

Cisco Nexus 7000 Series NX-OS Fundamentals Commands

This chapter describes the Cisco Nexus 7000 Series NX-OS fundamentals commands.

attach module

To start a command session on an I/O module, use the attach module command.

attach module slot-number

Syntax Description

slot-number	Slot number in the chassis for the I/O module.
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Defaults

None

Command Modes

Any command mode

SupportedUserRoles

network-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

To exit the I/O module session, use the **exit** command. To abort the session, use the **\$.** character sequence.

You can also use the **slot** command to send commands to an I/O module from the supervisor module session.

Use the question mark character (?) to obtain context sensitive help.

This command does not require a license.

Examples

This example shows how to start a command session on an I/O module:

switch# attach module 2
Attaching to module 2 ...
To exit type 'exit', to abort type '\$.'
module-2#

Command	Description
slot	Sends commands to an I/O module.

banner motd

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

banner motd delimiting-character message delimiting-character

no banner motd

Syntax Description	delimiting-character	Delimiting character that you choose. This character indicates the start and end of the message and is not a character that you use in the message. Do not use " and % as a delimiting character.
	message	Message text. The text is alphanumeric, case sensitive, and can contain special characters. Does not contain the delimiting character you have chosen. The text has a maximum length of 80 characters and can have a maximum of 40 lines.

Defaults User Access Verification

Command Modes Global configuration

SupportedUserRoles network-admin vdc-admin

Command History

Release	Modification
4.0(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!#

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

switch# configure terminal
switch(config)# banner motd #Welcome to authorized users!
> Unauthorized access prohibited.#

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

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

Command	Description
show banner motd	Displays the MOTD banner.

boot auto-copy

To enable automatic copying of boot image files to the standby supervisor module, use the **boot** auto-copy command. To disable automatic copying, use the **no** form of this command.

boot auto-copy

no boot auto-copy

Syntax Description

This command has no arguments or keywords.

Defaults

Enabled

Command Modes

Global configuration

SupportedUserRoles

network-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

When automatic copying of image files is enabled, the Cisco NX-OS software copies the image files referred to by the boot variable to the standby supervisor module. These image files must be present in local memory on the active supervisor module. For kickstart and system boot variables, only those image files that are configured for the standby supervisor module are copied. For modules images, all modules present in the standby's corresponding locations (bootflash: or slot0:) will be copied.

This command does not require a license.

Examples

This example shows how to enable automatic copying of boot image files to the standby supervisor module:

switch# configure terminal
switch(config)# boot auto-copy
Auto-copy administratively enabled

Command	Description
boot kickstart	Configures the kickstart boot variable.
boot system	Configures the system boot variable.
copy	Copies files.
show boot	Displays boot variable configuration information.

boot kickstart

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

boot kickstart [filesystem:[//directory] | directory]filename [sup-1] [sup-2]

no boot kickstart

Syntax Description

filesystem:	(Optional) Name of a file system. Valid values are bootflash or slot0 .
//directory	(Optional) Name of a directory. The directory name is case sensitive.
filename	Name of the kickstart image file. The filename is case sensitive.
sup-1	(Optional) Configures the kickstart boot for the sup-1 supervisor module only.
sup-2	(Optional) Configures the kickstart boot for the sup-2 supervisor module only.

Defaults

Configures for both supervisor modules.

Command Modes

Global configuration

SupportedUserRoles

network-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

The Cisco NX-OS software uses the boot variable for loading images when booting up using the **reload** or **install all** command. You must copy the kickstart image to the device before you set the kickstart boot variable. You must also set the system boot variable using the **boot system** command.



We recommend that you use the install all command to update the system image on your device.

For information on upgrading and downgrading images on your Cisco NX-OS device, see the *Cisco Nexus 7000 Series NX-OS Software Upgrade and Downgrade Guide, Release 4.2.*

This command does not require a license.

Examples

This example shows how to configure the kickstart boot variable for both supervisor modules:

switch# configure terminal
switch(config)# boot kickstart bootflash:kickstart-image

This example shows how to configure the kickstart boot variable for the sup-1 supervisor module:

switch# configure terminal
switch(config)# boot kickstart bootflash:kickstart-image sup-1

This example shows how to clear the kickstart boot variable:

switch# configure terminal
switch(config)# no boot kickstart

Command	Description
boot system	Configures the system boot variable.
copy	Copies files.
install all	Installs the software on the physical device.
reload	Reloads the device with new Cisco NX-OS software.
show boot	Displays boot variable configuration information.

boot system

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

boot system [filesystem:[//directory] | directory]filename [sup-1] [sup-2]

no boot system

Syntax Description

filesystem:	(Optional) Name of a file system. Valid values are bootflash or slot0 .
//directory	(Optional) Name of a directory. The directory name is case sensitive.
filename	Name of the system image file. The filename is case sensitive.
sup-1	(Optional) Configures the system boot for the sup-1 supervisor module only.
sup-2	(Optional) Configures the system boot for the sup-2 supervisor module only.

Defaults

Configures for both supervisor modules.

Command Modes

Global configuration

SupportedUserRoles

network-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

The Cisco NX-OS software uses the boot variable for loading images when booting up using the **reload** or **install all** command. You must copy the system image to the device before you set the system boot variable. You must also set the kickstart boot variable using the **boot kickstart** command.



We recommend that you use the install all command to update the system image on your device.

For information on upgrading and downgrading images on your Cisco NX-OS device, see the *Cisco Nexus 7000 Series NX-OS Software Upgrade and Downgrade Guide, Release 4.2.*

This command does not require a license.

Examples

This example shows how to configure the system boot variable for both supervisor modules:

switch# configure terminal
switch(config)# boot system bootflash:system-image

This example shows how to configure the system boot variable for the sup-1 supervisor module:

switch# configure terminal
switch(config)# boot system bootflash:system-image sup-1

This example shows how to clear the system boot variable:

switch# configure terminal
switch(config)# no boot system

Command	Description	
boot kickstart	Configures the kickstart boot variable.	
copy	Copies files.	
install all	Installs the software on the physical device.	
reload	Reloads the device with new Cisco NX-OS software.	
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:[//directory] | directory]

Syntax Description

filesystem:	(Optional) Name of the file system. Valid values are bootflash , slot0 , volatile , usb1 , or usb2 .
//directory	(Optional) Name of the directory. The directory name is case sensitive.

Defaults

bootflash

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

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

You can change only the directories that are on the active supervisor module.

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 slot0:

This example shows how to revert back to the default working directory (bootflash):

switch# cd

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.

Defaults

None

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.0(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

Command	Description
show cli history	Displays the command history.

clear debug-logfile

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

clear debug-logfile filename

mtav	Desc	PIR	ti o n
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filename	Name of the debug	logfile to clear.
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Defaults

None

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to clear the debug logfile:

switch# clear debug-logfile syslogd_debugs

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

clear install all failed-standby

To clear the software installation failure log on the standby supervisor module, use the **clear install all failed-standby** command.

clear install all failed-standby

Syntax Description	This command has n	o arguments	or keywords
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Defaults None

Command Modes Any command mode

SupportedUserRoles network-admin vdc-admin

Command History

Release	Modification
4.2(1)	This command was introduced.

Usage Guidelines This command does not require a license.

Examples This example shows how to clear the software installation failure log on the standby supervisor module:

switch# clear install all failed-standby

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

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.

Defaults

None

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.0(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

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

mtav	Descri	ntion

filename

Name of the license file to be uninstalled.

Defaults

None

Command Modes

Any command mode

SupportedUserRoles

network-admin

Command History

Release	Modification
4.0(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 Enterprise.lic
Clearing license Enterprise.lic:
SERVER this_host ANY
VENDOR cisco

Do you want to continue? (y/n) ${\bf y}$ Clearing license ..done switch#

Command	Description
show license	Displays license information.

cli alias name

To configure a command alias, use the **cli alias name** command. To delete a command alias, use the **no** form of this command.

cli alias name alias-name alias-text

no cli alias name

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alias-name	Name of the command alias. The alias name is an alphanumeric string that is not case sensitive and must begin with an alphabetic character. The maximum length is 30 characters.
alias-text	Alias text string. The command is alphanumeric, not case sensitive, can contain spaces and special characters, and has a maximum of 100 characters.

Defaults

None

Command Modes

Global configuration

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

You can use the command to create aliases for commands that you use frequently.

The Cisco NX-OS software has one predefined command alias called alias. You can use it to display the currently configured command aliases.

This command does not require a license.

Examples

This example shows how to configure a command alias:

switch# configure terminal

switch(config)# cli alias name crun copy running-config startup-config

This example shows how to delete a command alias:

switch# configure terminal

switch(config)# no cli alias name crun

Command	Description
show cli alias	Displays information about command alias configuration.

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

cli no 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.

Defaults

None

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.0(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 in 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 must remove a CLI variable before you can change its definition.

This command does not require a license.

Examples

This example shows how to define a CLI variable:

switch# cli var name testinterface interface 2/3

This example shows how to reference a CLI variable:

switch# cd slot0:

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 testinterface interface 2/3

Command	Description
show cli variables	Displays the CLI variables.

clock set

To manually set the clock on a Cisco NX-OS device, use the clock set command.

clock set time day month year

Syntax Description

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

Defaults

None

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

Use this command when you cannot synchronize your device with an outside clock source, such as NTP. This command does not require a license.

Examples

This example shows how to manually configure the clock:

switch# clock set 9:00:00 1 June 2008

Command	Description
show clock	Displays the clock time.

clock summer-time

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

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

no clock summer-time

Syntax Description

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

	_
Defaults	None

Command Modes Global configuration

SupportedUserRoles network-admin vdc-admin

Command History

Release	Modification
4.0(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# configure terminal
switch(config)# clock summer-time PDT 2 Sunday March 02:00 1 Sunday November 02:00 60

This example shows how to remove the summer-time offset:

switch# configure terminal
switch(config)# no clock summer-time

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

clock timezone

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

clock timezone zone-name offset-hours offset-minutes

no clock timezone

Syntax Description

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

Defaults

None

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.0(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# clock timezone EST 5 0

This example shows how to remove the time zone offset:

switch# no clock timezone

Command	Description
show clock	Displays the clock time.

configure terminal

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

configure terminal

Syntax Description

This command has no arguments or keywords.

Defaults

None

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

Use this command to enter global configuration mode. The commands that you enter in this mode are written to the running configuration file after you press the Enter key.

This command does not require a license.

Examples

This example shows how to enter global configuration mode:

switch# configure terminal

switch(config)#

Command	Description
where	Displays the current configuration mode context.

copy

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

copy source-url destination-url

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

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

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

Table 1 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:[//module/]	Source or destination URL for boot flash memory. The <i>module</i> argument value is sup-active , sup-local , sup-remote , or sup-standby .	
slot0:[//module/]	Source or destination URL of the external PCMCIA Flash memory device. The <i>module</i> argument value is sup-active , sup-local , sup-remote , or sup-standby .	
usb0:[//module/] usb1:[//module/]	Source or destination URL for the external Universal Serial Bus (USB) Flash memory devices. The <i>module</i> argument value is sup-active , sup-local , sup-remote , or sup-standby .	

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

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

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

Table 3 URL Prefix Keywords for Special File Systems

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

Defaults

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

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.0(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.

This command does not require a license.

This section contains usage guidelines for the following topics:

- Copying Files from a Server to Bootflash Memory, page 27
- Copying a Configuration File from a Server to the Running Configuration, page 27
- Copying a Configuration File from a Server to the Startup Configuration, page 27
- Copying the Running or Startup Configuration on a Server, page 27

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:** | **stp:** | **startup-config** command to copy a configuration file from a network server to the router startup configuration. These commands replace the startup configuration file with the copied configuration file.

Copying the Running or Startup Configuration on a Server

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

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

Examples

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

switch# copy file1 file2

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

switch# copy file1 my_files:file2

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

switch# copy file1 slot0:

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

switch# copy file1 bootflash://sup-remote/file1.bak

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

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

Command	Description
cd	Changes the current working directory.
cli var name	Configures CLI variables for the session.
dir	Displays the directory contents.
move	Moves a file.
pwd	Displays the name of the current working directory.

copy running-config startup-config

To copy the running configuration to the startup configuration, use the **copy running-config startup-config** command.

copy running-config startup-config

Syntax Description

This command has no arguments or keywords.

Defaults

None

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

Use this command to save your configuration changes in the running configuration to the startup configuration in persistent memory. When a device reload or switchover occurs, the saved configuration is applied.

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
[############################## 100%

Command	Description	
show running-config	Displays the running configuration.	
show running-config diff	The Displays the differences between the running configuration and the startup configuration.	
show startup-config	Displays the startup configuration.	
write erase	Erases the startup configuration in the persistent memory.	

databits

To configure the number of data bits in a character for the COM1 port or console 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.

Defaults

8 bits

Command Modes

COM1 port configuration console port configuration

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

You can use this command only in the default virtual device context (VDC).

You can configure the console and COM1 ports 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 COM1 port:

switch# configure terminal
switch(config)# line com1
switch(config-com1)# databits 7

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 COM1 port:

switch# configure terminal
switch(config)# line com1
switch(config-com1)# no databits 7

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

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

Command	Description
show line	Displays information about the COM1 port and 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 logfile in bytes. The range is from 4096 to 4194304.

Defaults

Default filename: syslogd_debugs Default file size: 4194304 bytes

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.0(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 logfile:

switch# debug logfile debug_log

This example shows how to revert to the default debug logfile:

switch# no debug logfile debug_log

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

Defaults

Disabled

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.0(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

Command	Description
debug logfile	Configures the logfile for the debug command output.

delete

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

delete [filesystem:[//directory/] | directory/]filename

Syntax Description

filesystem:	(Optional) Name of the file system. Valid values are bootflash , slot0 , usb1 , usb2 , or volatile .
//directory/	(Optional) Name of the directory. The directory name is case sensitive.
filename	Name of the file. The name is case sensitive.

Defaults

None

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

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

This command does not require a license.

Examples

This example shows how to delete a file:

switch# delete bootflash:old_config.cfg

Command	Description
dir	Displays the contents of a directory.

diff-clean

To remove the temporary files created automatically when you use **diff** filtering in **show** commands, use the **diff-clean** command.

diff-clean [all-sessions | all-users]

Syntax Description

all-sessions	(Optional) Removes the temporary files for all sessions, current and past, for the current user.
all-users	(Optional) Cleans the temporary files for all sessions, current and past, for all users.

Defaults

Removes the temporary file for the current session of the current user.

Command Modes

All command modes

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.2(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to remove the temporary files for the current session of the current user:

switch# **diff-clean**

This example shows how to remove the temporary files for the current session and all past sessions of the current user:

switch# diff-clean all-sessions

This example shows how to remove the temporary files for the current sessions and all past sessions of all users:

switch# diff-clean all-users

dir

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

dir [filesystem:[//directory/] | directory/]

Syntax Description

filesystem:	(Optional) Name of the file system. Valid values are bootflash , debug , log , logflash , slot0 , usb1 , usb2 , or volatile .
//directory/	(Optional) Name of the directory. The directory name is case sensitive.

Defaults

Displays the contents of the current working directory.

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin network-operator vdc-operator

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

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

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

echo

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

echo [backslash-interpret] [text]

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backslash-interpret	(Optional) Interprets any character following a backslash character (\) as a formatting option.
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.

Defaults

Displays a blank line

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.0(1)	This command was introduced.
4.0(3)	Replaced the -e keyword with the backslash-interpret keyword.

Usage Guidelines

You can use this command in a command script to display information while the script is running.

Table 4 lists the formatting keywords that you can insert in the text when you include the **backslash-interpret** keyword.

Table 4 Formatting Options for the echo Command

Formatting Option	Description		
\ b	Back spaces.		
<u>\c</u>	Removes the new line character at the end of the text string.		
\f	Inserts a form feed character.		
\ <u>n</u>	Inserts a new line character.		
\ <u>r</u>	Returns to the beginning of the text line.		
\t	Inserts a horizontal tab character.		
\ <u>v</u>	Inserts a vertical tab character.		

Table 4 Formatting Options for the echo Command (continued)

Formatting Option	Description
//	Displays a backslash character.
\nnn	Displays the corresponding ASCII octal character.

This command does not require a license.

Examples

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

switch# echo

switch#

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

```
switch# echo Script run at $(TIMESTAMP).
Script run at 2008-08-12-23.29.24.
```

This example shows how to use a formatting option in the text string:

```
switch# echo backslash-interpret This is line #1. \nThis is line #2.
This is line #1.
This is line #2.
```

Command	Description
run-script	Runs command scripts.

end

To exit a configuration mode and return to EXEC mode, use the end command.

end

Syntax Description

This command has no arguments or keywords.

Defaults

None

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin network-operator vdc-operator

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to return to EXEC mode from global configuration mode:

switch(config)# end

switch#

This example shows how to return to EXEC mode from interface configuration mode:

switch(config-if)# end

switch#

Command	Description
exit	Returns to the previous command 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

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

Defaults

0 minutes

Command Modes

console port configuration Line configuration

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

You can use this command only in the default virtual device context (VDC).

You can configure the console ports 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-com1)# exec-timeout 30

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

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

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

switch# configure terminal
switch(config)# line console
switch(config-com1)# no exec-timeout

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

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

Command	Description
show running-config	Displays the running configuration.

exit

To exit a configuration mode and return to the previous configuration mode, use the exit command.

exit

Syntax Description

This command has no arguments or keywords.

Defaults

None

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin network-operator vdc-operator

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to return to EXEC mode from global configuration mode:

switch(config)# exit
switch#

This example shows how to return to global configuration mode from interface configuration mode:

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

Command	Description
end	Returns to the EXEC command mode.

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	filename-prefix	First part or all of a filename.	The filename pr	refix is case sensitive
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Defaults

None

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.0(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 ospf:

switch# find ospf

/usr/bin/find: ./lost+found: Permission denied

- ./ospf-gr.cfg
- ./ospfgrconfig
- ./ospf-gr.conf

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

flowcontrol hardware

To enable flow control on the COM1 port, use the **flowcontrol hardware** command. To disable flow control, use the **no** form of this command.

flowcontrol hardware

no flowcontrol hardware

Syntax Description

This command has no arguments or keywords.

Defaults

Enabled

Command Modes

COM1 port configuration

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

You can use this command only in the default virtual device context (VDC).

You can configure the COM1 ports only from a session on the console port or COM1 port.

This command does not require a license.

Examples

This example shows how to enable flow control for the COM1 port:

switch# configure terminal
switch(config)# line com1

 $\verb|switch(config-com1)| \# \textbf{ flowcontrol hardware}|\\$

This example shows how to disable flow control for the COM1 port:

switch# configure terminal
switch(config)# line com1
switch(config-com1)# no flowcontrol hardware

Command	Description
show line	Displays information about the COM1 port and console port configuration.

format

To format an external Flash device to erase the contents and restore it to its factory-shipped state, use the **format** command.

format filesystem:

Cuntax	Description	
Syntax	Description	ı

filesystem:

Name of the file system. The valid values are **slot0**, **usb1**, or **usb2**.

Defaults

None

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

You can use this command only in the default virtual device context (VDC).



For information about formatting and recovering corrupted bootflash, see the *Cisco Nexus* 7000 *Series NX-OS Troubleshooting Guide, Release 4.x.*

This command does not require a license.

Examples

This example shows how to format an external Flash device:

switch# format slot0:

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 filename

mtov	Descri	ntion

filename	Name of a file.	The filename	is case	sensitive.
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Defaults

None

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

The compressed filename must have the .gz extension. You do not have to enter the .gz extension as part of the 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 uncompress a compressed file:

switch# gunzip run_cnfg.cfg

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

gzip

To compress a file, use the gzip command.

gzip filename

ntax		

filename	Name of a file	. The filename is ca	se sensitive.

Defaults

None

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

After you use this command, the file is replaced with the compressed filename that has 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 compress a file:

switch# gzip run_cnfg.cfg

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

hostname

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

hostname name

no hostname

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

Defaults

switch

Command Modes

Global configuration

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.0(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 device hostname:

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

This example shows how to revert to the default device hostname:

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

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

install all

To install the kickstart and system images on your Cisco NX-OS device, use the install all command.

install all

[kickstart {bootflash: | ftp:[//server][/path] | scp:[//[username@]server][/path] | sftp:[//[username@]server][/path] | slot0: | tftp:[//server[:port]][/path] |

volatile: *\} kickstart-filename \}*

[system {bootflash: | ftp:[//server][/path] | scp:[//[username@]server][/path] | sftp:[//[username@]server][/path] | slot0: | tftp:[//server[:port]][/path] |

sitp:[//[username@jserver][/pain] | sioto: | titp:[

volatile:} *system-filename*]

Syntax Description

kickstart	(Optional) Specifies the kickstart image file.
bootflash:	Specifies the internal Flash memory.
ftp:	Uses FTP to download the file.
<i>llserver</i>	(Optional) Server IPv4 address or name. The name is case sensitive.
<i>Ipath</i>	(Optional) Path to the file. The name is case sensitive.
scp:	Uses Secure Copy (SCP) to download the file.
username@	(Optional) Username on the server. The name is case sensitive.
sftp:	Uses Secure Shell FTP (SFTP) to download the file.
slot0:	Specifies external Flash memory.
tftp:	Uses Trivial FTP (TFTP) to download the file.
port	(Optional) Port number.
volatile:	Specifies the volatile memory on the device.
kickstart-filename	Name of the kickstart image file. The name is case sensitive.
system	(Optional) Specifies the system image file.
system-filename	Name of the system image file. The name is case sensitive.

Defaults

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

The path is the default for the user on the remote server.

Command Modes

Any command mode

SupportedUserRoles

network-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

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

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

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

This command only installs Cisco NX-OS software on devices with dual supervisor modules. To install new Cisco NX-OS software on a device with a single supervisor, you must use the **reload** command to boot the system after you use the **install all** command. For information on upgrading and downgrading images on your Cisco NX-OS device, see the *Cisco Nexus 7000 Series NX-OS Software Upgrade and Downgrade Guide, Release 4.2.*

The install all command does not install EPLD images.

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

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

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

Command	Description	
boot kickstart	Configures the boot variable for the kickstart image.	
boot system	Configures the boot variable for the system image.	
reload	Reloads the device with the new Cisco NX-OS software.	
show incompatibility system	Displays configuration incompatibilities between Cisco NX-OS system software images.	
show version	Displays information about the software version.	

install all epld

To upgrade the electronic programmable logical device (EPLD) image, use the **install all epld** command.

install all epld [bootflash: epld-image-name | slot0: epld-image-name | volatile: epld-image-name]

Syntax Description

bootflash:	Specifies the internal flash memory.	
epld-image-name	Name of the EPLD image file. The name is case sensitive.	
slot0:	Specifies the external flash memory.	
volatile:	Specifies the volatile memory on the device.	

Defaults

None

Command Modes

Any command mode

SupportedUserRoles

network-admin

Command History

Release	Modification
4.2 (1)	This command was introduced.

Usage Guidelines

Follow these guidelines when you upgrade or downgrade the EPLD:

- You can perform an upgrade from the active supervisor module only. All the modules, including the active supervisor module, can be updated individually.
- You can individually update each module whether it is online or offline as follows:
 - If you upgrade EPLD images on an online module, only the EPLD images with version numbers that differ from the new EPLD images are upgraded.
 - If you upgrade EPLD images on an offline module, all of the EPLD images are upgraded.
- On a switch that has two supervisor modules, upgrade the EPLDs for the standby supervisor and then switch the active supervisor to standby mode to upgrade its EPLDs (the supervisor switchover is not disruptive to traffic on Cisco Nexus 7000 switches). On a switch that has only one supervisor module, you can upgrade the active supervisor, but this will disrupt its operations during the upgrade.
- If you interrupt an upgrade, you must upgrade the module that is being upgraded again.
- The upgrade process disrupts traffic on the targeted module.
- Do not insert or remove any modules while an EPLD upgrade is in progress.

This command does not require a license.

Examples

This example shows how to upgrade a Cisco NX-OS EPLD image:

switch# install all epld bootflash:n7000-s1-epld.4.2.1.img

Compati	bility	check:			
Module	Type	Upgradable	Impact	Reason	
3	LC	Yes	disruptive	Module	Upgradable
5	SUP	Yes	disruptive	Module	Upgradable
7	LC	Yes	disruptive	Module	Upgradable
9	LC	Yes	disruptive	Module	Upgradable
1	Xbar	Yes	disruptive	Module	Upgradable
2	Xbar	Yes	disruptive	Module	Upgradable
3	Xbar	Yes	disruptive	Module	Upgradable
1	FAN	Yes	disruptive	Module	Upgradable
2	FAN	Yes	disruptive	Module	Upgradable
3	FAN	Yes	disruptive	Module	Upgradable
4	FAN	Yes	disruptive	Module	Upgradable

Retrieving EPLD versions... Please wait.

Images will be upgraded according to following table:

Module	Type	EPLD	Running-Version		Upg-Required
3	LC	Power Manager	5.4	5.6	Yes
3	LC	IO	2.11	2.13	
3	LC	Forwarding Engine	1.6	1.6	No
5	SUP	Power Manager	3.7	3.9	Yes
5	SUP	IO	3.26	3.28	
5	SUP	Inband	1.7	1.8	Yes
5	SUP	Local Bus CPLD	3.0	3.0	No
5	SUP	CMP CPLD	6.0	6.0	No
7	LC	Power Manager	4.6	4.8	Yes
7	LC	IO	1.14	1.15	
7	LC	Forwarding Engine	1.6	1.6	No
7	LC	FE Bridge(1)	186.3	186.3	No
7	LC	FE Bridge(2)	186.3	186.3	No
7	LC	Linksec Engine(1)	1.8	2.2	Yes
7	LC	Linksec Engine(2)	1.8	2.2	Yes
7	LC	Linksec Engine(3)	1.8	2.2	Yes
7	LC	Linksec Engine(4)	1.8	2.2	Yes
7	LC	Linksec Engine(5)	1.8	2.2	Yes
7	LC	Linksec Engine(6)	1.8	2.2	Yes
7	LC	Linksec Engine(7)	1.8	2.2	Yes
7	LC	Linksec Engine(8)	1.8	2.2	Yes
9	LC	Power Manager	5.4	5.6	Yes
9	LC	IO	2.11	2.13	Yes
9	LC	Forwarding Engine	1.6	1.6	No
1	Xbar	Power Manager	2.9	2.10	
2	Xbar	Power Manager	2.9	2.10	
3	Xbar	Power Manager	2.9	2.10	Yes
1	FAN	Fan Controller (1)		0.7	Yes
1	FAN	Fan Controller (2)		0.7	Yes
2	FAN	Fan Controller (1)		0.7	Yes
2	FAN	Fan Controller (2)		0.7	Yes
3	FAN	Fan Controller (1)		0.7	Yes
3	FAN	Fan Controller (2)		0.7	Yes
4	FAN	Fan Controller (1)		0.7	Yes
4	FAN	Fan Controller (2)	0.4	0.7	Yes
'i'ne abo	ve mod	ules require upgrad	₽.		

The above modules require upgrade.

Do you want to continue (y/n) ? [n]

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

install fan-module epld

To install an electronically programmable logical device (EPLD) image on a fan module, use the **install fan-module epld** command.

install fan-module slot epld {bootflash: | slot0: | volatile: } filename

Syntax Description

slot	Slot number in chassis.
bootflash:	Specifies the internal Flash memory.
slot0:	Specifies the external Flash memory.
volatile:	Specifies the volatile memory.
filename	Name of the EPLD image file.

Defaults None

Command Modes Any command mode

SupportedUserRoles network-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

You must copy the EPLD image file to local storage before you can install it.

Enter this command from the active supervisor module to update any other module.

Use the **show version fan** slot **epld** command to display the EPLD version for a fan module.



Do not insert or remove any modules while an EPLD upgrade or downgrade is in progress.

This command does not require a license.

Examples

This example shows how to install an EPLD image on a module:

switch# install fan-module 1 epld bootflash:n7000-s1-epld.4.0.2.bin

Command	Description
copy	Copies files.
show version	Displays information about the software version.

install license

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

install license {bootflash: | slot0: | usb0: | usb1:} src-filename [target-filename]

Syntax Description

bootflash:	Specifies the internal Flash memory source location for the license file.
slot0:	Specifies the external Flash memory source location for the license file.
usb0:	Specifies the external USB memory source location for the license file.
usb1:	Specifies the external USB memory source location for the license file.
src-filename	Name of the source license file.
target-filename	(Optional) Name of the target license file.

Defaults

No license is installed.

Command Modes

Any command mode

SupportedUserRoles

network-admin

Command History

Release	Modification
4.0(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.

For information on installing licenses on your Cisco NX-OS device, see the *Cisco Nexus 7000 Series NX-OS Licensing Guide, Release 4.2.*

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

Command	Description
show license	Displays license information.

install module epld

To install an electronically programmable logical device (EPLD) image on an I/O module, use the **install module epld** command.

install module slot epld {bootflash: | slot0: | volatile:} filename

Syntax Description

slot	Slot number in chassis.
bootflash:	Specifies the internal Flash memory.
slot0:	Specifies the external Flash memory.
volatile:	Specifies the volatile memory.
filename	Name of the EPLD image file.

Defaults None

Command Modes Any command mode

SupportedUserRoles network-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

You must copy the EPLD image file to local storage before you can install it.

Enter this command from the active supervisor module to update any other module.

Use the **show version module** slot **epld** command to display the EPLD version for a fabric module.



Do not insert or remove any modules while an EPLD upgrade or downgrade is in progress.

This command does not require a license.

Examples

This example shows how to install an EPLD image on a fabric module:

switch# install module 2 epld bootflash:n7000-s1-epld.4.0.2.bin

Command	Description
сору	Copies files.
show version	Displays information about the software version.

install xbar-module epld

To install an electronically programmable logical device (EPLD) image on a fabric module, use the **install xbar-module epld** command.

install xbar-module slot epld {bootflash: | slot0: | volatile: } filename

Syntax Description

slot	Slot number in chassis.
bootflash:	Specifies the internal Flash memory.
slot0:	Specifies the external Flash memory.
volatile:	Specifies the volatile memory.
filename	Name of the EPLD image file.

Defaults None

Command Modes Any command mode

SupportedUserRoles network-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

You must copy the EPLD image file to local storage before you can install it.

Enter this command from the active supervisor module to update any other module.

Use the **show version xbar** slot **epld** command to display the EPLD version for an I/O module.



Do not insert or remove any modules while an EPLD upgrade or downgrade is in progress.

This command does not require a license.

Examples

This example shows how to install an EPLD image on an I/O module:

switch# install xbar-module 2 epld bootflash:n7000-s1-epld.4.0.2.bin

Command	Description
сору	Copies files.
show version	Displays information about the software version.

line com1

To specify the COM1 port and enter COM1 port configuration mode, use the line com1 command.

line com1

Syntax Description

This command has no arguments or keywords.

Defaults

None

Command Modes

Global configuration

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

You can configure the COM1 line from a console port session or a COM1 port session.

This command does not require a license.

Examples

This example shows how to enter COM1 port configuration mode:

switch# configure terminal
switch(config)# line com1
switch(config-com1)#

Command	Description
show line	Displays information about the COM1 port and console port configuration.

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.

Defaults

None

Command Modes

Global configuration

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

You can use this command only in the default virtual device context (VDC).

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)#

Command	Description
show line	Displays information about the COM1 port and console port configuration.

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.

Defaults

None

Command Modes

Global configuration

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.0(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)#

Command	Description
show line	Displays information about the COM1 port and console port configuration.

modem connect line

To notify the Cisco NX-OS that you connected a modem, use the modem connect line command.

modem connect line {com1 | console}

Syntax Description

com1	Specifies that you have connected the modem to the COM1 port.
console	Specifies that you have connected the modem to the console port.

Defaults

None

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.1(2)	This command was introduced.

Usage Guidelines

You can use this command only in the default virtual device context (VDC).

This command does not require a license.

Examples

This example shows how to notify the device that you have connected a modem to the COM1 port: switch# modem connect line com1

This example shows how to notify the device that you have connected a modem to the console port: switch# modem connect line console

Command	Description
modem in	Enables the modem connection on the COM1 port or console port.
show line	Displays information about the COM1 and console port configuration.

modem in

To enable the modem connection on the COM1 or 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.

Defaults

Disabled

Command Modes

COM1 port configuration console port configuration

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

You can use this command only in the default virtual device context (VDC).

You can configure the console and COM1 ports 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 COM1 port:

switch# configure terminal
switch(config)# line com1
switch(config-com1)# modem in

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

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

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

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

Command	Description
line console	Enters console port configuration mode.
line com1	Enters COM1 port configuration mode.
show line	Displays information about the COM1 and console port configuration.

modem init-string

To download the initialization string to a modem connected to the COM1 or 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.

Defaults

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

Command Modes

COM1 port configuration console port configuration

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

You can use this command only in the default virtual device context (VDC).

You can configure the console and COM1 ports 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 COM1 port:

```
switch# configure terminal
switch(config)# line com1
switch(config-com1)# modem init-string default
```

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 COM1 port:

```
switch# configure terminal
switch(config)# line com1
switch(config-com1)# modem init-string user-input
```

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 revert to the default initialization string for the modem connected to the COM1 port:

```
switch# configure terminal
switch(config)# line com1
switch(config-com1)# no modem init-string
```

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

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

Command	Description
line console	Enters console port configuration mode.
line com1	Enters COM1 port configuration mode.
modem set-string user-input	Configures the user-input initialization string for a modem.
show line	Displays information about the COM1 and console port configuration.

modem restart line

To restart a modem connection on the COM1 port or console port, use the **modem restart line** command.

modem restart line {com1 | console}

Syntax Description

com1	Restarts the modem on the COM1 port.
console	Restarts the modem on the console port.

Defaults

None

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.1(2)	This command was introduced.

Usage Guidelines

You can use this command only in the default virtual device context (VDC).

This command does not require a license.

Examples

This example shows how to restart a modem connected to the COM1 port:

switch# modem restart line com1

This example shows how to restart a modem connected to the console port:

switch# modem restart line console

Command	Description
modem in	Enables the modem connection on the COM1 port or console port.
show line	Displays information about the COM1 and console port configuration.

modem set-string user-input

To configure the user-input initialization string to download to a modem connected to the COM1 or 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.

Defaults

None

Command Modes

COM1 port configuration console port configuration

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

You can use this command only in the default virtual device context (VDC).

You can configure the console and COM1 ports 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 COM1 port:

```
switch# configure terminal
switch(config) # line com1
switch(config-com1) # modem set-string user-input ATEOQ1&D2&C1S0=3\015
```

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 ATEOQ1&D2&C1S0=3\015
```

This example shows how to revert to the default user-input initialization string for the modem connected to the COM1 port:

switch# configure terminal
switch(config)# line com1
switch(config-com1)# no modem set-string

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

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

Command	Description
line console	Enters console port configuration mode.
line com1	Enters COM1 port configuration mode.
modem init-string	Downloads the user-input initialization string to a modem.
show line	Displays information about the COM1 and console port configuration.

move

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

move [filesystem:[//module/][directory/] | directory/]source-filename {{filesystem:[//module/][directory/] | directory/}[destination-filename] | target-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.
source-filename	Name of the file to move. The name is case sensitive.
destination-filename	(Optional) Name of the destination file. The name is alphanumeric, case sensitive, and has a maximum of 64 characters.

Defaults

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

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

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



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

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 slot0:

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

switch# move file1 bootflash://sup-remote/file1.bak

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

parity

To configure the parity for the COM1 port or 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.

Defaults

The **none** keyword is the default.

Command Modes

COM1 port configuration console port configuration

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

You can use this command only in the default virtual device context (VDC).

You can configure the console and COM1 ports 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 COM1 port:

switch# configure terminal
switch(config)# line com1
switch(config-com1)# parity even

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 COM1 port:

switch# configure terminal
switch(config)# line com1
switch(config-com1)# no parity even

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

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

Command	Description
show line	Displays information about the COM1 port and console port configuration.

ping

To determine the network connectivity to another device using IPv4 addressing, use the ping command.

ping {dest-ipv4-address | hostname} [count {number | unlimited}] [df-bit] [interval seconds]
[packet-size bytes] [source src-ipv4-address] [timeout seconds] [vrf vrf-name]

Syntax Description

dest-ipv4-address	IPv4 address of destination device. The format is <i>A.B.C.D</i> .
hostname	Hostname of destination device. The hostname is case sensitive.
count	(Optional) Specifies the number of transmissions to send.
number	Number of pings. The range is from 1 to 655350. The default is 5.
unlimited	Allows an unlimited number of pings.
df-bit	(Optional) Enables the do-not-fragment bit in the IPv4 header. The default is disabled.
interval seconds	(Optional) Specifies the interval in seconds between transmissions. The range is from 0 to 60. The default is 1 second.
packet-size bytes	(Optional) Specifies the packet size in bytes to transmit. The range is from 1 to 65468. The default is 56 bytes.
source scr-ipv4-address	(Optional) Specifies the source IPv4 address to use. The format is <i>A.B.C.D</i> . The default is the IPv4 address for the management interface of the device.
timeout seconds	(Optional) Specifies the nonresponse timeout interval in seconds. The range is from 1 to 60. The default is 2 seconds.
vrf vrf-name	(Optional) Specifies the virtual routing and forwarding (VRF) name. The default is the default VRF.

Defaults

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

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

To determine the network connectivity to another device using IPv6 addressing, use the **ping6** command. This command does not require a license.

Examples

This example shows how to determine connectivity to another device using IPv4 addressing:

```
switch# ping 172.28.231.246 vrf management
PING 172.28.231.246 (172.28.231.246): 56 data bytes
Request 0 timed out
64 bytes from 172.28.231.246: icmp_seq=1 ttl=63 time=0.799 ms
64 bytes from 172.28.231.246: icmp_seq=2 ttl=63 time=0.597 ms
64 bytes from 172.28.231.246: icmp_seq=3 ttl=63 time=0.711 ms
64 bytes from 172.28.231.246: icmp_seq=4 ttl=63 time=0.67 ms
--- 172.28.231.246 ping statistics ---
5 packets transmitted, 4 packets received, 20.00% packet loss
round-trip min/avg/max = 0.597/0.694/0.799 ms
```

Command	Description
ping6	Determines connectivity to another device using IPv6 addressing.

ping6

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

ping6 {dest-ipv6-address | hostname} [count {number | unlimited}] [interface intf-id] [interval seconds] [packet-size bytes] [source ipv6-address] [timeout seconds] [vrf vrf-name]

Syntax Description

dest-ipv6-address	IPv4 address of destination device. The format is <i>A.B.C.D</i> .
hostname	Hostname of destination device. The hostname is case sensitive.
count	(Optional) Specifies the number of transmissions to send.
number	Number of pings. The range is from 1 to 655350. The default is 5.
unlimited	Allows an unlimited number of pings.
interface intf-id	(Optional) Specifies the interface to send the IPv6 packet. The valid interface types are Ethernet, loopback, port channel, and VLAN.
interval seconds	(Optional) Specifies the interval in seconds between transmissions. The range is from 0 to 60. The default is 1 second.
packet-size bytes	(Optional) Specifies the packet size in bytes to transmit. The range is from 1 to 65468.
source ipv6-address	(Optional) Specifies the source IPv6 address to use. The format is <i>A:B::C:D</i> . The default is the IPv6 address for the management interface of the device.
timeout seconds	(Optional) Specifies the nonresponse timeout interval in seconds. The range is from 1 to 60. The default is 2 seconds.
vrf vrf-name	(Optional) Specifies the virtual routing and forwarding (VRF) name. The default is the default VRF.

Defaults

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

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

To determine the network connectivity to another device using IPv4 addressing, use the **ping** command. This command does not require a license.

Examples

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

Command	Description	
ping	Determines connectivity to another device using IPv4 addressing.	

pop

To restore a saved command mode context, use the **pop** command.

pop [name]

Syntax Description

name

(Optional) Name for the command mode context.

Defaults

The mode recent save context

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.1(2)	This command was introduced.

Usage Guidelines

You can save a command mode context using the **push** command.

This command does not require a license.

Examples

This example shows how to restore an unnamed command mode context:

```
switch# configure terminal
switch(config)# role name test
switch(config-role)# push
switch(config-role)# end
switch# pop
switch(config-role)#
```

This example shows how to restore a named command mode context:

```
switch# configure terminal
switch(config)# line com1
switch(config-com1)# push com1
switch(config-com1)# end
switch# pop com1
switch(config-com1)#
```

Command	Description
push	Saves a command mode context.

power redundancy-mode

To configure the power supply redundancy mode, use the **power redundancy-mode** command. To revert to the default, use the **no** form of this command.

power redundancy-mode {combined | insrc-redundant | ps-redundant | redundant}

no power redundancy-mode {combined | insrc-redundant | ps-redundant | redundant }

Syntax Description

combined	Specifies the combined power supply mode.	
insrc-redundant	Specifies the input source redundancy mode.	
ps-redundant	Specifies the power support redundancy mode.	
redundant	Specifies the full redundancy mode.	

Defaults

ps-redundant

Command Modes

Global configuration

SupportedUserRoles

network-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

You can use this command only in the default virtual device context (VDC).

You can configure the power supplies with the following modes:

- Combined mode—This is the simplest power mode, but it does not provide power redundancy. The available power for this mode is the total power capacity of all power supplies.
- Power supply redundancy mode—This mode provides an extra power supply in case an active power supply goes down. With this mode, the power supply that can supply the most power operates in standby mode. The other one or two power supplies are active. The available power is the amount of power provided by the active power supply units.
- Input source redundancy mode—This mode utilizes two electrical grids, each one powering a half module within each power supply. If one power grid goes down, each power supply continues to draw power through its other half module. The available power is the amount of power by the lesser of the two grids through the power supplies.
- Full redundancy mode—This mode combines power supply redundancy and input source
 redundancy, which means that the chassis has an extra power supply and each half of each power
 supply is connected to one electrical grid while the other half of each power supply is connected to
 the other electrical grid. The available power is the lesser of the available power for power supply
 mode and input source mode.

This command does not require a license.

Examples

This example shows how to configure the power supply redundancy mode:

switch# configure terminal
switch(config)# power redundancy-mode redundant

This example shows how to revert to the default power supply redundancy mode:

switch# configure terminal
switch(config)# no power redundancy-mode redundant

Command	Description
show environment	Displays information about the device hardware environment.

purge module running-config

show running-config

To remove the configuration for a missing module from the running configuration, use the **purge module running-config** command.

purge module slot running-config

Syntax Description	slot	Slot in the chassis.
Defaults	None	
Command Modes	Any command mo	ode
SupportedUserRoles	network-admin	
Command History	Release	Modification
	4.0(1)	This command was introduced.
Usage Guidelines	Use the show har	ommand only in the default virtual device context (VDC). dware command to verify which modules are missing. es not require a license.
Examples	configuration:	ws how to remove the configuration for a missing module from the running
Related Commands	Command	Description

Displays the running configuration.

push

To save a command mode context, use the **push** command.

push [name]

Syntax Description

name	(Optional) Name for the command mode context.
------	---

Defaults

None

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.1(2)	This command was introduced.

Usage Guidelines

You can save only one command mode context. You can use the **pop** command to restore a saved command mode context.

This command does not require a license.

Examples

This example shows how to save an unnamed command mode context:

switch# configure terminal
switch(config)# role name test
switch(config-role)# push

This example shows how to save a named command mode context:

switch# configure terminal
switch(config)# line com1
switch(config-com1)# push com1

Command	Description
pop	Restores a command mode context.

reload

To reload the entire Cisco NX-OS device, use the reload command.

reload [soft]

Syntax Description

soft	(Optional) Specifies to not reload the Connectivity Management Processor
	(CMP) on the active supervisor module.

Defaults

Reloads the entire device.

Command Modes

Any command mode

SupportedUserRoles

network-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

You can use this command only in the default virtual device context (VDC).

The **reload** command uses the kickstart and system images referenced in the boot variables to reboot on the device. Use the **show boot** command to verify the contents of the kickstart and system boot variables. To set the boot variables to reference the correct images, use the **boot kickstart** and **boot system** commands.

If the boot variables do not reference images on the device, after you enter the **reload** command the device comes up at the loader> prompt. For information about recovering from the loader> prompt, see the *Cisco Nexus 7000 Series NX-OS Troubleshooting Guide*, *Release 4.x.*



The reload command disrupts traffic on the device.



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

For information on upgrading and downgrading images on your Cisco NX-OS device, see the *Cisco Nexus 7000 Series NX-OS Software Upgrade and Downgrade Guide, Release 4.2.*

This command does not require a license.

Examples

This example shows how to reload the Cisco NX-OS device:

switch# copy running-config startup-config
[############################# 100%
switch# reload
This command will reboot the system. (y/n)? [n] y

Command	Description
boot kickstart	Configures the kickstart boot variable.
boot system	Configures the system boot variable.
copy running-config startup-config	Copies the current running configuration to the startup configuration.
install all	Installs the software on the physical device.
show boot	Displays boot variable configuration information.
show version	Displays information about the software version.

reload cmp module

To reload the Connectivity Management Processor (CMP), use the reload cmp module command.

reload cmp module slot

show version

Syntax Description	slot	Chassis slot number.
Defaults	None	
Command Modes	Any command m	ode
SupportedUserRoles	network-admin	
Command History	Release	Modification
	4.0(1)	This command was introduced.
Usage Guidelines	Use the show ha	command only in the default virtual device context (VDC). rdware command to determine the location of the CMPs on your device. oes not require a license.
Examples	This example sho	ows how to reload the CMP on the supervisor module in slot 5:
Related Commands	Command	Description

Displays information about the software version.

reload module

To reload a module in the device, use the **reload module** command.

reload module slot [force-dnld]

•		_		
•	/ntov	Hace	rin	tınn
J	ntax	DCOL	, I I U	uvii

slot	Chassis slot number.
force-dnld	(Optional) Forces the download of software to the module.

Defaults

None

Command Modes

Any command mode

SupportedUserRoles

network-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

You can use this command only in the default virtual device context (VDC).

Use the **show hardware** command to display information about the hardware on your device.

This command does not require a license.

Examples

This example shows how to reload a module:

switch# reload module 2

Command	Description
show version	Displays information about the software version.

rmdir

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

rmdir [filesystem:[//module/]]directory

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	Name of a directory. The name is case sensitive.

Defaults

Removes the directory from the current working directory.

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.0(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

Command	Description
cd	Changes the current working 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.
directoryl	(Optional) Name of a directory. The name is case sensitive.
filename	Name of the command file. The name is case sensitive.

Defaults

None

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

You must create the command file on a remote device and download it to the Cisco NX-OS device 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

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

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.

Defaults

Sends a message to all active user sessions.

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.0(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 device:

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/39 You must log off the device.

Command	Description
show users	Displays the active user session on the device.

setup

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

setup

Syntax Description

This command has no arguments or keywords.

Defaults

Factory settings

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

When you use the **setup** command to change your device configuration, the setup utility uses the factory-default values, not the values that you have configured, when you accept the defaults values in the dialog.

You can exit the setup utility 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

---- Basic System Configuration Dialog VDC: 1 ----

This setup utility will guide you through the basic configuration of the system. Setup configures only enough connectivity for management of the system.

*Note: setup is mainly used for configuring the system initially, when no configuration is present. So setup always assumes system defaults and not the current system configuration values.

Press Enter at anytime to skip a dialog. Use ctrl-c at anytime to skip the remaining dialogs.

Would you like to enter the basic configuration dialog (yes/no):

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 i	s from 1 to 64.
----------	---	-----------------

Defaults

32 sessions

Command Modes

Line configuration

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.0(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

Command	Description
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.

Defaults

None

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin network-operator vdc-operator

Command History

Release	Modification
4.0(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
Unauthorize access prohibited!

Command	Description
banner motd	Configures the MOTD banner.

show boot

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

show boot [auto-copy | module [slot] | sup-1 | sup-2 | variables]

Syntax Description

auto-copy	(Optional) Displays the boot auto-copy status.
module	(Optional) Displays the boot variable configured for an I/O module.
slot	(Optional) Slot number in the chassis.
sup-1	(Optional) Displays the boot variables configured for supervisor module 1 (sup-1).
sup-2	(Optional) Displays the boot variables configured for supervisor module 2 (sup-2).
variables	(Optional) Displays a list of boot variables.

Defaults

Displays all configured boot variables.

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin network-operator vdc-operator

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

Sup-1 refers to the top supervisor module in a chassis with two supervisor modules and sup-2 refers to the bottom supervisor module. For example, in the Cisco NX-OS 7010 device, sup-1 is in slot 5 and sup-2 is in slot 6.

This command does not require a license.

Examples

This example shows how to display all configured boot variables:

```
switch# show boot
sup-1
kickstart variable = bootflash:/n7000-s1-kickstart.4.0.2.bin
system variable = bootflash:/n7000-s1-dk9.4.0.2.bin
sup-2
kickstart variable = bootflash:/n7000-s1-kickstart.4.0.2.bin
system variable = bootflash:/n7000-s1-dk9.4.0.2.bin
No module boot variable set
```

This example shows how to display the boot variables for supervisor module 1:

```
switch# show boot sup-1
sup-1
kickstart variable = bootflash:/n7000-s1-kickstart.4.0.2.bin
system variable = bootflash:/n7000-s1-dk9.4.0.2.bin
```

This example shows how to display the list of boot variable names (see Table 5 for field descriptions):

```
switch# show boot variables
    ssi
    system
    asm-sfn
    kickstart
```

Table 5 show boot variables Field Descriptions

Field	Description
ssi	Not supported.
system	Name of variable for the system image filename.
asm-sfn	Not supported.
kickstart	Name of the variable for the kickstart image filename.

Command	Description
boot auto-copy	Enables automatic copy of boot images to the standby supervisor module.
boot kickstart	Configures the boot variable for the kickstart image.
boot system	Configures the boot variable for the 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.

Defaults

Displays all configured command aliases variables.

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin network-operator vdc-operator

Command History

Release	Modification
4.0(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

ethint :interface ethernet shintbr :show interface br

shintupbr :shintbr | include up | include ethernet

alias :show cli alias

crun :copy running-config startup-config

This example shows how to display a specific command alias:

switch# show cli alias name ethint

ethint :interface ethernet

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) Number of line at the end of the command history lines to display.
unformatted	(Optional) Displays the commands without line numbers or time stamps.

Defaults

Displays the entire formatted history.

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin network-operator vdc-operator

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

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

switch# show cli history

0 22:59:13 show boot 1 23:00:05 show boot sup-1 2 23:01:23 show boot variables 3 23:20:28 config t 4 23:22:16 end 5 23:22:25 show cli alias

6 00:00:10 show cli alias name ethint

. . .

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

```
switch# show cli history 10
42  00:42:54 ip route 0.0.0.0/0 172.28.230.1
43  00:42:54 interface mgmt0
44  00:42:54 ip address 172.28.231.193/23
45  00:42:54 no shutdown
46  00:42:54 aaa group server radius aaa-private-sg
47  00:42:54 use-vrf management
48  00:42:54 telnet server enable
49  00:42:54 logging server 172.28.254.254
50  00:42:54 power redundancy-mode combined
51  00:43:28 show cli history 10
```

This example shows how to display unformatted command history:

```
switch# show cli history unformatted config t
vrf context management
ip route 0.0.0.0/0 172.28.230.1
interface mgmt0
ip address 172.28.231.193/23
no shutdown
aaa group server radius aaa-private-sg
use-vrf management
telnet server enable
logging server 172.28.254.254
power redundancy-mode combined
show cli history unformated
```

show cli list

To list the Cisco NX-OS commands available in a command mode, use the show cli list command.

show cli list [combinations] [component-name] [recurse]

Syntax Description

combinations	(Optional) Displays the number of combinations to show per command. The range is from 0 to 2147483647 combinations. The default is 100.
component-name	(Optional) Name of the component. Currently components are restricted to routing commands.
recurse	(Optional) Displays the children commands within a command mode.

Defaults

Displays the commands for the command mode in a single-line format.

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin network-operator vdc-operator

Command History

Release	Modification
4.0(2)	This command was introduced.

Usage Guidelines

To exit a long listing generated by this command, type Ctrl-C.

This command does not require a license.

Examples

This example shows how to display all commands available in EXEC mode:

```
switch# show cli list

MODE exec
show system internal modlock-info
show system internal usd errors
show system internal usd isr
show system internal usd mts
show system internal usd timeslice
show system internal usd wd
show system internal aaa event-history errors
show system internal aaa event-history msgs
...
^C
```

This example shows how to display all commands related to the address resolution protocol (ARP) available in configuration command mode:

```
switch(config) # show cli list arp
MODE configure
no ip arp timeout
no logging level arp <uint:0-7>
no ip arp event-history packet size <small|medium|large|disabled>
no ip arp event-history event size <small|medium|large|disabled>
no ip arp event-history ha size <small|medium|large|disabled>
no ip arp event-history errors size <small|medium|large|disabled>
no ip arp event-history lcache size <small|medium|large|disabled>
no ip arp event-history lcache-errors size <small|medium|large|disabled>
no ip arp event-history client-event size <small|medium|large|disabled>
no ip arp event-history client-errors size <small|medium|large|disabled>
no ip arp event-history snmp size <small|medium|large|disabled>
no ip arp event-history cli size <small|medium|large|disabled>
logging level arp <uint:0-7>
ip arp event-history packet size <small|medium|large|disabled>
ip arp event-history event size <small|medium|large|disabled>
ip arp event-history ha size <small|medium|large|disabled>
ip arp event-history errors size <small|medium|large|disabled>
ip arp event-history lcache size <small|medium|large|disabled>
ip arp event-history lcache-errors size <small | medium | large | disabled>
ip arp event-history client-event size <small|medium|large|disabled>
ip arp event-history client-errors size <small|medium|large|disabled>
ip arp event-history snmp size <small|medium|large|disabled>
ip arp event-history cli size <small|medium|large|disabled>
ip arp timeout <int:60-28800>
```

This example shows how to display commands related to Open Shortest Path First (OSPF) available in the loopback interface command mode:

```
switch(config)# interface loopback 0
switch(config-if)# show cli list ospf
MODE if-loopback
no ip ospf network point-to-point
no ip ospf network
```

Command	Description
show cli syntax	Displays the Cisco NX-OS command syntax available in a command mode.

show cli syntax

To display the Cisco NX-OS command syntax available in a command mode, use the **show cli syntax** command.

show cli syntax [component-name] [long] [mode mode-name] [recurse]

Syntax Description

component-name	(Optional) Name of the component.
long	(Optional) Displays the syntax in a tree format with more than one line per command.
mode mode-name	(Optional) Displays the command syntax for only the specified command mode.
recurse	(Optional) Displays the syntax of the commands within a command mode for the children of the current mode.

Defaults

Displays the command syntax for the command mode in a single-line format.

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin network-operator vdc-operator

Command History

Release	Modification
4.0(2)	This command was introduced.
4.2(1)	Added the mode keyword.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to display the command syntax for commands available in the role configuration command mode in the default format:

```
switch(config-role)# show cli syntax
MODE role
(0) description <line> | no description
(1) description <line> | no description
(2) rule <number> { <action> } { <permission> [ <featuretype> <name> ] } | { c
ommand <cmd_line> } | no rule <number>
(3) rule <number> { <action> } { <permission> [ <featuretype> <name> ] } | { c
ommand <cmd_line> } | no rule <number>
(4) [ no ] vlan policy deny
(5) [ no ] interface policy deny
(6) [ no ] vrf policy deny
```

This example shows how to display the command syntax for commands available in the role configuration command mode in long format:

```
switch(config-role) # show cli syntax long
MODE role
***(0) description <line>
       | no description
***(1) description <line>
       no description
***(2) rule <number> { <action> }
                       { { <permission> [ <featuretype> <name> ]}
                       { command <cmd_line> }}
       | no rule <number>
***(3) rule <number> { <action> }
                       { <permission> [ <featuretype> <name> ]}
                       { command <cmd_line> }}
       | no rule <number>
***(4) [no] vlan policy deny
***(5) [no] interface policy deny
***(6) [no] vrf policy deny
```

This example shows how to display the command syntax for commands and subcommands available in the role configuration command mode in the default format:

```
switch(config-role) # show cli syntax long recurse
MODE role
***(0) description <line>
       | no description
***(1) description <line>
      no description
***(2) rule <number> { <action> }
                       { <permission> [ <featuretype> <name> ]}
                       { command <cmd_line> }}
       | no rule <number>
***(3) rule <number> { <action> }
                       { { <permission> [ <featuretype> <name> ]}
                       { command <cmd_line> }}
       | no rule <number>
***(4) [no] vlan policy deny
***(5) [no] interface policy deny
***(6) [no] vrf policy deny
MODE vlan
***(7) [no] permit vlan <vlan-mrange>
MODE interface
***(8) [no] permit interface <if0>
MODE vrf
***(9) [no] permit vrf <vrf-name>
```

show cli variables

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

show cli variables

Syntax Description

This command has no arguments or keywords.

Defaults

None

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin network-operator vdc-operator

Command History

Release	Modification
4.0(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

TIMESTAMP="2008-06-13-01.14.09" testinterface="ethernet 2/3"

Command	Description
cli var name	Configures CLI variables.

show clock

To display the clock configuration, use the **show clock** command.

show clock [detail]

Syntax Description

detail

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

Defaults

Displays all configured command aliases variables.

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin network-operator vdc-operator

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to display the clock setting:

```
switch# show clock
Fri Jun 13 02:19:20 PDT 2008
```

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

switch# show clock detail

```
Fri Jun 13 02:19:02 PDT 2008 summer-time configuration:
```

timezone name: PDT

starts : 1 Sunday March at 02:00 hours
Ends : 1 Sunday November at 02:00 hours

Minute offset: 60

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

show copyright

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

show copyright

Syntax Description

This command has no arguments or keywords.

Defaults

None

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin network-operator vdc-operator

Command History

Release	Modification
4.0(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) 2002-2008, 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

show debug logfile

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

show debug logfile filename

Syntax	

filename

Name of the debug log file.

Defaults

None

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin network-operator vdc-operator

Command History

Release	Modification
4.0(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 the debug log file:

switch# show debug logfile syslogd_debugs

Dropping the mts message
Dropping MTS notif(not a reject) reference, from: 0x00000601/22000, To: 0x000006
01/32, Opcode: 8888, MsgID: 38388549, rr_token: 0
Jun 9 23:49:58 2008
select_and_process_log_messages :: Successful select, count = 1, Activity on: 9
Jun 9 23:49:58 2008 Message from UNIX socket: #9
Jun 9 23:49:58 2008 printchopped :: Message - <15>Jun 9 23:49:58 aaad: Semapho
re lock success
, Length - 52, FD - 9
Jun 9 23:49:58 2008 printchopped :: Calling copy_message(do loop), message - <1
5>Jun 9 23:49:58 aaad: Semaphore lock success

Command	Description
debug logfile	Configures the debug log file.

show file

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

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

Syntax Description

filesystem:	(Optional) Name of a file system. Valid values are bootflash , debug , logflash , slot0 , usb1 , usb2 ,or volatile .
//directory/	(Optional) Name of a directory. The directory name is case sensitive.
filename	Name of the file. The filename is case sensitive.

Defaults

None

Command Modes

Any command mode

network-admin vdc-admin network-operator vdc-operator

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

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

switch# show file scriptfile
configure terminal
interface \$(testinterface)
no shutdown
end
show interface \$(testinterface)

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 device, use the **show hostname** command.

show hostname

Syntax Description

This command has no arguments or keywords.

Defaults

None

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin network-operator vdc-operator

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

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

This command does not require a license.

Examples

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

switch# show hostname

switch

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

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 {bootflash: | slot0: | volatile: } filename

Syntax Description

bootflash:	Specifies the internal Flash memory.
slot0:	Specifies the external Flash memory.
volatile:	Specifies the volatile memory on the device.
filename	System image filename to compare with the loaded software image.

Defaults

None

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin network-operator vdc-operator

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

You can use this command only in the default virtual device context (VDC).

This command does not require a license.

Examples

This example shows how to display the configuration incompatibilities:

switch# show incompatibility system bootflash:old_image.bin

The following configurations on active are incompatible with the system image

1) Service: eth_port_channel, Capability: CAP_FEATURE_AUTO_CREATED_PORT_CHANNEL

Description: active mode port channels, auto create enabled ports or auto created

port-channels are present

Capability requirement : STRICT

Disable command: 1.Convert Active mode port channels to On mode port channels (no channel mode active).

- 2.Disable autocreate on interfaces (no channel-group auto).
- 3.Convert autocreated port channels to be persistent (port-channel 1 persistent).

show install all

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

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

Syntax Description

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

Defaults

None

Command Modes

Any command mode

SupportedUserRoles

network-admin

Command History

Release	Modification
4.0(1)	This command was introduced.
42(1)	Added the failed-standby keyword.

Usage Guidelines

You can use this command only in the default virtual device context (VDC).

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

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

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

Verifying image bootflash:/n7000-s1-kickstart.4.0.2.bin for boot variable "kickstart".

[################ 100% -- SUCCESS

Verifying image bootflash:/n7000-s1-dk9.4.0.2.bin for boot variable "system"

[################ 100% -- SUCCESS

Verifying image type.

[############### 100% -- SUCCESS

Extracting "lc1n7k" version from image bootflash:/n7000-s1-dk9.4.0.2.bin. [#################] 100% -- SUCCESS

Extracting "bios" version from image bootflash:/n7000-s1-dk9.4.0.2.bin. [#################] 100% -- SUCCESS

Extracting "system" version from image bootflash:/n7000-s1-dk9.4.0.2.bin. [#################] 100% -- SUCCESS

Extracting "kickstart" version from image bootflash:/n7000-s1-kickstart.4.0.2.gb in.S22.

[############### 100% -- SUCCESS

Compatibility check is done:

Module	bootable	Impact	Install-type	Reason
2	yes	non-disruptive	none	
6	ves	non-disruptive	none	

Images will be upgraded according to following table:

New-Versi	Running-Version(pri:alt)		Image Required	dule Upg-	Mod on
4.0(4.0(2)		lc1n7k	2	
			no		2)
v1.10.5(02/27/0	v1.10.5(02/27/08)	v1.10.5(02/27/08):	bios	2	
			no		8)
4.0(4.0(2)		system	6	
			no		2)
4.0(4.0(2)		kickstart	6	
			no		2)
v3.17.0(03/23/0	v3.17.0(03/23/08)	v3.17.0(03/23/08):	bios	6	
			no		8)

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

```
switch# show install all impact
There is an on-going installation...
Enter Ctrl-C to go back to the prompt.
Verifying image bootflash:/n7000-s1-kickstart.4.0.2.bin
-- SUCCESS
Verifying image bootflash:/n7000-s1-dk9.4.0.2.bin
-- SUCCESS
Extracting "system" version from image bootflash:/n7000-s1-dk9.4.0.2.bin.
-- SUCCESS
Extracting "kickstart" version from image bootflash:/n7000-s1-kickstart.4.0.2.bin.
-- SUCCESS
Extracting "loader" version from image bootflash:/n7000-s1-kickstart.4.0.2.bin.
```

Command	Description
clear install all failed-standby	Clears the software installation failure log for the standby supervisor module.
install all	Installs the software on the physical device.
show boot	Displays the boot variable configuration.

show license

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

show license [brief | file filename]

Syntax Description

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

Defaults

Displays information about the installed licenses.

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin network-operator vdc-operator

Command History

Release	Modification
4.0(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 a device:

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

```
switch# show license brief
Enterprise.lic:
```

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

show license host-id

To display the serial number for the 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.

Defaults

None

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin network-operator vdc-operator

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

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

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=4C0AF664

show license usage

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

show license usage [vdc-all] [LAN_ADVANCED_SERVICES_PKG | LAN_ENTERPRISE_SERVICES_PKG]

•	_	_	-	
V-1	/ntav	Desci	rın	tınn
J	/IILAA	DESCI	uр	uvu

vdc-all	(Optional) Displays license information for all VDCs.
LAN_ADVANCED_SERVICES_PKG	(Optional) Displays a list of licensed features in use for the Advanced Services license package.
LAN_ENTERPRISE_SERVICES_PKG	(Optional) Displays a list of licensed features in use for the Enterprise Services license package.

Defaults

Displays license usage for the local VDC.

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin network-operator vdc-operator

Command History

Release	Modification
4.0(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 for the local VDC:

switch# show license usage Feature	Lic Count	Status Expiry	Date Comments
LAN_ADVANCED_SERVICES_PKG LAN_ENTERPRISE_SERVICES_PKG		In use In use	Grace 116D 20H Grace 116D 20H

Table 6 describes the significant fields shown in the display.

Table 6 show license usage Field Description

Field	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.
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_ENTERPRISE_SERVICES_PKG
Application
----bgp
ospf

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

switch# show license usage vdc-all LAN_ENTERPRISE_SERVICES_PKG
Application
-----bgp
ospf
bgp@2
ospf@2



The "@2" after the feature name in the command output indicates that the feature is enabled in VDC 2. Use the **show vdc** command to display the VDC name and identifier information.

show line

To display COM1 and console port configuration information, use the **show line** command.

show line [com1 | console]

•	_		
· ·	mtav	HOCCE	ntion
J	/IILAA	Descri	DUIDII

com1	(Optional) Displays only information about the COM1 port configuration.
console	(Optional) Displays only information about the console port configuration.

Defaults

Displays information about the COM1 port and the console port configuration.

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin network-operator vdc-operator

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to display information about the COM1 port and the console port configuration information:

```
switch# show line
line Console:
   Speed:
                115200 baud
   Databits:
               8 bits per byte
   Stopbits: 1 bit(s)
   Parity:
               none
   Modem In: Disable
   Modem Init-String -
       default : ATE0Q1&D2&C1S0=1\015
Statistics: tx:26197 rx:805 Register Bits:RTS|CTS|DTR|DSR|CD|RI
line Aux:
   Speed:
                9600 baud
   Databits:
               8 bits per byte
               1 bit(s)
   Stopbits:
   Parity:
                none
   Modem In: Enable
   Modem Init-String -
       default : ATE0Q1&D2&C1S0=1\015
   Hardware Flowcontrol: ON
Statistics: +ò Çêe+ Register Bits:RTS|CTS|DTR|DSR|CD|RI
```

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

```
switch# show line console
```

Command	Description
line com1	Enters the COM1 port configuration mode.
line console	Enters the console port configuration mode.

show running-config

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

show running-config [all | exclude component-list]

Syntax Description

all	(Optional) Displays all the default and configured information.
exclude component-list	(Optional) Removes the components from the command output. The <i>component-list</i> argument is a space-separated list and can contain a maximum of four component names.
	You can use the context-sensitive command-line interface (CLI) help to display the list of valid component names.

Defaults

Displays only the configured information.

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin network-operator vdc-operator

Command History

Release	Modification
4.0(1)	This command was introduced.
4.2(1)	Added the exclude option.

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

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

switch# show running-config all

This example shows how to exclude the ACL manager and control plane policing (CoPP) components from the command output:

switch# show running-config exclude aclmgr copp

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.

Defaults

None

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin network-operator vdc-operator

Command History

Release	Modification	
4.0(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
**************************************	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 the startup configuration.
- text	Indicates that the line is in not the running configuration but it is in the startup configuration.
! text	Indicates that the line exists in both configurations but in different orders.

This command does not require a license.

Examples

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

```
switch# show running-config diff

*** Startup-config
--- Running-config

**********

*** 48,76 ****
--- 48,83 ----
    username foo role network-admin
    username x password 5 ! role network-operator
    username user-op password 5 $1$ykZCz5Y2$npXjKVQhpa4U7EtwMauQG1 role network-operator
    telnet server enable
    ssh key rsa 768 force
+ ssh key dsa force
    ip domain-lookup
    ip host 172.28.231.193 172.28.231.193
    kernel core target 0.0.0.0
```

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 startup-config

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

show startup-config [exclude component-list]

Syntax Description

*	gument is a space-separated list and can contain a
You can use the c	component names. ontext-sensitive command-line interface (CLI) help to valid component names.

Defaults

None

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin network-operator vdc-operator

Command History

Release	Modification	
4.0(1)	This command was introduced.	
4.2(1)	Added the exclude option.	

Usage Guidelines

This command does not require a license.

Examples

This example shows how to display the startup configuration:

switch# show startup-config

This example shows how to exclude the ACL manager and control place policing (CoPP) components from the command output:

switch# show startupt-config exclude aclmgr copp

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.

Defaults

None

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin network-operator vdc-operator

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

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

This command does not require a license.

Examples

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

switch# show switchname
switch

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

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.	

Defaults

Displays information for all features.

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin network-operator vdc-operator

Command History

Release	Modification
4.0(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** > bootflash: *filename*).

This command does not require a license.

Examples

This example shows how to display technical support information and redirect it to a file:

switch# show tech-support > bootflash:tsupport_file

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

switch# show tech-support brief

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

switch# show tech-support aaa

This example shows how to display the commands to generate the technical support information: switch# show tech-support commands

show terminal

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

show terminal

Syntax Description

This command has no arguments or keywords.

Defaults

None

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin network-operator vdc-operator

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

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

switch# show terminal

TTY: /dev/pts/41 Type: "ansi"

Length: 31 lines, Width: 80 columns

Session Timeout: None

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 [build-info [all] | epld filename | fan fan-number epld | image filename | module slot [epld] | xbar xbar-number epld]

Syntax Description

build-info	(Optional) Displays the build information for the currently running system	
	image.	
all	(Optional) Displays the build information for the currently running system image and the corresponding kickstart image.	
epld filename	(Optional) Displays the version information for an electrically programmable logic device (EPLD) image file.	
fan fan-number epld	(Optional) Displays the EPLD version information for a fan.	
image filename	(Optional) Displays the version information for a system or kickstart image file.	
module slot	(Optional) Displays the version information for an I/O module image and BIOS.	
epld	(Optional) Displays the version information for EPLD images on an I/O module.	
xbar xbar-number epld	(Optional) Displays the EPLD version information for a fabric module.	

Defaults

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

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin network-operator vdc-operator

Command History

Release	Modification
4.0(1)	This command was introduced.
4.1(2)	Added the build-info keyword.

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 device:

```
switch# show version
Cisco Nexus Operating System (NX-OS) Software
TAC support: http://www.cisco.com/tac
Copyright (c) 2002-2008, 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
Software
  BIOS:
           version 3.17.0
  loader: version N/A
  kickstart: version 4.0(1a) [gdb]
  system: version 4.0(1a) [gdb]
  BIOS compile time:
                          03/23/08
  kickstart image file is: bootflash:/n7000-s1-kickstart.4.0.1a.bin
  kickstart compile time: 5/8/2008 13:00:00 [05/20/2008 07:52:26]
  system image file is:
                           bootflash:/n7000-s1-dk9.4.0.1a.bin
  system compile time:
                          5/8/2008 13:00:00 [05/20/2008 08:35:00]
Hardware
  cisco Nexus7000 C7010 (10 Slot) Chassis ("Supervisor module-1X")
                              with 2063436 kB of memory.
  Intel(R) Xeon(R) CPU
  Processor Board ID JAB10380101
  Device name: switch
  bootflash: 1023120 kB
  slot0:
                     0 kB (expansion flash)
Kernel uptime is 1 day(s), 3 hour(s), 48 minute(s), 20 second(s)
Last reset at 761445 usecs after Wed May 21 11:46:23 2008
  Reason: Reset Requested by CLI command reload
  System version: 4.0(1.51)
  Service:
plugin
 Core Plugin, Ethernet Plugin
CMP (Module 6) no response
CMP (Module 5) no response
This example shows how to display the version information for an image file:
switch# show version image bootflash:old_image
  image name: old_image
```

```
bios:
           v3.15.0(03/04/08)
system:
           version 4.0(1a)
compiled: 4/3/2008 8:00:00 [04/18/2008 08:26:29]
```

This example shows how to display the version information for an I/O module:

switch# show version module 2

ModNo Image Type SW Version SW Interim Version BIOS Version
2 SLC 4.0(1a) 4.0(1a) 1.10.5

This example shows how to display the version information for the EPLD images on an I/O module:

switch# show version module 2 epld

EPLD Device	Version
Power Manager	2.9
IO	1.17
Forwarding Engine	1.4

This example shows how to display the version information for the EPLD images on a fabric module:

switch# show version xbar 1 epld

EPLD Device	Version
Power Manager	2.4

sleep

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

sleep seconds

Syntax	DUJUII	puon

seconds

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

Defaults

None

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.0(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 before displaying the prompt:

switch# sleep 5

slot

To issue commands to an I/O module from the supervisor module session, use the **slot** command.

slot slot-number {command-string | quoted "command-string"}

Syntax Description

slot-number	Chassis slot number for the I/O module.
command-string	Specifies the commands to send to the I/O module. If you want to send more than one command to the I/O module, separate the commands with a space, a semicolon (;), and a space.
quoted	Indicates that the command string is enclosed in double quotation marks.

Defaults

None

Command Modes

Any command mode.

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.2(1)	This command was introduced.

Usage Guidelines

You can use the **slot** command instead of starting a session on the I/O module with the **attach** command.

By default, the keyword and arguments in the command-string argument are space-separated. To send more than one command to a module, separate the commands with a space character, a semicolon character (;), and a space character.

The **quoted** keyword indicates that the command string begins and ends with double quotation marks (""). Use this keyword when you want to redirect the module command output to a filtering utility, such as diff, that is only supported on the supervisor module session.

This command does not require a license.

Examples

This example shows how to send commands to an I/O module from the supervisor module session:

```
switch# slot 1 show system uptime; show version
                          Tue Aug 4 15:09:49 2009
System start time:
System uptime:
                           6 days, 17 hours, 50 minutes, 55 seconds
                           6 days, 17 hours, 53 minutes, 7 seconds
Kernel uptime:
RAM 516692 kB
1c1
Software
 BIOS:
           version 1.10.6
          version 4.2(1) [build 4.2(1)]
  system:
 BIOS compile time:
                        11/04/08
  system compile time:
                         7/3/2009 2:00:00 [08/02/2009 07:15:39]
Hardware
   bootflash: 0 blocks (block size 512b)
  uptime is 6 days 17 hours 53 minute(s) 7 second(s)
```

This example shows how to send a quoted command to an I/O module from the supervisor module session:

```
switch# slot 1 quoted "show system uptime" | diff
switch# slot 1 quoted "show system uptime" | diff -c
*** /volatile/vsh_diff_1_admin_4849_slot__quoted_show_system_uptime.old Tue Aug 11
09:16:14 2009
--- - Tue Aug 11 09:16:14 2009
*****
*** 1,3 ****
 System start time:
                            Tue Aug 4 15:09:49 2009
! System uptime:
                             6 days, 18 hours, 6 minutes, 13 seconds
! Kernel uptime:
                             6 days, 18 hours, 8 minutes, 25 seconds
--- 1,3 ----
 System start time:
                             Tue Aug 4 15:09:49 2009
                             6 days, 18 hours, 6 minutes, 36 seconds
! System uptime:
! Kernel uptime:
                             6 days, 18 hours, 8 minutes, 48 seconds
```

Command	Description
attach module	Starts a command session on an I/O module.

stopbits

To configure the stop bits for the COM1 port or console port, use the **stopbits** command. To revert to the default, use the **no** form of this command.

stopbits $\{1 \mid 2\}$

no stopbits {1 | 2}

Syntax Description

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

Defaults

1 stop bit

Command Modes

COM1 port configuration console port configuration

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

You can use this command only in the default virtual device context (VDC).

You can configure the console and COM1 ports 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 COM1 port:

```
switch# configure terminal
switch(config)# line com1
switch(config-com1)# stopbits 2
```

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 COM1 port:

switch# configure terminal
switch(config)# line com1
switch(config-com1)# no stopbits 2

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

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

Command	Description
show line	Displays information about the COM1 port and console port 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

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Si	untax.	Descri	ntınn
•	III CUA	-	Pull

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

Defaults

switch

Command Modes

Global configuration

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.0(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 device hostname:

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

This example shows how to revert to the default device hostname:

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

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

tail

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

tail [filesystem:[//module/]][directory/]filename lines]

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.
lines	(Optional) Number of lines to display. The range is from 0 to 80.

Defaults

10 lines

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.0(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
ip arp inspection filter marp vlan 9
ip dhcp snooping vlan 13
```

ip arp inspection vlan 13

ip dhcp snooping

ip arp inspection validate src-mac dst-mac ip

ip source binding 10.3.2.2 0f00.60b3.2333 vlan 13 interface Ethernet2/46

ip source binding 10.2.2.2 0060.3454.4555 vlan 100 interface Ethernet2/10

logging level dhcp_snoop 6

logging level eth_port_channel 6

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

```
switch# tail bootflash:startup.cfg 20
area 99 virtual-link 1.2.3.4
router rip Enterprise
router rip foo
 address-family ipv4 unicast
router bgp 33.33
event manager applet sdtest
monitor session 1
monitor session 2
ip dhcp snooping vlan 1
ip arp inspection vlan 1
ip arp inspection filter marp vlan 9
ip dhcp snooping vlan 13
ip arp inspection vlan 13
ip dhcp snooping
ip arp inspection validate src-mac dst-mac ip
ip source binding 10.3.2.2 0f00.60b3.2333 vlan 13 interface Ethernet2/46
ip source binding 10.2.2.2 0060.3454.4555 vlan 100 interface Ethernet2/10
logging level dhcp_snoop 6
logging level eth_port_channel 6
```

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

tar append

To append files to a tar archive file, use the **tar append** command.

tar append {bootflash: | volatile: } archive-filename [absolute] [remove] [verbose] filename-list

Syntax Description

archive-filename	Name of an existing tar archive file.
absolute	(Optional) Uses the filenames without stripping leading backslashes (/).
remove	(Optional) Removes the files after adding them to the archive file.
verbose	(Optional) Displays the filenames when the Cisco NX-OS software appends them to the archive file.
filename-list	Space-separated list of filenames. The files must be on only on bootflash: or volatile:.

Defaults

Adds the tar.gz extension to the archive filename if you do not enter an extension.

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.2(1)	This command was introduced.

Usage Guidelines

You must create an archive file using the tar create command before you can append files to it.

This command does not require a license.

Examples

This example shows how to append two files to the end of an archive file:

switch# tar append bootflash:testarchive.tar.gz newfile1 newfile2

This example shows how to append two files to the end of an archive file and display the filenames as they are appended:

switch# tar append bootflash:testarchive.tar.gz verbose newfile1 newfile2
/bootflash/newfile1

/bootflash/newfile1 /bootflash/newfile2

This example shows how to append two files to the end of an archive file and remove those files from the device:

switch# tar append bootflash:testarchive.tar.gz remove newfile1 newfile2

Command	Description
tar create	Creates an archive file.
tar extract	Extracts the files from an archive file.
tar list	Displays the contents of an archive file.

tar create

To create a tar archive file, use the tar create command.

tar create {bootflash: | volatile:} archive-filename [absolute] [bz2-compress] [gz-compress] [remove] [uncompressed] [verbose] filename-list

Syntax Description

{bootflash: volatile:}archive-filename	Name of the tar archive file to create.
absolute	(Optional) Uses the filenames without stripping leading backslashes (/).
bz2-compress	(Optional) Compress the files as they are added to the archive using the bzip 2 utility. With this option, the archive file extension is .tar.bz2.
gz-compress	(Optional) Compresses the files as they are added to the archive file using the gzip utility. With this option, the archive file extension is .tar.gz.
remove	(Optional) Removes the files after adding them to the archive file.
uncompressed	(Optional) Adds the files to the archive without compression. With this option, the archive file extension is .tar.
verbose	(Optional) Displays the filenames when the Cisco NX-OS software appends them to the archive file.
filename-list	Space-separated list of filenames. The files must be on only on bootflash: or volatile:.

Defaults

gz-compress

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.1(2)	This command was introduced.
4.2(1)	Added the absolute , bz2-compress , and uncompressed optional keywords.
	Changed the compress keyword to gz-compress .

Usage Guidelines

This command does not require a license.

Examples

This example shows how to create a tar archive file and add two files:

switch# tar create bootflash:testarchive.tar.gz newfile1 newfile2

This example shows how to create a tar archive file, two files to the end of an archive file, and display the filenames as they are appended:

switch# tar create bootflash:testarchive.tar.gz verbose newfile1 newfile2
/bootflash/newfile1
/bootflash/newfile2

This example shows how to create a tar archive file, add two files, and remove those files from the device:

switch# tar create bootflash:testarchive.tar.gz remove newfile1 newfile2

Command	Description
tar append	Appends files to the end of an archive file.
tar extract	Extracts the files from an archive file.
tar list	Displays the contents of an archive file.

tar extract

To extract files from a tar archive file, use the tar extract command.

tar extract {bootflash: | volatile:} archive-filename [keep-old] [screen] [to {bootflash: | volatile:} filename] [verbose]

Syntax Description

{bootflash: volatile:}archive-filename	Name of an existing tar archive file.
keep-old	(Optional) Does not overwrite existing files.
screen	(Optional) Extracts only to the terminal session screen.
to {bootflash: volatile:}filename	(Optional) Extracts to another tar archive file. The target archive file must exist on the device before you can extract files to it.
verbose	(Optional) Displays the filenames when the Cisco NX-OS software appends them to the archive file.

Defaults

Adds the tar.gz extension to the archive filename if you do not enter an extension.

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.1(2)	This command was introduced.
4.2(1)	Added the keep-old and to optional keywords.

Usage Guidelines

You must create an archive file using the tar create command before you can append files to it.

This command does not require a license.

Examples

This example shows how to extract files from an archive file:

switch# tar extract bootflash:testarchive.tar.gz

This example shows how to extract files from an archive file and display the filenames as they are extracted:

switch# tar append bootflash:testarchive.tar.gz verbose newfile1 newfile2
/bootflash/newfile1

/bootflash/newfile2

Command	Description
tar append	Appends files to the end of an archive file.
tar create	Creates an archive file.
tar list	Displays the contents of an archive file.

tar list

To list the files in a tar archive file, use the tar list command.

tar list {bootflash: | volatile:} archive-filename

Syntax Description

{bootflash: | volatile: } archive-filename Name

Name of an existing tar archive file.

Defaults

Adds the tar.gz extension to the archive filename if you do not enter an extension.

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.1(2)	This command was introduced.

Usage Guidelines

You must create an archive file using the tar create command before you can list files.

This command does not require a license.

Examples

This example shows how to list files in an archive file:

switch# tar list bootflash:testfile.tar.gz

bootflash/newfile2
bootflash/newfile1

Command	Description	
tar append	Appends files to the end of an archive file.	
tar create	Creates an archive file.	
tar extract	Extracts the files from an archive file.	

terminal alias

To display and define command aliases for the user session, use the **terminal alias** command. To remove the alias definition, use the **no** form of this command.

terminal alias [persist] [alias-name alias-definition]

no terminal alias [persist] [alias-name alias-definition]

Syntax Description

persist	(Optional) Makes the setting persistent for the current and future sessions for the current user.
alias-name	(Optional) Name of the alias.
alias-definition	Alias definition.

Defaults

Displays the command aliases available to the user session.

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.2(1)	This command was introduced.

Usage Guidelines

Aliases that you define with the **terminal alias** command are only available to the current user. Other user cannot use these command aliases. To create aliases that other users can access, use the **cli alias name** command.

This command does not require a license.

Examples

This example shows how to define a command alias only for the current user session:

switch# terminal alias shint show interface brief

This example shows how to define a command alias to persist across session for the current user:

switch# terminal alias persist shver show version

This example shows how to display the command aliases available to the current user session:

This example shows how to remove a temporary command alias for the user session:

switch# no terminal alias shint

Command	Description
cli alias name	Configure command aliases for all user sessions.

terminal color

To change the colors used when displaying the commands and output on the command-line interface (CLI) for the user session, use the **terminal color** command. To revert to the default, use the **no** form of this command.

terminal color [evening] [persist]

no terminal color [evening] [persist]

Syntax Description

evening	(Optional) Not supported.
persist	(Optional) Makes the setting persistent for the current and future sessions for
	the current user.

Defaults

All CLI prompts, commands, and command output display in colors defined by the terminal emulator.

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.2(1)	This command was introduced.

Usage Guidelines

The **terminal color** command changes the CLI colors as follows:

- Displays the command prompt in green if the previous command was successful.
- Displays the command prompt in red if an error occurred in the previous command.
- Displays the command in blue.
- Displays output in the default color defined by the terminal emulator.

The terminal colors setting applies only to the current user session. Use the **persist** keyword to change the setting for the current and future session for the current user.

This command does not require a license.

Examples

This example shows how to change the terminal display colors for the current user session:

switch# terminal color

This example shows how to change the terminal display colors for the current and future sessions for the current user:

switch# terminal color persist

This example shows how to revert to the default for the current user session:

switch# no terminal color

This example shows how to revert to the default for the current and future sessions for the current user:

switch# no terminal color persist

terminal dont-ask

To disable confirmation prompts on the command-line interface (CLI), use the **terminal dont-ask** command. To revert to the default, use the **no** form of this command.

terminal dont-ask [persist]

no terminal dont-ask [persist]

Syntax Description

persist	(Optional) Makes the setting persistent for the current and future sessions for
	the current user.

Defaults

Confirmation prompts enabled.

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.2(1)	This command was introduced.

Usage Guidelines

The terminal confirmation prompt setting applies only to the current user session. Use the **persist** keyword to change the setting for the current and future session for the current user.

This command does not require a license.

Examples

This example shows how to disable the CLI confirmation prompts for the current user session:

switch# terminal dont-ask

This example shows how to disable the CLI confirmation prompts for the current and future sessions for the current user:

switch# terminal dont-ask persist

This example shows how to enable the CLI confirmation prompts for the current user session:

switch# no terminal dont-ask

This example shows how to enable the CLI confirmation prompts for the current and future sessions for the current user:

switch# no terminal dont-ask persist

terminal edit-mode vi

To enable vi editing of recalled commands, use the **terminal edit-mode** command. To revert to the default, use the **no** form of this command.

terminal edit-mode vi [persist]

no terminal edit-mode vi [persist]

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	yntax	DESU		uui

persist	(Optional) Makes the setting persistent for the current and future sessions for
	the current user.

Defaults

emacs

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.2(1)	This command was introduced.

Usage Guidelines

The edit mode setting applies only to the current user session. Use the **persist** keyword to change the setting for the current and future session for the current user.

This command does not require a license.

Examples

This example shows how to change the edit mode for recalled commands to vi for the current user session:

switch# terminal edit-mode vi

This example shows how to change the edit mode for recalled commands to vi for the current and future session for the current user:

switch# terminal edit-mode vi persist

This example shows how to revert the edit mode for recalled command to emacs for the current user session:

switch# no terminal edit-mode vi

This example shows how to revert the edit mode for recalled command to emacs for the current and future sessions for the current user:

switch# no terminal edit-mode vi persist

Command	Description
show terminal	Displays the terminal session configuration.

terminal history no-exec-in-config

To remove the EXEC commands from the show history command output, use the **terminal length** command. To revert to the default, use the **no** form of this command.

terminal history no-exec-in-config

no terminal history no-exec-in-config

Syntax Description

This command has no arguments or keywords.

Defaults

The **show history** command always displays EXEC commands.

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.2(1)	This command was introduced.

Usage Guidelines

The terminal history setting applies only to the current session.

This command does not require a license.

Examples

This example shows how to remove the EXEC commands when recalling the command history from a configuration command mode:

switch# terminal history no-exec-in-config

This example shows how to revert to the default:

switch# no terminal history no-exec-in-config

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.

Defaults

The initial default for the console is 0.

The initial default for virtual terminal sessions is 31.

The default for the **no** form is 24 lines.

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.0(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

Command	Description
show terminal	Displays the terminal session configuration.

terminal log-all

To enable logging of all commands, including the **show** commands, to the accounting log, use the **terminal log-all** command. To revert to the default, use the **no** form of this command.

terminal log-all

terminal no log-all

Syntax Description

This command has no arguments or keywords.

Defaults

Does not log the show commands.

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.2(1)	This command was introduced.

Usage Guidelines

The terminal log setting applies only to the current session.

This command does not require a license.

Examples

This example shows how to enable logging of all commands in the accounting log:

switch# terminal log-all

This example shows how to disable logging of all commands in the accounting log:

switch# terminal no log-all

Command	Description
show terminal	Displays the terminal session configuration.

terminal redirection-mode

To configure the format of the output from **show** commands, use the **terminal redirection-mode** command.

terminal redirection-mode {ascii | zipped}

Syntax Description

ascii	Specifies standard character format when redirecting show command output.
zipped	Specifies zipped format when redirecting show command output.

Defaults

ascii

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.2(1)	This command was introduced.

Usage Guidelines

Some of the **show** commands have lengthy outputs, especially debugging **show** commands such as the **show tech-support** command. You can use the **terminal redirection-mode** command to reduce the size of the file when you redirect the output from the command.

The terminal redirection mode setting applies only to the current session.

This command does not require a license.

Examples

This example shows how to configure zipped format for the terminal redirection mode:

 $\verb|switch#| \textbf{terminal redirection-mode zipped}|\\$

This example shows how to configure ASCII format for the terminal redirection mode:

switch# terminal redirection-mode ascii

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	

minutes

Number of minutes. The range is from 0 to 525600 minutes (8760 hours).

Defaults

0 minutes

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

A value of 0 minutes disables the session timeout.

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:

switch# terminal session-timeout 10

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

switch# terminal no session-timeout

Command	Description
show terminal	Displays the terminal session configuration.

terminal type

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

terminal type type

terminal no type

_	_	_		
	mtav	11000	PIP	tion
	yntax	DESU		uui

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

Defaults

ansi

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.0(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 type xterm

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

switch# terminal no type

Command	Description
show terminal	Displays the terminal session configuration.

terminal width

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

terminal width columns

terminal no width

ntax		

columns	
---------	--

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

Defaults

80 columns

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.0(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

Command	Description	
show terminal	Displays the terminal session configuration.	

traceroute

To discover the routes that packets take when traveling to an IPv4 address, use the **traceroute** command.

traceroute {dest-ipv4-addr | hostname} [vrf vrf-name] [show-mpls-hops] [source src-ipv4-addr]

Syntax Description

dest-ipv4-addr	IPv4 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.	
show-mpls-hops	(Optional) Displays the Multiprotocol Label Switching (MPLS) hops.	
source src-ipv4-addr	(Optional) Specifies a source IPv4 address. The format is A.B.C.D.	

Defaults

Uses the default VRF.

Does not show the MPLS hops.

Uses the management IPv4 address for the source address.

Command Modes

Any command mode

SupportedUserRoles

network-admin

vdc-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

To use IPv6 addressing for discovering the route to a device, use the traceroute6 command.

This command does not require a license.

Examples

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

switch# traceroute 172.28.255.18 vrf management

traceroute to 172.28.255.18 (172.28.255.18), 30 hops max, 40 byte packets

- 1 172.28.230.1 (172.28.230.1) 0.746 ms 0.595 ms 0.479 ms
- 2 172.24.114.213 (172.24.114.213) 0.592 ms 0.51 ms 0.486 ms
- 3 172.20.147.50 (172.20.147.50) 0.701 ms 0.58 ms 0.486 ms
- 4 172.28.255.18 (172.28.255.18) 0.495 ms 0.43 ms 0.482 ms

Command	Description	
traceroute6	Discovers the route to a device using IPv6 addressing.	

traceroute6

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

traceroute6 { dest-ipv6-addr | hostname } [vrf vrf-name] [source src-ipv6-addr]

Syntax Description

dest-ipv6-addr	IPv6 address of the destination device. The format is A:B::C:D.	
hostname	Name of the destination device. The name is case sensitive.	
vrf vrf-name	(Optional) Specifies the virtual routing and forwarding (VRF) to use. The name is case sensitive.	
source src-ipv4-addr	(Optional) Specifies a source IPv4 address. The format is A:B::C:D.	

Defaults

Uses the default VRF.

Uses the management IPv6 address for the source address.

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification	
4.0(1)	This command was introduced.	

Usage Guidelines

To use IPv4 addressing for discovering the route to a device, use the **traceroute** command.

This command does not require a license.

Examples

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

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

Command	Description
traceroute	Discovers the route to a device using IPv4 addressing.

update license

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

update license {**bootflash:** | **slot0:** | **usb0:** | **usb1:**} *filename license-filename*

Syntax Description

bootflash:	Specifies the license file location in the internal bootflash memory.
slot0:	Specifies the license file in the CompactFlash memory or PCMCIA card.
usb0:	Specifies the license file in the external USB memory.
usb1:	Specifies the license file in the external USB memory.
filename	Name of the license file to update.
license-filename	Name of license to update.

Command Modes

Any command mode

SupportedUserRoles

network-admin

Command History

Release	Modification	
4.0(1)	This command was introduced.	
4.2(1)	Added license filename argument.	

Usage Guidelines

You can use this command only in the default virtual device context (VDC).

This command does not require a license.

Updating license ..done

Examples

This example shows how to update a specific license:

where

To display your current context in the command-line interface (CLI), use the where command.

where [detail]

Syntax Description

detail

(Optional) Displays detailed context information.

Defaults

Displays summary context information.

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

This command helps you to keep track where you are in the CLI and how you got to that place.

This command does not require a license.

Examples

This example shows how to display summary context information:

```
switch(config-if)# where
?conf; interface Ethernet2/3 admin@switch%default
```

This example shows how to display detailed context 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 variable and mgmt0 interface configuration.
debug	(Optional) Erases only the debug configuration.

Defaults

Erases all configuration in persistent memory except for the boot variable, mgmt0 interface, and debug configuration.

Command Modes

Any command mode

SupportedUserRoles

network-admin vdc-admin

Command History

Release	Modification	
4.0(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 device to its initial state, except for the boot variable, mgmt0 interface, and debug configurations. You have to explicitly erase those configurations with the **boot** and **debug** options.

This command does not require a license.

Examples

This example shows how to erase the startup configuration:

switch(config-if)# write erase Warning: This command will erase the startup-configuration. Do you wish to proceed anyway? (y/n) [n] y

This example shows how to erase the boot variable and mgmt0 interface configuration in the persistent memory:

switch(config-if) # write erase boot

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

switch(config-if)# write erase debug

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