Preface

This preface describes the audience, organization, and conventions of the *Cisco Nexus 3548 Switch NX-OS Fundamentals Command Reference*. It also provides information on how to obtain related documentation.

This preface includes the following sections:

- Audience, page 1
- Document Conventions, page 1
- , page 3]
- , page 3

Audience

This publication is for experienced network administrators who configure and maintain Cisco Nexus Series switches.

Document Conventions

Command descriptions use these conventions:

Convention	Description
boldface font	Commands and keywords are in boldface.
italic font	Arguments for which you supply values are in italics.
[ ]	Elements in square brackets are optional.
[x | y | z]	Optional alternative keywords are grouped in brackets and separated by vertical bars.
string	A nonquoted set of characters. Do not use quotation marks around the string or the string will include the quotation marks.

Screen examples use these conventions:

`screen font`	Terminal sessions and information that the switch displays are in screen font.
`boldface screen font`	Information that you must enter is in boldface screen font.
`italic screen font`	Arguments for which you supply values are in italic screen font.
< >	Nonprinting characters, such as passwords, are in angle brackets.
[ ]	Default responses to system prompts are in square brackets.
!, #	An exclamation point (!) or a pound sign (#) at the beginning of a line of code indicates a comment line.

This document uses the following conventions:

Note Means reader *take note*. Notes contain helpful suggestions or references to material not covered in the manual.

Caution Means *reader be careful*. In this situation, you might do something that could result in equipment damage or loss of data.

Related Documentation

Documentation for the Cisco Nexus 3000 Series Switch is available at the following URL:

http://www.cisco.com/en/US/products/ps11541/tsd_products_support_series_home.html

The documentation set is divided into the following categories:

Release Notes

The release notes are available at the following URL:

http://www.cisco.com/en/US/products/ps11541/prod_release_notes_list.html

Installation and Upgrade Guides

The installation and upgrade guides are available at the following URL:

http://www.cisco.com/en/US/products/ps11541/prod_installation_guides_list.html

Command References

The command references are available at the following URL:

http://www.cisco.com/en/US/products/ps11541/prod_command_reference_list.html

Technical References

The technical references are available at the following URL:

http://www.cisco.com/en/US/products/ps11541/prod_technical_reference_list.html

Configuration Guides

The configuration guides are available at the following URL:

http://www.cisco.com/en/US/products/ps11541/products_installation_and_configuration_guides_list.html

Error and System Messages

The system message reference guide is available at the following URL:

http://www.cisco.com/en/US/products/ps11541/products_system_message_guides_list.htm

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation:

http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html

Subscribe to the *What's New in Cisco Product Documentation* as an RSS feed and set content to be delivered directly to your desktop using a reader application. The RSS feeds are a free service. Cisco currently supports RSS Version 2.0.

Basic System Commands

This chapter describes the basic Cisco NX-OS system commands available on Cisco Nexus 3548 switches. These commands allow you to navigate and control the switch.

banner motd

To configure the message-of-the-day (MOTD) banner that displays when the user logs in to a Cisco Nexus 3548 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 3548 Switch” is the default MOTD string.

Command Modes

Interface configuration mode

Command History

Release	Modification
5.0(3)A1(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 3548 kickstart or system software image, use the **boot** command. To clear the boot variable, use the **no** form of this command.

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

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

Syntax Description

kickstart	Configures the kickstart image.
system	Configures the system image.
bootflash:	(Optional) 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 kickstart or system image file. The filename is case sensitive.

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

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
5.0(3)A1(1)	This command was introduced.

Usage Guidelines

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

This command does not require a license.

Examples

This example shows how to configure the system boot variable:

```
switch(config)# boot system bootflash:n3500-uk9.5.0.3.A1.0.448.bin
```

This example shows how to configure the kickstart boot variable:

```
switch(config)# boot kickstart bootflash:n3500-uk9-kickstart.5.0.3.A1.0.448.bin
```

This example shows how to clear the system boot variable:

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

This example shows how to clear the kickstart boot variable:

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

Related Commands

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

cd

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

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

Syntax Description

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

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

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)A1(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)A1(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)A1(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)A1(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)A1(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)A1(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)A1(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)A1(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 3548 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)A1(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)A1(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)A1(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)A1(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)A1(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
5.0(3)A1(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 protocol to protocol and from network to network.

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

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

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.
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 23
- Copying a Configuration File from a Server to the Running Configuration, page 23
- Copying a Configuration File from a Server to the Startup Configuration, page 23
- Copying the Running or Startup Configuration on a Server, page 23

Copying Files from a Server to Bootflash Memory

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

Copying a Configuration File from a Server to the Running Configuration

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

Copying the Running or Startup Configuration on a Server

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

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

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)A1(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)A1(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)A1(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)A1(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)A1(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)A1(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)A1(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)A1(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)A1(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)A1(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)A1(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.

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)A1(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)A1(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)A1(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)A1(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 “n3548”:

```
switch# find n3548
```

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)A1(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)A1(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)A1(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)A1(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 3548 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 3548 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)A1(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:n3500-uk9-kickstart.5.0.3.A1.0.448.bin
switch(config)# boot system bootflash:n3500-uk9.5.0.3.A1.0.448.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/n3500-uk9-kickstart.5.0.3.A1.0.448.bin system
bootflash:scp://adminuser@192.168.1.1/n3500-uk9.5.0.3.A1.0.448.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 3548 switches are factory installed. Manual installation is not required.

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)A1(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)A1(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)A1(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)A1(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)A1(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)A1(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)A1(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)A1(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)A1(1)	This command was introduced.

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
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)A1(1)	This command was introduced.

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.
traceroute	Displays the routes that packets take when traveling to an IP address.

reload

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

reload {**all**}

Syntax Description

all	Reboots the switch.

Command Default

Reloads the Cisco Nexus 3548 switch.

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)A1(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 3548 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)A1(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)A1(1)	This command was introduced.

Usage Guidelines

You must create the command file on a remote device and download it to the Cisco Nexus 3548 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)A1(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)A1(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)A1(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)A1(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)A1(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 3548 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)A1(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
Current Boot Variables:


kickstart variable = bootflash:/n3500-uk9-kickstart.5.0.3.A1.0.440.bin
system variable = bootflash:/n3500-uk9.5.0.3.A1.0.440.bin
Boot POAP Disabled

Boot Variables on next reload:


kickstart variable = bootflash:/n3500-uk9-kickstart.5.0.3.A1.0.440.bin
system variable = bootflash:/n3500-uk9.5.0.3.A1.0.440.bin
Boot POAP Disabled
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)A1(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
==================
abm1   :show hardware profile buffer monitor summary
abm2   :show hardware profile buffer monitor brief
abm3   :show hardware profile buffer monitor int eth 1/4 detail
alias  :show cli alias
ig     :show ip igmp snooping groups
nat1   :ip nat inside source static udp 20.1.9.2 63 35.48.35.48 250
sa     :show running | in "cli alias name"
sl     :show hardware profile latency monitor summary
sws    :show hardware profile warp span group all
warp   :hardware profile forwarding-mode warp
ws     :hardware profile warp span group
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)A1(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
1  00:02:35   show boot
2  00:03:20   sh cli alias
3  00:04:39   sh cli history
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
 show boot
 sh cli alias
 sh cli history
 sh 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)A1(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="N3548-1"
TIMESTAMP="2012-10-25-00.07.11"
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)A1(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
00:08:03.402 UTC Thu Oct 25 2012
switch#
```

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

```
switch# show clock detail
00:10:34.761 UTC Thu Oct 25 2012
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)A1(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
There are no active configuration sessions
switch#
```

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)A1(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) 2002-2012, 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)A1(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 debugmsg
switch#
```

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
5.0(3)A1(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-C3500-FAN        --         ok
Chassis-2       N3K-C3500-FAN        --         ok
Chassis-3       N3K-C3500-FAN        --         ok
Chassis-4       N3K-C3500-FAN        --         ok
PS-1            N2200-PAC-400W       --         failure or missing
PS-2            N2200-PAC-400W       --         ok

 Control Temperature
-----------------------------------------------
 Sensor     MajorThresh   MinorThres   CurTemp
            (Celsius)     (Celsius)    (Celsius)
-----------------------------------------------
 ASIC       -128          -128         47
 INTAKE     -128          -128         23
-----------------------------------------------

 Monitor Temperature
---------------------------------------------------------
 Sensor     MajorThresh   MinorThres   CurTemp     Status
            (Celsius)     (Celsius)    (Celsius)
---------------------------------------------------------
```

```
 ASIC       -128          -128         47          major alarm
 INTAKE     -128          -128         23          major alarm
-----------------------------------------------------


Power Supply:
Voltage: 12 Volts
------------------------------------------------------------
PS  Model                Input Power       Power     Status
                         Type  (Watts)     (Amp)
------------------------------------------------------------
1   --                   --         --        --     fail/not-powered-up
2   N2200-PAC-400W       AC     396.00     33.00     ok


Mod Model                   Power     Power       Power     Power       Status
                            Requested Requested   Allocated Allocated
                            (Watts)   (Amp)       (Watts)   (Amp)
--- --------------------  -------   ----------  --------- ----------  --------
--
1    N3K-C3548P-10G-SUP     349.92    29.16       349.92    29.16       powered-
up


Power Usage Summary:
--------------------
Power Supply redundancy mode:                 Redundant
Power Supply redundancy operational mode:     Non-redundant

Total Power Capacity                              396.00 W

Power reserved for Supervisor(s)                  349.92 W
Power currently used by Modules                     0.00 W

                                                -------------
Total Power Available                              46.08 W
                                                -------------
switch#
```

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

```
switch# show environment temperature
Control Temperature
-----------------------------------------------
 Sensor     MajorThresh   MinorThres   CurTemp
            (Celsius)     (Celsius)    (Celsius)
-----------------------------------------------
 ASIC       -128          -128         47
 INTAKE     -128          -128         23
-----------------------------------------------

 Monitor Temperature
------------------------------------------------------------
 Sensor     MajorThresh   MinorThres   CurTemp     Status
            (Celsius)     (Celsius)    (Celsius)
------------------------------------------------------------
 ASIC       -128          -128         47          major alarm
 INTAKE     -128          -128         23          major alarm
------------------------------------------------------------
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  99        15168
1       2    Front-to-Back  99        11203
2       1    Front-to-Back  99        15340
2       2    Front-to-Back  99        11344
3       1    Front-to-Back  99        15000
3       2    Front-to-Back  99        11440
4       1    Front-to-Back  99        15168
4       2    Front-to-Back  99        11538


Power Supply:
-----------------------------------
Module  Airflow        Configured
        Direction      Speed (RPM)
-----------------------------------
1       N/A            0
2       Front-to-Back  13500
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)A1(1)	This command 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)A1(1):

```
switch# show feature
Feature Name          Instance  State
--------------------  --------  --------
bfd                   1         disabled
bfd_app               1         disabled
bgp                   1         enabled
dhcp                  1         enabled
eigrp                 1         disabled
eigrp                 2         disabled
eigrp                 3         disabled
eigrp                 4         disabled
hsrp_engine           1         disabled
interface-vlan        1         enabled
lacp                  1         disabled
ldap                  1         disabled
msdp                  1         disabled
nat                   1         enabled
ospf                  1         enabled
ospf                  2         enabled (not-running)
ospf                  3         enabled (not-running)
ospf                  4         enabled (not-running)
ospfv3                1         disabled
ospfv3                2         disabled
ospfv3                3         disabled
ospfv3                4         disabled
pim                   1         enabled
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
scheduler             1          disabled
scpServer             1          disabled
sflow                 1          disabled
sshServer             1          enabled
tacacs                1          disabled
telnetServer          1          enabled
tunnel                1          disabled
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)A1(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# sh file bootflash:///assoc_ascii_cnv.log
file opened sucessfully
assoc_infra_convert_startup:;  convert_startup invoked
pkg_name: infra
path: /tmp/convert_dir
to_ver = 5.0(3)A1(1), from_ver = 5.0(3)U5(1)
from_major = 5, from_minor = 0, to_major = 5, to_minor = 0
ascii convertion not requred

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)A1(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
Nexus3548Switch
switch#
```

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)A1(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)A1(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
No install all failure-reason
switch#
```

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

```
switch# show install all impact
Installer is forced disruptive
switch#
```

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

```
switch# show install all status
This is the log of last installation.


Verifying image bootflash:/n3500-uk9-kickstart.5.0.3.A1.0.440.bin for boot varia
ble "kickstart".
SUCCESS
```

```
Verifying image bootflash:/n3500-uk9.5.0.3.A1.0.440.bin for boot variable "syste
m".
SUCCESS

Verifying image type.
SUCCESS

Extracting "system" version from image bootflash:/n3500-uk9.5.0.3.A1.0.440.bin.
SUCCESS

Extracting "kickstart" version from image bootflash:/n3500-uk9-kickstart.5.0.3.A
1.0.440.bin.
SUCCESS

Extracting "bios" version from image bootflash:/n3500-uk9.5.0.3.A1.0.440.bin.
SUCCESS

Performing module support checks.
SUCCESS

Notifying services about system upgrade.
SUCCESS



Compatibility check is done:
Module  bootable          Impact  Install-type  Reason
------  --------  --------------  ------------  ------
     1       yes      disruptive         reset  ISSU not supported



Images will be upgraded according to following table:
Module       Image         Running-Version             New-Version  Upg-Required
------  ----------  ----------------------  ----------------------  ------------
     1      system             5.0(3)A1(1)             5.0(3)A1(1)            no
     1   kickstart             5.0(3)A1(1)             5.0(3)A1(1)            no
     1        bios      v1.8.0(09/20/2012)      v1.9.0(10/13/2012)           yes
     1   power-seq                   v1.0                    v2.1           yes
ISSU is not supported on this platform!!
Switch will be reloaded for disruptive upgrade.

Install is in progress, please wait.

Performing runtime checks.
SUCCESS

Setting boot variables.
SUCCESS

Performing configuration copy.
SUCCESS

Module 1: Refreshing compact flash and upgrading bios/loader/bootrom/power-seq.
Warning: please do not remove or power off the module at this time.
Note: Power-seq upgrade needs a power-cycle to take into effect.
On success of power-seq upgrade, SWITCH OFF THE POWER to the system and then, po
--More--
switch#
```

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)A1(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: "Nexus 3548 Chassis"
PID: N3K-C3548P-10G    , VID: V00 , SN: FOC1607R10A

NAME: "Module 1", DESCR: "48x10GE Supervisor"
PID: N3K-C3548P-10G    , VID: V00 , SN: FOC160620RG

NAME: "Fan 1", DESCR: "Chassis fan module"
PID: N3K-C3500-FAN     , VID: N/A , SN: N/A

NAME: "Fan 2", DESCR: "Chassis fan module"
PID: N3K-C3500-FAN     , VID: N/A , SN: N/A

NAME: "Fan 3", DESCR: "Chassis fan module"
PID: N3K-C3500-FAN     , VID: N/A , SN: N/A

NAME: "Fan 4", DESCR: "Chassis fan module"
PID: N3K-C3500-FAN     , VID: N/A , SN: N/A

NAME: "Power supply 1", DESCR: "AC power supply"
PID: N2200-PAC-400W    , VID: V03 , SN: LIT16011AR2

NAME: "Power supply 2", DESCR: "AC power supply"
PID: N2200-PAC-400W    , VID: V03 , SN: LIT16011AR1
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)A1(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
N3K1203231351_FOC1607R10A.lic:
SERVER this_host ANY
VENDOR cisco
FEATURE LAN_BASE_SERVICES_PKG cisco 1.0 permanent uncounted \
        VENDOR_STRING=<LIC_SOURCE>NEXUS_SWIFT</LIC_SOURCE><SKU>N3K-BAS1K9</SKU>
\
        HOSTID=VDH=FOC1607R10A \
        NOTICE="<LicFileID>20120323135130688</LicFileID><LicLineID>1</LicLineID>
 \
        <PAK></PAK>" SIGN=39D8CA1E1182

N3K1210041959_FOC1607R10A.lic:
SERVER this_host ANY
VENDOR cisco
FEATURE ALGO_BOOST_SERVICES_PKG cisco 1.0 permanent uncounted \
        VENDOR_STRING=<LIC_SOURCE>NEXUS_SWIFT</LIC_SOURCE><SKU>N3548-ALGK9</SKU>
 \
        HOSTID=VDH=FOC1607R10A \
        NOTICE="<LicFileID>20121004195959914</LicFileID><LicLineID>1</LicLineID>
 \
        <PAK></PAK>" SIGN=61EB5C381DAE

N3K1203231351_FOC1607R10A1.lic:
SERVER this_host ANY
VENDOR cisco
```

```
FEATURE LAN_ENTERPRISE_SERVICES_PKG cisco 1.0 permanent uncounted \
        VENDOR_STRING=<LIC_SOURCE>NEXUS_SWIFT</LIC_SOURCE><SKU>N3K-LAN1K9</SKU>
\
        HOSTID=VDH=FOC1607R10A \
        NOTICE="<LicFileID>20120323135147811</LicFileID><LicLineID>1</LicLineID>
 \
        <PAK></PAK>" SIGN=3FC06E34EC6E

switch#
```

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

```
switch# show license brief
N3K1203231351_FOC1607R10A.lic
N3K1210041959_FOC1607R10A.lic
N3K1203231351_FOC1607R10A1.lic
switch#
```

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               -
ALGO_BOOST_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)A1(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=FOC1607R10A
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)A1(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 ALGO_BOOST_SERVICES_PKG
Application
-----------
nat
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 [**com1 | console**[**connected | user-input-string**]]

Syntax Description

com1	Optional) Displays only information about the aux line configurations.
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)A1(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:
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
No user-input string configured
switch#
```

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)A1(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    48     48x10GE Supervisor               N3K-C3548P-10G-SUP     active *

Mod  Sw              Hw      World-Wide-Name(s) (WWN)
---  --------------  ------  --------------------------------------------------
1    5.0(3)A1(1)     0.3     --

Mod  MAC-Address(es)                         Serial-Num
---  --------------------------------------  ----------
1    0022.bdec.1988 to 0022.bdec.19c7         FOC160620RG
switch#
```

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

```
switch# show module 1
Mod Ports  Module-Type                       Model                  Status
--- -----  --------------------------------- ---------------------- ------------
1    48     48x10GE Supervisor               N3K-C3548P-10G-SUP     active *

Mod  Sw              Hw      World-Wide-Name(s) (WWN)
---  --------------  ------  --------------------------------------------------
1    5.0(3)A1(1)     0.3     --

Mod  MAC-Address(es)                         Serial-Num
---  --------------------------------------  ----------
1    0022.bdec.1988 to 0022.bdec.19c7         FOC160620RG
N3548-1# sh module 1
Mod Ports  Module-Type                       Model                  Status
```

```
--- -----  -------------------------------- ---------------------- ------------
1    48     48x10GE Supervisor               N3K-C3548P-10G-SUP     active *

Mod  Sw              Hw      World-Wide-Name(s) (WWN)
---  --------------  ------  --------------------------------------------------
1    5.0(3)A1(1)     0.3     --

Mod  MAC-Address(es)                         Serial-Num
---  --------------------------------------  ----------
1    0022.bdec.1988 to 0022.bdec.19c7         FOC160620RG
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)A1(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
  126      S         0            1     -  kblockd/0
  127      S         0            1     -  kblockd/1
  140      S         0            1     -  khubd
  207      S         0            1     -  pdflush
  208      S         0            1     -  pdflush
  209      S         0            1     -  kswapd0
  210      S         0            1     -  aio/0
  211      S         0            1     -  aio/1
  769      S         0            1     -  kide/0
  770      S         0            1     -  kide/1
  773      S         0            1     -  ata/0
  774      S         0            1     -  ata/1
  779      S         0            1     -  mtdblockd
  831      S         0            1     -  scsi_eh_0
```

```
  832      S         0            1      -  usb-storage
  838      S         0            1      -  kirqd
 1362      S         0            1      -  kjournald
 1370      S         0            1      -  kjournald
 2132      S         0            1      -  jffs2_gcd_mtd2
 2189      S         0            1      -  kjournald
 2207      S         0            1      -  kjournald
 2735      S  b7f8718e            1      -  portmap
 2744      S         0            1      -  nfsd
 2745      S         0            1      -  nfsd
 2746      S         0            1      -  nfsd
 2747      S         0            1      -  nfsd
 2748      S         0            1      -  nfsd
 2749      S         0            1      -  nfsd
 2750      S         0            1      -  nfsd
 2751      S         0            1      -  nfsd
 2753      S         0            1      -  lockd
 2754      S         0            1      -  rpciod
 2758      S  b7f89468            1      -  rpc.mountd
 2764      S  b7f89468            1      -  rpc.statd
 2791      S  b7d33468            1      -  sysmgr
 3447      S         0            1      -  mping-thread
 3689      S         0            1      -  insmod
 4156      S  b7f4b468            1      -  xinetd
 4157      S  b7f89468            1      -  tftpd
 4158      S  b78cb1b6            1      -  syslogd
 4159      S  b7ecb468            1      -  sdwrapd
 4160      S  b4dd6468            1      -  pfma
 4167      S         0            1      -  ls-notify-mts-t
 4181      S         0            1      -  usd_mts_kthread
 4183      S  b7cafbe4            1      -  vshd
 4184      S  b7a98f43            1      -  smm
 4185      S  b7c8a468            1      -  psshelper
 4186      S  b7f89468            1      -  lmgrd
 4187      S  b7e72be4            1      -  licmgr
 4188      S  b7ec3468            1      -  fs-daemon
<--Output truncated-->
switch#
```

Related Commands

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

show processes cpu

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

show processes cpu

Syntax Description

This command has no arguments or keywords.

Command Default

Displays information for all processes in the local device.

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)A1(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         1111      5431    204    0.0%  init
    2            9      2172      4    0.0%  migration/0
    3         1454   4812575      0    0.0%  ksoftirqd/0
    4           22      4058      5    0.0%  desched/0
    5           14      3069      4    0.0%  migration/1
    6          774   2039224      0    0.0%  ksoftirqd/1
    7           20      3241      6    0.0%  desched/1
    8          904      9960     90    0.0%  events/0
    9          525      9124     57    0.0%  events/1
   10           91      2984     30    0.0%  khelper
   15            0        24     33    0.0%  kthread
   24         1542    163123      9    0.0%  kacpid
  126            0        68     14    0.0%  kblockd/0
  127            2       150     14    0.0%  kblockd/1
  140            2       127     22    0.0%  khubd
  207            0         3      4    0.0%  pdflush
  208           84      3694     22    0.0%  pdflush
  209            0         1      6    0.0%  kswapd0
  210            0         2      2    0.0%  aio/0
  211            0         2      3    0.0%  aio/1
  769            0         2      2    0.0%  kide/0
  770            0         2      3    0.0%  kide/1
  773            0         2      2    0.0%  ata/0
  774            0         2      3    0.0%  ata/1
```

```
  779           0         1      6    0.0%  mtdblockd
  831           0         1      7    0.0%  scsi_eh_0
  832         277     19121     14    0.0%  usb-storage
  838         988   6847033      0    0.0%  kirqd
 1362           1         6    256    0.0%  kjournald
 1370           0         6    126    0.0%  kjournald
 2132         725       174   4169    0.0%  jffs2_gcd_mtd2
 2189          17       505     33    0.0%  kjournald
 2207          80       700    115    0.0%  kjournald
 2735           1        21     82    0.0%  portmap
 2744           0        19     49    0.0%  nfsd
 2745           0         7      4    0.0%  nfsd
 2746           0         7      4    0.0%  nfsd
 2747           0         7      4    0.0%  nfsd
 2748           0         7      4    0.0%  nfsd
 2749           0         7      4    0.0%  nfsd
 2750           0         9     11    0.0%  nfsd
 2751           0         9      9    0.0%  nfsd
 2753           0         2     51    0.0%  lockd
 2754           0         1      6    0.0%  rpciod
 2758           0         1    152    0.0%  rpc.mountd
 2764           5         5   1167    0.0%  rpc.statd
 2791          59     40273      1    0.0%  sysmgr
 3447           0         1     27    0.0%  mping-thread
 3689          13      1822      7    0.0%  insmod
 4156          29         5   5938    0.0%  xinetd
 4157           8         4   2080    0.0%  tftpd
 4158         580    905622      0    0.0%  syslogd
 4159          31        12   2654    0.0%  sdwrapd
 4160         255     26606      9    0.0%  pfma
 4167          63      9107      7    0.0%  ls-notify-mts-t
 4181         119    119022      1    0.0%  usd_mts_kthread
 4183         250      5066     49    0.0%  vshd
 4184         101        10  10164    0.0%  smm
 4185         471     18353     25    0.0%  psshelper
 4186          66       354    187    0.0%  lmgrd
 4187         257      3801     67    0.0%  licmgr
 4188          68        11   6268    0.0%  fs-daemon
switch#
```

Related Commands

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

show processes log

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

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

Syntax Description

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

Command Default

Displays summary information for all processes on the device.

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)A1(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
---------------  ------  -----------  -----  -----  ---------------
fwm              4292              N      Y      N  Tue Oct  2 00:50:28 2012
port-profile     4229              N      Y      N  Sun Oct  7 03:45:48 2012
port-profile     4234              N      Y      N  Tue Sep 18 18:01:01 2012 4404
switch#
```

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

```
switch# show processes log details
====================================================
Service: fwm
Description: Forwarding manager Daemon
Executable: /isan/bin/fwm

Started at Tue Oct  2 00:18:23 2012 (663020 us)
Stopped at Tue Oct  2 00:50:28 2012 (427746 us)
Uptime: 32 minutes 5 seconds

Start type: SRV_OPTION_RESTART_STATELESS (23)
Death reason: SYSMGR_DEATH_REASON_FAILURE_SIGNAL (2)
Last heartbeat 47.95 secs ago
RLIMIT_AS: 657697075
System image name: n3500-uk9.5.0.3.A1.0.410.gbin
System image version: 5.0(3)A1(0.410) S0
```

```
PID: 4292
Exit code: signal 6 (core dumped)

CWD: /var/sysmgr/work

Virtual Memory:
--More--
```

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

```
switch# show processes log pid 4292
==========================================================
Service: fwm
Description: Forwarding manager Daemon
Executable: /isan/bin/fwm

Started at Tue Oct  2 00:18:23 2012 (663020 us)
Stopped at Tue Oct  2 00:50:28 2012 (427746 us)
Uptime: 32 minutes 5 seconds

Start type: SRV_OPTION_RESTART_STATELESS (23)
Death reason: SYSMGR_DEATH_REASON_FAILURE_SIGNAL (2)
Last heartbeat 47.95 secs ago
RLIMIT_AS: 657697075
System image name: n3500-uk9.5.0.3.A1.0.410.gbin
System image version: 5.0(3)A1(0.410) S0

PID: 4292
Exit code: signal 6 (core dumped)

CWD: /var/sysmgr/work

Virtual Memory:
--More--
```

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)A1(1)	This command was introduced.

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 bffffe80/bffff970  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
   24         0        0        0        0        0/0         kacpid
  126         0        0        0        0        0/0         kblockd/0
  127         0        0        0        0        0/0         kblockd/1
  140         0        0        0        0        0/0         khubd
  207         0        0        0        0        0/0         pdflush
  208         0        0        0        0        0/0         pdflush
  209         0        0        0        0        0/0         kswapd0
  210         0        0        0        0        0/0         aio/0
  211         0        0        0        0        0/0         aio/1
<--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                4       1020     34
cli                     0X50110000     24576*           12329      12247      9
npacl                   0X51920000      4096*               2       4094      2
mrib                    0X51D30000     59392*            3311      56081      4
u6rib-ufdm              0X55740000       320*             188        132      2
am                      0X557A0000      1024*              84        940      8
m6rib                   0X558B0000      1024*              12       1012      2
urib                    0X559C0000     65536*             740      64796     18
u6rib                   0X599D0000      1024*             551        473      8
m6rib-mfdm              0X59AE0000      1024                0       1024      2
u6rib-notify            0X59BF0000      1024*             795        229      8
mrib-mfdm               0X59D00000      4096*               9       4087      2
urib-redist             0X5A110000      8192*               0       8192     18
urib-ufdm               0X5A920000      2048*               0       2048      2
icmpv6                  0X5AB30000      1024                5       1019      5
ipnat                   0X5AC40000      2048*               5       2043      2
ip                      0X5AE50000     10240               73      10167     14
ipv6                    0X5B860000      1024               10       1014      6
igmp                    0X5B970000      3072             1173       1899      2
rpm                     0X5BC80000      2048                1       2047      5
mcastfwd                0X5BE90000     12288              866      11422      3
pim                     0X5CAA0000     16384              234      16150      4

Shared memory totals - Size: 218 MB, Used: 20 MB, Available: 198 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)A1(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 Oct 25 00:51:40 2012

version 5.0(3)A1(1)
feature telnet
feature ospf
feature bgp
feature pim
feature interface-vlan
feature dhcp
feature nat

logging level monitor 7
username admin password 5 $1$LcwwB4ku$OVX1TvatyG8EGx8G5ki2U1  role network-admin
no password strength-check

banner motd #Nexus 3548 Switch

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

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

```
switch# show running-config all

!Time: Thu Oct 25 00:48:41 2012

version 5.0(3)A1(1)
```

```
license grace-period

feature telnet
feature ssh
feature vrrp
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 interface-vlan
feature lacp
clock protocol ntp
feature nat

username admin password 5 $1$Q519D7sA$AJSxpqELzupn3fC7JIbd90  role network-admin
no password strength-checkswitch#
```

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)A1(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
```

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)A1(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 backplane
DISPLAY backplane sprom contents:
Common block:
 Block Signature : 0xabab
 Block Version   : 3
 Block Length    : 160
 Block Checksum  : 0x1412
 EEPROM Size     : 65535
 Block Count     : 5
 FRU Major Type  : 0x6001
 FRU Minor Type  : 0x0
 OEM String      : Cisco Systems, Inc.
 Product Number  : N3K-C3548P-10G
 Serial Number   : FOC1607R10A
 Part Number     : 68-4416-02
 Part Revision   : 07
 Mfg Deviation   : 0
```

```
 H/W Version     : 0.3
 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             : V00
Chassis specific block:
 Block Signature : 0x6001
 Block Version   : 3
 Block Length    : 39
 Block Checksum  : 0x350
 Feature Bits    : 0x0
 HW Changes Bits : 0x1
 Stackmib OID    : 0
 MAC Addresses   : 00-22-bd-ec-19-80
 Number of MACs  : 96
 OEM Enterprise  : 0
 OEM MIB Offset  : 0
 MAX Connector Power: 0
WWN software-module specific block:
 Block Signature : 0x6005
 Block Version   : 1
 Block Length    : 0
 Block Checksum  : 0x66
wwn usage bits:
 00 00 00 00 00 00 00 00
 00 00 00 00 00 00 00 00
 00 00 00 00 00 00 00 00<--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)A1(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
!Time: Thu Oct 25 00:52:59 2012
!Startup config saved at: Mon Oct  8 18:39:48 2012

version 5.0(3)A1(1)
feature telnet
feature vrrp
feature interface-vlan
feature lacp
feature nat

username admin password 5 $1$Q519D7sA$AJSxpqELzupn3fC7JIbd90  role network-admin
no password strength-check
ip domain-lookup
switchname CLP2D047
ip access-list racl
  10 permit ip any any
class-map type control-plane match-any copp-s-arp
class-map type control-plane match-any copp-s-bfd
class-map type control-plane match-any copp-s-bpdu
class-map type control-plane match-any copp-s-dai
<--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)A1(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 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)A1(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
Transfer of cores is not enabled
switch#
```

Related Commands

Command	Description
system cores	Configures the system core filename.

show system reset-reason

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

show system reset-reason

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)A1(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) At 520032 usecs after Mon Oct  8 23:43:31 2012
    Reason: Reset Requested by CLI command reload
    Service:
    Version: 5.0(3)A1(1)

2) At 870188 usecs after Mon Oct  8 18:39:50 2012
    Reason: Reset Requested by CLI command reload
    Service:
    Version: 5.0(3)A1(1)

3) At 140225 usecs after Mon Oct  8 18:01:34 2012
    Reason: Reset Requested by CLI command reload
    Service:
    Version: 5.0(3)A1(1)

4) At 180409 usecs after Sun Oct  7 06:06:21 2012
    Reason: Reset Requested by CLI command reload
    Service:
    Version: 5.0(3)A1(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)A1(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)A1(1):

```
switch(config)# show system resources
Load average:   1 minute: 0.09   5 minutes: 0.04   15 minutes: 0.07
Processes   :   298 total, 1 running
CPU states  :   0.0% user,   1.0% kernel,   99.0% idle
Memory usage:   4140896K total,   1821920K used,   2318976K 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)A1(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:          Mon Oct  8 23:49:49 2012
System uptime:              16 days, 1 hours, 7 minutes, 8 seconds
Kernel uptime:              16 days, 1 hours, 9 minutes, 28 seconds
Active supervisor uptime:   16 days, 1 hours, 7 minutes, 8 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)A1(1)	This command was introduced.

Usage Guidelines

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

This example shows how to display technical support information:

```
switch# show tech-support brief
Switch Name           : Nexus-3548-Switch
Switch Type           : 48x10GE
Kickstart Image       : 5.0(3)A1(1) bootflash:///m.k
System Image          : 5.0(3)A1(1) bootflash:///m.sys
IP Address/Mask       : 1.1.1.1/24


--------------------------------------------------------------------------------
Ethernet      VLAN   Type Mode   Status  Reason                   Speed     Port
Interface                                                                  Ch #
--------------------------------------------------------------------------------
Eth1/1        1      eth  trunk  up      none                       10G(D) --
Eth1/2        1      eth  access down    Administratively down      10G(D) --
```

```
Eth1/3        1      eth  access down    Administratively down       10G(D) --
Eth1/4        1      eth  access down    Administratively down       10G(D) --
Eth1/5        1      eth  access down    Administratively down       10G(D) --
Eth1/6        1      eth  access down    Administratively down       10G(D) --
Eth1/7        1      eth  access down    Administratively down       10G(D) --
Eth1/8        1      eth  access down    Administratively down       10G(D) --
Eth1/9        1      eth  access down    Administratively down       10G(D) --
Eth1/10       1      eth  access down    Administratively down       10G(D) --
Eth1/11       1      eth  access down    Administratively down       10G(D) --
--More--
switch#
```

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 a
show logging log
show module
show environment
show sprom backplane
show clock
show callhome
show cfs application
show cfs lock
show snmp
show interface brief
show interface
--More--
<--Output truncated-->
switch#
```

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)A1(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/ttyS0 Type: "vt100"
Length: 24 lines, Width: 120 columns
Session Timeout: 30 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)A1(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) 2002-2012, 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 1.7.0
  loader:    version N/A
  kickstart: version 5.0(3)A1(1) [build 5.0(3)A1(0.414)]
  system:    version 5.0(3)A1(1) [build 5.0(3)A1(0.414)]
  power-seq: Module 1: version v255.255
  BIOS compile time:       08/28/2012
  kickstart image file is: bootflash:///m.k
  kickstart compile time:  10/1/2012 3:00:00 [10/01/2012 05:07:10]
  system image file is:    bootflash:///m.sys
  system compile time:     10/1/2012 3:00:00 [10/05/2012 16:24:26]

Hardware
  cisco Nexus 3548 Chassis ("48x10GE Supervisor")
  Intel(R) Core(TM) i3- CPU @  with 4140896 kB of memory.
  Processor Board ID FOC16342TCZ
```

```
  Device name: Nexus-3548-Switch
  bootflash:    2007040 kB

Kernel uptime is 16 day(s), 1 hour(s), 16 minute(s), 16 second(s)

Last reset at 520032 usecs after  Mon Oct  8 23:43:31 2012

  Reason: Reset Requested by CLI command reload
  System version: 5.0(3)A1(1)
  Service:

plugin
  Core Plugin, Ethernet 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)A1(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)A1(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)A1(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)A1(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)A1(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 3548 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 cores

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

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

no system cores

Syntax Description

tftp:	Specifies a TFTP server.
tftp_URL	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)A1(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)A1(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)A1(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)A1(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)A1(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)A1(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)A1(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*} [**vrf** {*vrf-name* | **default** | **management**}] [**source** *src-addr*]

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.
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.
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.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.0(3)A1(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.

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)A1(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)A1(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.

INDEX

B

banner motd command FND-2
boot command FND-4

C

cd command FND-6
clear cli history command FND-7
clear cores command FND-8
clear debug-logfile command FND-9
clear install failure-reason command FND-10
clear license command FND-11
clear user command FND-12
cli var name command FND-13
clock set command FND-15
clock summer-time command FND-16
clock timezone command FND-18
configure session command FND-19
configure terminal command FND-20
copy command FND-21
copy running-config startup-config command FND-25

D

databits command FND-26
debug logfile command FND-27
debug logging command FND-28
delete command FND-29
dir command FND-31

E

echo command FND-33
end command FND-34
exec-timeout command FND-35
exit (EXEC) command FND-37
exit (global) command FND-38

F

feature interface-vlan command FND-39
feature lacp command FND-40
feature udld command FND-41
find command FND-42
format command FND-43

G

gunzip command FND-44
gzip command FND-45

H

hostname command FND-46

I

install all command FND-47
install license command FND-50

L

line console command FND-51

line vty command FND-52

M

modem in command FND-53
modem init-string command FND-54
modem set-string user-input command FND-56
move command FND-57

P

parity command FND-59
ping command FND-60
ping multicast command FND-62

R

reload command FND-64
rmdir command FND-65
run-script command FND-66

S

save command FND-68
send command FND-69
session-limit command FND-71
setup command FND-70
show banner motd command FND-72
show boot command FND-73
show cli alias command FND-74
show cli history command FND-75
show cli variables command FND-77
show clock command FND-78
show configuration session command FND-79
show copyright command FND-80
show debug logfile command FND-81
show environment command FND-82
show feature command FND-85
show file command FND-87
show hostname command FND-93
show incompatibility system command FND-94
show install all command FND-95
show inventory command FND-98
show license command FND-100
show license host-id command FND-102
show license usage command FND-103
show line command FND-105
show module command FND-107
show processes command FND-109
show processes cpu command FND-111
show processes log command FND-113
show processes memory command FND-115
show running-config command FND-117
show running-config diff command FND-119
show sprom command FND-121
show startup-config command FND-123
show switchname command FND-125
show system cores command FND-126
show system reset-reason command FND-127
show system resources command FND-128
show system uptime command FND-129
show tech-support command FND-130
show terminal command FND-132
show version command FND-133
sleep command FND-135
slot command FND-136
speed command FND-138
stopbits command FND-139
switchname command FND-140
system cores command FND-141
system startup-config unlock command FND-142

T

tail command FND-143
terminal length command FND-145
terminal session-timeout command FND-146

terminal terminal-type command FND-147
terminal width command FND-148
traceroute command FND-149

U

update license command FND-150

W

write erase command FND-151