aaa authentication login error-enable
no aaa authentication login mschap enable
no aaa authentication login mschapv2 enable
no aaa authentication login chap enable
```

```
no aaa authentication login ascii-authentication
no radius-server directed-request
```

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

```
switch# show tech-support commands
show tech-support details:
~~~~~~~~~~~~~~~~~~~~~~~~~~
---- show tech-support commands ----
show switchname
show system uptime
show interface mgmt0
show system resources
show version
dir bootflash:
show inventory
show diagnostic result module all
show logging log
show module
<--Output truncated-->
switch#
```

This example shows how to display the commands used to troubleshoot the information:

```
switch# show tech-support commands detail
show tech-support details:
~~~~~~~~~~~~~~~~~~~~~~~~~~
---- show tech-support commands ----
show policy-map interface control-plane
show interface transceiver detail


# show policy-map int control-plane
Control  Plane
service-policy input: copp-system-policy
class-map copp-s-selfIp (match-any)
 police pps 500
    OutPackets 268
    DropPackets 0

switch# show interface ethernet 1/2 transceiver details
Ethernet1/2
transceiver is present
type is 10Gbase-SR
name is CISCO-AVAGO
part number is SFBR-7700SDZ
revision is B4
serial number is AGD1210210F
nominal bitrate is 10300 MBit/sec
Link length supported for 50/125um fiber is 80 m
Link length supported for 50/125um fiber is 300 m
Link length supported for 62.5/125um fiber is 20 m
cisco id is --
cisco extended id number is 4
```

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
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

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

```
switch# show terminal
TTY: /dev/pts/0 Type: "ansi"
Length: 25 lines, Width: 80 columns
Session Timeout: 0 minutes
Event Manager CLI event bypass: no
Redirection mode: ascii
switch#
```

Related Commands

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

show version

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

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

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

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

Command Modes EXEC mode

Command History	Release	Modification
	5.0(3)U1(1)	This command was introduced.

Usage Guidelines This command does not require a license.

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

```
switch# show version
Cisco Nexus Operating System (NX-OS) Software
TAC support: http://www.cisco.com/tac
Copyright (c) 2002-2010, Cisco Systems, Inc. All rights reserved.
The copyrights to certain works contained herein are owned by
other third parties and are used and distributed under license.
Some parts of this software are covered under the GNU Public
License. A copy of the license is available at
http://www.gnu.org/licenses/gpl.html.

Software
  BIOS:      version 1.3.0
  loader:    version N/A
  kickstart: version 5.0(3)U1(1)
  system:    version 5.0(3)U1(1)
  power-seq: version v1.2
  BIOS compile time:       09/08/09
  kickstart image file is: bootflash:/n3000-uk9-kickstart.5.0.3.U1.1.bin
  kickstart compile time:  7/28/2010 11:00:00 [07/07/2010 22:20:39]
  system image file is:    bootflash:/n3000-uk9.5.0.3.U1.1.bin
  system compile time:     7/28/2010 11:00:00 [07/07/2010 23:47:55]


Hardware
  cisco Nexus5020 Chassis ("40x10GE/Supervisor")
  Intel(R) Xeon(R) CPU         with 2074288 kB of memory.
  Processor Board ID JAF1344BHNK
```

```
  Device name: NEXUS5K-1
  bootflash:    1003520 kB

Kernel uptime is 0 day(s), 9 hour(s), 9 minute(s), 7 second(s)

Last reset
  Reason: Unknown
  System version: 5.0(3)U1(1)
  Service:

plugin
  Core Plugin, Ethernet Plugin, Fc Plugin
switch#
```

Related Commands

Command	Description
show module	Displays module information.

sleep

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

sleep *seconds*

Syntax Description

seconds	Number of seconds. The range is from 0 to 2147483647.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

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

This command does not require a license.

Examples

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

```
switch# sleep 5
```

Related Commands

Command	Description
run-script	Runs command scripts.

slot

To enable preprovisioning on a slot in a chassis, use the **slot** command. To disable the slot for preprovisioning, use the **no** form of this command.

slot *slot-number*

no slot *slot-number*

Syntax Description

slot-number	Slot number in the chassis. The range is from 2 to 199.

Command Default

None

Command Modes

Global configuration mode
Configuration synchronization mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

Use this command to enable preprovisioning of features or interfaces of a module on a slot in a chassis. Preprovisioning allows you configure features or interfaces (Ethernet, Fibre Channel) on modules before the modules are inserted in the switch chassis.

This command does not require a license.

Examples

This example shows how to enable a chassis slot for preprovisioning of a module:

```
switch(config)# slot 2
switch(config-slot)#
```

This example shows how to configure a switch profile to enable a chassis slot for preprovisioning of a module:

```
switch# config sync
Enter configuration commands, one per line.  End with CNTL/Z.
switch(config-sync)# switch-profile sp
Switch-Profile started, Profile ID is 1
switch(config-sync-sp)# slot 2
switch(config-sync-sp-slot)#
```

This example shows how to disable a chassis slot for preprovisioning of a module:

```
switch(config)# no slot 2
switch(config)#
```

Related Commands

Command	Description
provision	Preprovisions a module in a slot.
show running-config exclude-provision	Displays the running configuration excluding the preprovisioned features.

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 mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

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

This command does not require a license.

Examples

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

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

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

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

Related Commands

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

stopbits

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

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

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

Syntax Description

1	Specifies one stop bit.
2	Specifies two stop bits.

Command Default

1 stop bit

Command Modes

Terminal line configuration mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

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

This command does not require a license.

Examples

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

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

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

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

Related Commands

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

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
5.0(3)U1(1)	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.

This command does not require a license.

Examples

This example shows how to configure the hostname for a Cisco Nexus 3000 Series switch:

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

This example shows how to revert to the default hostname:

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

Related Commands

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

system config reload-pending syslog-interval

To configure the interval at which syslog will appear, use the **system config reload-pending syslog-interval** command. To revert to the default, use the **no** form of this command.

system config reload-pending syslog-interval <0-24>

no system config reload-pending syslog-interval

Syntax Description

syslog-interval	Specifies the interval in hours at which syslog will appear. Range: 0-24.

Command Default

1.

Command Modes

Global configuration mode

Command History

Release	Modification
6.0(2)U6(7)	This command was introduced.

Usage Guidelines

None.

Examples

This example shows how to set the syslog interval to two hours:

```
switch(config)# system config reload-pending syslog-interval 2
```

Related Commands

Command	Description
show system config reload-pending	Displays the commands entered by you that require reload.

system cores

Command	Description
show system cores	Displays the core filename.

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

Command Default

None

Command Modes

Interface configuration mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to configure a core file:

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

This example shows how to disable system core logging:

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

Related Commands

Command	Description
show system cores	Displays the core filename.

system startup-config unlock

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

system startup-config unlock *process-id*

Syntax Description		
	process-id	Identifier of the process that has locked the startup-configuration file.

Command Default None

Command Modes EXEC mode

Command History	Release	Modification
	5.0(3)U1(1)	This command was introduced.

Usage Guidelines This command does not require a license.

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

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

Related Commands	Command	Description
	show startup-config	Displays the startup configuration file information.

tail

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

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

Syntax Description

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

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

Command Default

Displays the last 10 lines.

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

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

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

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

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

Related Commands

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

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

terminal length

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

terminal length *lines*

terminal no length

Syntax Description

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

Command Default

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

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	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.

This command does not require a license.

Examples

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

```
switch# terminal length 28
```

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

```
switch# terminal no length
```

Related Commands

Command	Description
show terminal	Displays the terminal session configuration.

terminal session-timeout

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

terminal session-timeout *minutes*

terminal no session-timeout

Syntax Description

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

Command Default

Terminal session timeout is disabled (0 minutes).

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

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

This command does not require a license.

Examples

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

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

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

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

Related Commands

Command	Description
show terminal	Displays the terminal session configuration.

terminal terminal-type

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

terminal terminal-type *type*

terminal no terminal-type

Syntax Description

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

Command Default

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

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

The terminal type setting applies only to the current session.

This command does not require a license.

Examples

This example shows how to set the terminal type:

```
switch# terminal terminal-type xterm
```

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

```
switch# terminal no terminal-type
```

Related Commands

Command	Description
show terminal	Displays the terminal session configuration.

terminal width

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

terminal width *columns*

terminal no width

Syntax Description

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

Command Default

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

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

The terminal width setting applies only to the current session.

This command does not require a license.

Examples

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

```
switch# terminal width 70
```

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

```
switch# terminal no width
```

Related Commands

Command	Description
show terminal	Displays the terminal session configuration.

traceroute

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

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

Syntax Description

dest-addr	IP address of the destination device. The format is *A.B.C.D*.
hostname	Name of the destination device. The name is case sensitive.
source *src-addr*	(Optional) Specifies a source IP address. The format is *A.B.C.D*. The default is the IPv4 address for the management interface of the switch.
vrf *vrf-name*	(Optional) Specifies the virtual routing and forwarding (VRF) to use. The name is case sensitive.
default	(Optional) Specifies the default VRF.
management	(Optional) Specifies the management VRF.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

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

```
switch# traceroute 192.168.255.18 vrf management
```

Related Commands

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

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.
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.
vrf *vrf-name*	(Optional) Specifies the virtual routing and forwarding (VRF) instance. The name is case sensitive and can be a maximum of 32 alphanumeric characters.
default	(Optional) Specifies the default VRF.
management	(Optional) Specifies the management VRF.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

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

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

Related Commands

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

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

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to update a license:

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

Related Commands

Command	Description
show license	Displays license information.

write erase

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

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

Syntax Description

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

Command Default

Erases all configuration in persistent memory.

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)U1(1)	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.

This command does not require a license.

Examples

This example shows how to erase the startup configuration:

```
switch# write erase
```

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

```
switch# write erase debug
```

Related Commands

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