



Show Commands

This chapter describes the basic Cisco NX-OS system **show** commands.

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show banner motd

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

show banner motd

Syntax Description This command has no arguments or keywords.

Command Default None

Command Modes EXEC mode

Command History	Release	Modification
	5.0(2)N1(1)	This command was introduced.

Examples This example shows how to display the MOTD banner:

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

Related Commands	Command	Description
	banner motd	Configures the MOTD banner.

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show boot

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

show boot [variables]

Syntax Description	variables (Optional) Displays a list of boot variables.
---------------------------	--

Command Default	Displays all configured boot variables.
------------------------	---

Command Modes	EXEC mode
----------------------	-----------

Command History	Release	Modification
	5.0(2)N1(1)	This command was introduced.

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

```
switch# show boot
```

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

```
switch# show boot variables
```

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

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show cli alias

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

```
show cli alias [name alias-name]
```

Syntax Description	name <i>alias-name</i> (Optional) Specifies the name of a command alias. The alias name is not case sensitive.
---------------------------	---

Command Default	Displays all configured command alias variables.
------------------------	--

Command Modes	EXEC mode
----------------------	-----------

Command History	Release	Modification
	5.0(2)N1(1)	This command was introduced.

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

```
switch# show cli alias
```

This example shows how to display a specific command alias:

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

Related Commands	Command	Description
	cli alias name	Configures command aliases.

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show cli history

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

```
show cli history [lines] [unformatted]
```

Syntax Description	
<i>lines</i>	(Optional) Last number of lines from the end of the command history.
unformatted	(Optional) Displays the commands without line numbers or time stamps.

Command Default Displays the entire formatted history.

Command Modes EXEC mode

Command History	Release	Modification
	5.0(2)N1(1)	This command was introduced.

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

```
switch# show cli history
```

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

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

This example shows how to display unformatted command history:

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

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

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show cli variables

To display the configuration of the command-line interface (CLI) variables, use the **show cli variables** command.

show cli variables

Syntax Description This command has no arguments or keywords.

Command Default None

Command Modes EXEC mode

Command History	Release	Modification
	5.0(2)N1(1)	This command was introduced.

Examples This example shows how to display the CLI variables:

```
switch# show cli variables
```

Related Commands	Command	Description
	cli var name	Configures CLI variables.

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show clock

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

show clock [detail]

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

Command Default	None
-----------------	------

Command Modes	EXEC mode
---------------	-----------

Command History	Release	Modification
	5.0(2)N1(1)	This command was introduced.

Examples

This example shows how to display the current clock setting:

```
switch# show clock
```

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

```
switch# show clock detail
```

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

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show configuration session

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

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

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

Command Default None

Command Modes EXEC mode

Command History	Release	Modification
	5.0(2)N1(1)	This command was introduced.

Examples

This example shows how to display information about a specific configuration session:

```
switch# show configuration session mySession1
config session name mySession1
0001 ip access-list myACL
0002 permit icmp any any
0003 statistics per-entry
switch#
```

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

```
switch# show configuration session status
=====
Session Name       : mySession1
Last Action        : Validate
Last Action Status : Success
Last Action Reason : -NA-
Last Action Timestamp : 19:03:49 UTC Sep 06 2009
=====

switch#
```

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

```
switch# show configuration session summary
Session Manager Database:
-----
Name                Session Owner      Creation Time
-----
mySession1         root                18:09:03 UTC Sep 06 2009
```


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```
Number of active configuration sessions = 1  
switch#
```

Related Commands

Command	Description
configure session	Creates a configuration session.

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show copyright

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

show copyright

Syntax Description This command has no arguments or keywords.

Command Default None

Command Modes EXEC mode

Command History	Release	Modification
	5.0(2)N1(1)	This command was introduced.

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) 2002-2010, Cisco Systems, Inc. All rights reserved.
The copyrights to certain works contained in this software are
owned by other third parties and used and distributed under
license. Certain components of this software are licensed under
the GNU General Public License (GPL) version 2.0 or the GNU
Lesser General Public License (LGPL) Version 2.1. A copy of each
such license is available at
http://www.opensource.org/licenses/gpl-2.0.php and
http://www.opensource.org/licenses/lgpl-2.1.php
switch#
```

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show debug logfile

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

show debug logfile *filename*

Syntax Description	<i>filename</i>	Name of the debug log file.
---------------------------	-----------------	-----------------------------

Command Default	None
------------------------	------

Command Modes	EXEC mode
----------------------	-----------

Command History	Release	Modification
	5.0(2)N1(1)	This command was introduced.

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

Examples	This example shows how to display the contents of a debug log file: switch# show debug logfile dmesg
-----------------	--

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

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show environment

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

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

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

Command Default None

Command Modes EXEC mode

Command History	Release	Modification
	5.0(2)N1(1)	This command was introduced.

Examples

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

```
switch# show environment
```

```
Fan:
```

```
-----
Fan           Model           Hw           Status
-----
Chassis-1    N5K-C5020-FAN   --           ok
Chassis-2    --              --           absent
Chassis-3    N5K-C5020-FAN   --           ok
Chassis-4    N5K-C5020-FAN   --           ok
Chassis-5    N5K-C5020-FAN   --           ok
PS-1         N5K-PAC-1200W   --           failure
PS-2         N5K-PAC-1200W   --           ok
```

```
Temperature
```

```
-----
Module  Sensor      MajorThresh  MinorThres  CurTemp  Status
      (Celsius)  (Celsius)   (Celsius)
-----
1       Outlet-1    60           50           41       ok
1       Outlet-2    60           50           44       ok
1       Outlet-3    60           50           36       ok
1       Outlet-4    60           50           39       ok
1       Intake-1    50           40           26       ok
1       Intake-2    50           40           25       ok
1       Intake-3    50           40           25       ok
1       Intake-4    50           40           25       ok
1       PS-1        60           50           20       ok
1       PS-2        60           50           27       ok
```

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```

3      Outlet-1  60          50          30          ok
2      Outlet-1  60          50          32          ok
    
```

Power Supply:
Voltage: 12 Volts

```

-----
PS  Model                Power      Power      Status
    (Watts)      (Amp)
-----
1   --                --          --          fail/shutdown
2   N5K-PAC-1200W      1200.00    100.00     ok
    
```

```

Mod Model                Power      Power      Power      Power      Status
    Requested Requested  Allocated Allocated
    (Watts)      (Amp)      (Watts)      (Amp)
-----
--
1   N5K-C5020P-BF-SUP    625.20    52.10      625.20    52.10     powered-
up
2   N5K-M1600            54.00     4.50       54.00     4.50      powered-
up
3   N5K-M1008            9.96      0.83       9.96      0.83      powered-
up
    
```

Power Usage Summary:

```

-----
Power Supply redundancy mode:      Redundant
Power Supply redundancy operational mode: Non-redundant
    
```

Total Power Capacity 1200.00 W

Power reserved for Supervisor(s) 625.20 W
Power currently used by Modules 63.96 W

```

-----
Total Power Available 510.84 W
-----
    
```

switch#

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

switch# **show environment power**

Power Supply:
Voltage: 12 Volts

```

-----
PS  Model                Power      Power      Status
    (Watts)      (Amp)
-----
1   --                --          --          fail/shutdown
2   N5K-PAC-1200W      1200.00    100.00     ok
    
```

```

Mod Model                Power      Power      Power      Power      Status
    Requested Requested  Allocated Allocated
    (Watts)      (Amp)      (Watts)      (Amp)
-----
--
1   N5K-C5020P-BF-SUP    625.20    52.10      625.20    52.10     powered-
up
    
```

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2	N5K-M1600	54.00	4.50	54.00	4.50	powered-
up						
3	N5K-M1008	9.96	0.83	9.96	0.83	powered-
up						

Power Usage Summary:

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

Total Power Capacity	1200.00 W
----------------------	-----------

Power reserved for Supervisor(s)	625.20 W
----------------------------------	----------

Power currently used by Modules	63.96 W
---------------------------------	---------

Total Power Available	510.84 W
-----------------------	----------

switch#

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show feature

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

show feature

Syntax Description This command has no arguments or keywords.

Command Default None

Command Modes EXEC mode

Command History	Release	Modification
	5.0(2)N1(1)	This command was introduced.
	5.0(3)N1(1)	Support for multicast and unicast routing features was added.
	5.0(3)N2(1)	Support for Flex Links and Fibre Channel over Ethernet (FCoE) N-Port Virtualizer (NPV) was added.
	5.1(3)N1(1)	Support for Adapter Fabric Extender (Adapter-FEX), Virtual Machine Fabric Extender (VM-FEX), FabricPath, and Cisco TrustSec was added.

Examples This example shows how to display the state of all features on a switch that runs Cisco NX-OS Release 5.0(2)N1(1):

```
switch# show feature
Feature Name           Instance  State
-----
cimserver              1        disabled
fabric-binding         1        disabled
fc-port-security      1        disabled
fcoe                   1        enabled
fcsp                   1        disabled
fex                    1        enabled
fport-channel-trunk   1        disabled
http-server            1        enabled
interface-vlan        1        enabled
lACP                   1        enabled
lldp                   1        enabled
npiv                   1        disabled
npv                    1        disabled
port_track            1        disabled
private-vlan           1        disabled
sshServer              1        enabled
tacacs                 1        enabled
telnetServer           1        enabled
udld                   1        enabled
vpc                    1        enabled
vtp                    1        disabled
switch#
```

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This example shows how to display the state of all features on a switch that runs Cisco NX-OS Release 5.0(3)N1(1):

```
switch# show feature
Feature Name      Instance  State
-----
bgp                1         disabled
cimserver          1         disabled
dhcp               1         enabled
eigrp              1         disabled
eigrp              2         disabled
eigrp              3         disabled
eigrp              4         disabled
fabric-binding     1         disabled
fc-port-security  1         disabled
fcoe               1         enabled
fcsp               1         disabled
fex                1         enabled
fport-channel-trunk 1         disabled
hsrp_engine        1         disabled
interface-vlan     1         enabled
lACP               1         enabled
ldap               1         disabled
lldp               1         enabled
msdp               1         disabled
npiv               1         disabled
npv                1         disabled
ospf               1         disabled
ospf               2         disabled
ospf               3         disabled
ospf               4         disabled
pim                1         disabled
port_track         1         disabled
private-vlan       1         enabled
privilege          1         disabled
rip                1         disabled
rip                2         disabled
rip                3         disabled
rip                4         disabled
sshServer          1         enabled
tacacs             1         enabled
telnetServer       1         enabled
udld               1         enabled
vem                1         disabled
vpc                1         enabled
vrrp               1         disabled
vtp                1         enabled
switch#
```

This example shows how to display the state of all features on a switch that runs Cisco NX-OS Release 5.0(3)N2(1):

```
switch# show feature
Feature Name      Instance  State
-----
Flexlink          1         enabled
adapter-fex       1         disabled
bgp                1         disabled
dhcp               1         disabled
eigrp              1         disabled
eigrp              2         disabled
eigrp              3         disabled
eigrp              4         disabled
fcoe               1         disabled
```


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```

fcoe-npv          1          disabled
fex               1          enabled
hsrp_engine      1          disabled
interface-vlan   1          disabled
lacp             1          enabled
ldap             1          disabled
lldp            1          enabled
msdp            1          disabled
ospf            1          disabled
ospf            2          disabled
ospf            3          disabled
ospf            4          disabled
pim             1          disabled
poe             1          disabled
private-vlan     1          disabled
privilege        1          disabled
rip             1          disabled
rip             2          disabled
rip             3          disabled
rip             4          disabled
sshServer       1          enabled
tacacs          1          disabled
telnetServer    1          enabled
udld            1          disabled
vem             1          disabled
vpc            1          disabled
vrrp           1          disabled
vtp            1          disabled
switch#

```

Related Commands

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

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show file

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

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

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

**Note**

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

Command Default	
None	

Command Modes	
EXEC mode	

Command History	Release	Modification
	5.0(2)N1(1)	This command was introduced.

Examples

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

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

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

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

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

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show hardware internal

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

show hardware internal

Syntax Description This command has no arguments or keywords.

Command Default None

Command Modes EXEC mode

Command History	Release	Modification
	5.0(2)N1(1)	This command was introduced.

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

```
switch# show hardware internal
```

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

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show hostname

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

show hostname

Syntax Description This command has no arguments or keywords.

Command Default None

Command Modes EXEC mode

Command History	Release	Modification
	5.0(2)N1(1)	This command was introduced.

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

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

```
switch# show hostname
switch
switch#
```

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

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show incompatibility system

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

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

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

**Note**

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

Command Default None

Command Modes EXEC mode

Command History	Release	Modification
	5.0(2)N1(1)	This command was introduced.

Examples

This example shows how to display the configuration incompatibilities:

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

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

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show install all

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

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

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

Command Default None

Command Modes EXEC mode

Command History	Release	Modification
	5.0(2)N1(1)	This command was introduced.

Examples

This example shows how to display the installation failure reason:

```
switch# show install all failure-reason
No install all failure-reason
switch#
```

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

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

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

```
switch# show install all status
There is an on-going installation...
Enter Ctrl-C to go back to the prompt.

switch#
```

This example shows how to display the impact of installing new images on a switch that runs Cisco NX-OS Release 5.0(3)N1(1):

```
switch# show install all impact

Verifying image bootflash:/n5000-uk9-kickstart.5.0.3.N1.bin for boot variable "kickstart".
[#####] 100% -- SUCCESS

Verifying image bootflash:/n5000-uk9.5.0.3.N1.bin for boot variable "system".
```

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```
[#####] 100% -- SUCCESS

Verifying image type.
[##### ] 50%
[#####] 100% -- SUCCESS

Extracting "system" version from image bootflash:/n5000-uk9.5.0.3.N1.bin.
[#####] 100% -- SUCCESS

Extracting "kickstart" version from image bootflash:/n5000-uk9-kickstart.5.0.3.N1.bin.
[#####] 100% -- SUCCESS

Extracting "bios" version from image bootflash:/n5000-uk9.5.0.3.N1.bin.
[#####] 100% -- SUCCESS

Extracting "fex" version from image bootflash:/n5000-uk9.5.0.3.N1.bin.
[#####] 100% -- SUCCESS

Extracting "fexth" version from image bootflash:/n5000-uk9.5.0.3.N1.bin.
[#####] 100% -- SUCCESS

Performing module support checks.
[#####] 100% -- SUCCESS

Notifying services about system upgrade.
[#####] 100% -- SUCCESS
```

Compatibility check is done:

Module	bootable	Impact	Install-type	Reason
1	yes	non-disruptive	none	
101	yes	non-disruptive	none	
102	yes	non-disruptive	none	
103	yes	non-disruptive	rolling	
106	yes	non-disruptive	rolling	
107	yes	non-disruptive	rolling	
108	yes	non-disruptive	rolling	

Images will be upgraded according to following table:

Module	Image	Running-Version	New-Version	Upg-Required
1	system	5.0(3)N1(1)	5.0(3)N1(1)	no
1	kickstart	5.0(3)N1(1)	5.0(3)N1(1)	no
1	bios	v3.5.0(02/03/2011)	v3.5.0(02/03/2011)	no
1	SFP-uC	v1.0.0.0	v1.0.0.0	no
101	fex	5.0(3)N1(1)	5.0(3)N1(1)	no
102	fexth	5.0(3)N1(1)	5.0(3)N1(1)	no
103	fexth	5.0(3u)N1(1u)	5.0(3)N1(1)	yes
106	fexth	5.0(3u)N1(1u)	5.0(3)N1(1)	yes
107	fex	5.0(3u)N1(1u)	5.0(3)N1(1)	yes
108	fexth	5.0(3u)N1(1u)	5.0(3)N1(1)	yes
1	power-seq	v4.0	v4.0	no
2	power-seq	v1.0	v1.0	no
3	power-seq	v1.0	v1.0	no
4	power-seq	v1.0	v1.0	no
1	uC	v1.0.0.2	v1.0.0.2	no

switch#

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

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show inventory

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

show inventory [**fex chassis_ID**]

Syntax Description	fex chassis_ID	(Optional) Specifies the Fabric Extender chassis ID. The chassis ID is from 100 to 199.
--------------------	-----------------------	---

Command Default Displays all hardware inventory information.

Command Modes EXEC mode

Command History	Release	Modification
	5.0(2)N1(1)	This command was introduced.

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

Need new output

```
switch# show inventory
NAME: "Chassis", DESCR: "Nexus5020 Chassis"
PID: N5K-C5020P-BF      , VID: V04 , SN: SSI13390FZT

NAME: "Module 1", DESCR: "40x10GE/Supervisor"
PID: N5K-C5020P-BF      , VID: V04 , SN: JAF1344BHNK

NAME: "Module 2", DESCR: "6x10GE Ethernet Module"
PID: N5K-M1600          , VID: V01 , SN: JAB1228018M

NAME: "Module 3", DESCR: "8x1/2/4G FC Module"
PID: N5K-M1008          , VID: V01 , SN: JAB1231020C

NAME: "Fan 1", DESCR: "Chassis fan module"
PID: N5K-C5020-FAN      , VID: N/A , SN: N/A

NAME: "Fan 3", DESCR: "Chassis fan module"
PID: N5K-C5020-FAN      , VID: N/A , SN: N/A

NAME: "Fan 4", DESCR: "Chassis fan module"
PID: N5K-C5020-FAN      , VID: N/A , SN: N/A

NAME: "Fan 5", DESCR: "Chassis fan module"
PID: N5K-C5020-FAN      , VID: N/A , SN: N/A

NAME: "Power supply 1", DESCR: "AC power supply"
PID: N5K-PAC-1200W      , VID: V01 , SN: DTM134200L5

NAME: "Power supply 2", DESCR: "AC power supply"
```

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```

PID: N5K-PAC-1200W      , VID: V01 , SN: DTM134200L4

NAME: "FEX 100 CHASSIS", DESCR: "N2K-C2148T-1GE  CHASSIS"
PID: N2K-C2148T-1GE    , VID: V01 , SN: FOX1252GQJR

NAME: "FEX 100 Module 1", DESCR: "Fabric Extender Module: 48x1GE, 4X10GE Supervi
sor"
PID: N2K-C2148T-1GE    , VID: V01 , SN: JAF1302ABDP

NAME: "FEX 100 Fan 1", DESCR: "Fabric Extender Fan module"
PID: N2K-C2148-FAN     , VID: N/A , SN: N/A

NAME: "FEX 100 Power Supply 1", DESCR: "Fabric Extender AC power supply"
PID: N2K-PAC-200W      , VID: V01 , SN: PAC12493LQX

NAME: "FEX 100 Power Supply 2", DESCR: "Fabric Extender AC power supply"
--More--
switch#

```

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

```

switch# show inventory fex 101
NAME: "FEX 100 CHASSIS", DESCR: "N2K-C2148T-1GE  CHASSIS"
PID: N2K-C2148T-1GE    , VID: V01 , SN: FOX1252GQJR

NAME: "FEX 100 Module 1", DESCR: "Fabric Extender Module: 48x1GE, 4X10GE Supervi
sor"
PID: N2K-C2148T-1GE    , VID: V01 , SN: JAF1302ABDP

NAME: "FEX 100 Fan 1", DESCR: "Fabric Extender Fan module"
PID: N2K-C2148-FAN     , VID: N/A , SN: N/A

NAME: "FEX 100 Power Supply 1", DESCR: "Fabric Extender AC power supply"
PID: N2K-PAC-200W      , VID: V01 , SN: PAC12493LQX

NAME: "FEX 100 Power Supply 2", DESCR: "Fabric Extender AC power supply"
PID: N5K-PAC-200W      , VID: 00V0, SN: PAC12423L1Q

switch#

```

Related Commands

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

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show license

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

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

Syntax Description	brief	(Optional) Displays a list of license files installed on a device.
	default	(Optional) Displays the services that use the default license.
	file <i>filename</i>	(Optional) Displays information for a specific license file.

Command Default Displays information about the installed licenses.

Command Modes EXEC mode

Command History	Release	Modification
	5.0(2)N1(1)	This command was introduced.
	5.1(3)N1(1)	The default keyword was introduced.

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

```
switch# show license file fc5020.lic
```

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

```
switch# show license brief
fcoelicense.lic
switch#
```

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

```
switch# show license default
Feature                               Default License Count
-----
FCOE_NPV_PKG                          -
FM_SERVER_PKG                          -
ENTERPRISE_PKG                         -
FC_FEATURES_PKG                        -
VMFEX_FEATURE_PKG                      -
ENHANCED_LAYER2_PKG                   -
-----
switch#
```

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

```
switch# show license
fcoelicense.lic:
SERVER this_host ANY
VENDOR cisco
INCREMENT ENTERPRISE_PKG cisco 1.0 permanent uncounted \
  VENDOR_STRING=<LIC_SOURCE>MDS_SWIFT</LIC_SOURCE><SKU>N5020-SSK9=</SKU> \
```

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```

HOSTID=VDH=SSI13390FZT \
NOTICE="<LicFileID>20100611101827012</LicFileID><LicLineID>1</LicLineID>
\
<PAK></PAK>" SIGN=877DB4A06E0C
INCREMENT FC_FEATURES_PKG cisco 1.0 permanent uncounted \
VENDOR_STRING=<LIC_SOURCE>MDS_SWIFT</LIC_SOURCE><SKU>N5020-SSK9=</SKU> \
HOSTID=VDH=SSI13390FZT \
NOTICE="<LicFileID>20100611101827012</LicFileID><LicLineID>2</LicLineID>
\
<PAK></PAK>" SIGN=A075D610878C

switch#

```

Related Commands

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

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show license host-id

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

show license host-id

Syntax Description This command has no arguments or keywords.

Command Default None

Command Modes EXEC mode

Command History	Release	Modification
	5.0(2)N1(1)	This command was introduced.

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

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

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

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

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show license usage

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

show license usage [*PACKAGE*]

Syntax Description	<i>PACKAGE</i> (Optional) List of licensed features in use for the specified license package.
---------------------------	---

Command Default	Displays license usage for the switch.
------------------------	--

Command Modes	EXEC mode
----------------------	-----------

Command History	Release	Modification
	5.0(2)N1(1)	This command was introduced.

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

```
switch# show license usage
Feature                               Ins  Lic  Status Expiry Date Comments
                               Count
-----
FM_SERVER_PKG                         No   -   Unused          -
ENTERPRISE_PKG                        Yes  -   Unused Never      -
FC_FEATURES_PKG                       Yes  -   In use Never     -
-----
```

This example shows how to display information about the current license usage on a switch that runs Cisco NX-OS Release 5.0(3)N2(1):

```
switch# show license usage
Feature                               Ins  Lic  Status Expiry Date Comments
                               Count
-----
FCOE_NPV_PKG                          No   -   In use          Grace 115D 19H
FM_SERVER_PKG                          No   -   Unused          -
ENTERPRISE_PKG                         No   -   Unused          Grace 119D 22H
FC_FEATURES_PKG                        No   -   Unused          Grace 54D 11H
LAN_BASE_SERVICES_PKG                 Yes  -   In use Never     license missing
LAN_ENTERPRISE_SERVICES_PKG           No   -   Unused          -
-----
```

```
**** WARNING: License file(s) missing. ****
switch#
```

This example shows how to display information about the current license usage on a switch that runs Cisco NX-OS Release 5.1(3)N1(1):

```
switch# show license usage
Feature                               Ins  Lic  Status Expiry Date Comments
                               Count
-----
FCOE_NPV_PKG                          No   -   Unused          Grace 119D 22H
-----
```

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```

FM_SERVER_PKG           No - Unused           -
ENTERPRISE_PKG         No - Unused           Grace 109D 0H
FC_FEATURES_PKG        No - Unused           Grace 119D 23H
VMFEX_FEATURE_PKG      No - In use           Grace 106D 19H
ENHANCED_LAYER2_PKG    No - In use           Grace 72D 0H
-----
switch#

```

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

Table 1 *show license usage Columns*

Column	Description
Feature	Name of the license package.
Ins	License installation status. “No” indicates that the license is not installed and “Yes” indicates that the license is installed.
Lic Count	License count. “-” indicates that the count is not used for this license package. A number in this field indicates that number of current usages of the license by features. This field is not supported.
Status	License status. “Unused” indicates that no features that require the license are enabled. “In use” indicates that one or more features are using the license.
Expiry Date	License expiry date. The field is blank if the license is not installed. If the license is installed, the field displays “Never” to indicate that the license has no time limit or displays the date of expiry for the license.
Comments	Additional information. “Grace” with a time period remaining in days (“D”) and hours (:H”) indicates that the grace license is in use and “license missing” indicates that an error has occurred.

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

```

switch# show license usage FC_FEATURES_PKG
Application
-----
PFM
-----
switch#

```

Related Commands

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

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show line

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

```
show line [console [user-input-string]]
```

Syntax Description	console	(Optional) Displays only information about the console port configuration.
	user-input-string	(Optional) Displays the user-input initialization string.

Command Default Displays information about the terminal port configuration.

Command Modes EXEC mode

Command History	Release	Modification
	5.0(2)N1(1)	This command was introduced.

Examples

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

```
switch# show line
line Console:
  Speed:          115200 baud
  Databits:       8 bits per byte
  Stopbits:       2 bit(s)
  Parity:         none
  Modem In:       Disable
  Modem Init-String -
                  default : ATE0Q1&D2&C1S0=1\015

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

switch#
```

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

```
switch# show line console
line Console:
  Speed:          115200 baud
  Databits:       8 bits per byte
  Stopbits:       2 bit(s)
  Parity:         none
  Modem In:       Disable
  Modem Init-String -
```


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```
default : ATE0Q1&D2&C1S0=1\015
```

```
switch#
```

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

```
switch# show line console user-input-string  
Console's user-input string is ATE0Q1&D2&C1S0=3\015  
switch#
```

Related Commands

Command	Description
line console	Enters the console port configuration mode.

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show module

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

```
show module [module-number | fex [chassis_ID | all]]
```

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

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

Command Modes EXEC mode

Command History	Release	Modification
	5.0(2)N1(1)	This command was introduced.
	5.1(3)N1(1)	Support to display the ASIC version of Layer 3 daughter card and GEM card.

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

Need new output¹

```
switch# show module
Mod Ports  Module-Type                Model                Status
-----
 1    40    40x10GE/Supervisor        N5K-C5020P-BF-SUP   active *
 2     6    6x10GE Ethernet Module   N5K-M1600           ok
 3     8    8x1/2/4G FC Module       N5K-M1008           ok

Mod  Sw                Hw      World-Wide-Name(s) (WWN)
---  -
 1   4.2(1)N2(1)      1.3    --
 2   4.2(1)N2(1)      0.100  --
 3   4.2(1)N2(1)      0.200  20:81:00:0d:ec:e7:df:40 to 20:88:00:0d:ec:e7:df:40

Mod  MAC-Address(es)                Serial-Num
---  -
 1   000d.ece7.df48 to 000d.ece7.df6f  JAF1344BHNK
 2   000d.ece7.df70 to 000d.ece7.df77  JAB1228018M
 3   000d.ece7.df78 to 000d.ece7.df7f  JAB1231020C
switch#
```

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

```
switch# show module 2
Mod Ports  Module-Type                Model                Status
```

1.

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```

-----
2      6      6x10GE Ethernet Module          N5K-M1600          ok

Mod Sw              Hw      World-Wide-Name(s) (WWN)
-----
2      4.2(1)N2(1)    0.100  --

Mod MAC-Address(es)              Serial-Num
-----
2      000d.ece7.df70 to 000d.ece7.df77    JAB1228018M
switch#

```

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

```

switch# show module fex 100
FEX Mod Ports Card Type                      Model              Status.
-----
100 1    48    Fabric Extender 48x1GE Module          N2K-C2148T-1GE    present

FEX Mod Sw              Hw      World-Wide-Name(s) (WWN)
-----
100 1    4.2(1)N2(1)    1.0    --

FEX Mod MAC-Address(es)              Serial-Num
-----
100 1    000d.ecb1.ef00 to 000d.ecb1.ef2f    JAF1302ABDP
switch#

```

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

```

switch# show module fex all
FEX Mod Ports Card Type                      Model              Status.
-----
100 1    48    Fabric Extender 48x1GE Module          N2K-C2148T-1GE    present
150 1    48    Fabric Extender 48x1GE + 4x10G Mod N2K-C2248TP-1GE    present
151 1    48    Fabric Extender 48x1GE + 4x10G Mod N2K-C2248TP-1GE    present
170 1    32    Fabric Extender 32x10G BaseT + 8x1 0    present
171 1    32    Fabric Extender 32x10G BaseT + 8x1 0    present
198 1    32    Fabric Extender 32x10GE + 8x10G Mo N2K-C2232PP-10GE    present
199 1    32    Fabric Extender 32x10GE + 8x10G Mo N2K-C2232PP-10GE    present

FEX Mod Sw              Hw      World-Wide-Name(s) (WWN)
-----
100 1    4.2(1)N2(1)    1.0    --
150 1    4.2(1)N2(1)    3.4    --
151 1    4.2(1)N2(1)    3.2    --
170 1    4.2(1)N2(1)    1.0    --
171 1    4.2(1)N2(1)    1.0    --
198 1    4.2(1)N2(1)    3.4    --
199 1    4.2(1)N2(1)    3.5    --

FEX Mod MAC-Address(es)              Serial-Num
-----
100 1    000d.ecb1.ef00 to 000d.ecb1.ef2f    JAF1302ABDP
150 1    000d.ecfc.a140 to 000d.ecfc.a16f    JAF1407AARL
151 1    000d.ecf4.f916 to 000d.ecf4.f945    JAF1352AHAL
170 1    68ef.bd62.1080 to 68ef.bd62.109f    JAF1417BTEM
171 1    68ef.bd62.1680 to 68ef.bd62.169f    JAF1421DMEA
198 1    000d.ecf7.d4a3 to 000d.ecf7.d4c2    JAF1352AQCH
199 1    68ef.bd61.d8c0 to 68ef.bd61.d8df    JAF1409ATAM
switch#

```

This example shows how to display information for all modules in the chassis of a switch that runs Cisco NX-OS Release 5.1(3)N1(1):

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```

switch# show module
Mod Ports  Module-Type                Model                Status
-----
1    48    O2 48X10GE/Modular Supervisor  N5K-C5596UP-SUP    active *
2    32    GEM with L3 ASIC             N55-M160L3-V2      ok
switch#

```

Related Commands

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

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show processes

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

```
show processes
```

Syntax Description This command has no arguments or keywords.

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

Command Modes EXEC mode

Command History	Release	Modification
	5.0(2)N1(1)	This command was introduced.

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

```
switch# show processes
```

PID	State	PC	Start_cnt	TTY	Process
1	S	b7f9e468	1	-	init
2	S	0	1	-	ksoftirqd/0
3	S	0	1	-	desched/0
4	S	0	1	-	events/0
5	S	0	1	-	khelper
10	S	0	1	-	kthread
18	S	0	1	-	kacpid
169	S	0	1	-	kblockd/0
182	S	0	1	-	khubd
247	S	0	1	-	pdflush
248	S	0	1	-	pdflush
249	S	0	1	-	kswapd0
250	S	0	1	-	aio/0
251	S	0	1	-	SerrLogKthread
809	S	0	1	-	kide/0
812	S	0	1	-	ata/0
817	S	0	1	-	mtdblockd
845	S	0	1	-	scsi_ah_0
846	S	0	1	-	usb-storage
1362	S	0	1	-	kjournald
1370	S	0	1	-	kjournald
2127	S	0	1	-	jffs2_gcd_mtd2
2184	S	0	1	-	kjournald
2644	S	b7f8718e	1	-	portmap
2653	S	0	1	-	nfsd
2654	S	0	1	-	nfsd
2655	S	0	1	-	nfsd
2656	S	0	1	-	nfsd
2657	S	0	1	-	nfsd
2658	S	0	1	-	nfsd

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```

2659      S          0          1      -  nfsd
2660      S          0          1      -  nfsd
2661      S          0          1      -  lockd
2662      S          0          1      -  rpciod
2667      S b7f89468          1      -  rpc.mountd
2673      S b7f89468          1      -  rpc.statd
2700      S b7df3468          1      -  sysmgr
3344      S          0          1      -  mping-thread
3511      S          0          1      -  insmod
3892      S b7f4b468          1      -  xinetd
3893      S b7f89468          1      -  tftpd
--More--
switch#

```

Related Commands

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

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show processes cpu

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

show processes cpu

Syntax Description This command has no arguments or keywords.

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

Command Modes EXEC mode

Command History	Release	Modification
	5.0(2)N1(1)	This command was introduced.

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

```
switch# show processes cpu
```

PID	Runtime(ms)	Invoked	uSecs	1Sec	Process
1	1802	22973	78	0.0%	init
2	440	44555	9	0.0%	ksoftirqd/0
3	79	17021	4	0.0%	desched/0
4	2097	92976	22	0.0%	events/0
5	71	3224	22	0.0%	khelper
10	0	18	20	0.0%	kthread
18	0	2	2	0.0%	kacpid
169	5	669	8	0.0%	kblockd/0
182	121	42	2885	0.0%	khubd
247	0	2	1	0.0%	pdflush
248	326	20427	15	0.0%	pdflush
249	0	1	4	0.0%	kswapd0
250	0	2	1	0.0%	aio/0
251	0	1	1	0.0%	SerrLogKthread
809	0	2	1	0.0%	kide/0
812	0	2	1	0.0%	ata/0
817	0	1	3	0.0%	mtdblockd
845	0	1	6	0.0%	scsi_ah_0
846	132	36789	3	0.0%	usb-storage
1362	0	1	8	0.0%	kjournald
1370	0	1	5	0.0%	kjournald
2127	367	56	6560	0.0%	jffs2_gcd_mtd2
2184	20	743	27	0.0%	kjournald
2644	0	21	38	0.0%	portmap
2653	0	42	14	0.0%	nfsd
2654	0	30	2	0.0%	nfsd
2655	0	30	2	0.0%	nfsd
2656	0	30	2	0.0%	nfsd
2657	0	30	2	0.0%	nfsd

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```

2658          0          30          2          0.0%  nfsd
2659          0          32          4          0.0%  nfsd
2660          0          32          3          0.0%  nfsd
2661          0           2          33          0.0%  lockd
2662          0           1           6          0.0%  rpciod
2667          0           1          71          0.0%  rpc.mountd
2673          2           5          571         0.0%  rpc.statd
2700         152        251559         0          0.0%  sysmgr
3344          0           1          22          0.0%  mping-thread
3511        1825        10196         179         0.0%  insmod
3892          12           3         4105         0.0%  xinetd
3893           3           4          843         0.0%  tftpd
--More--
switch#

```

Related Commands

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

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show processes log

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

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

Syntax Description	details	(Optional) Displays detailed information from the process log.
	pid <i>process-id</i>	(Optional) Displays detailed information from the process log for a specific process. The process ID range is from 1 to 2147483647.

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

Command Modes EXEC mode

Command History	Release	Modification
	5.0(2)N1(1)	This command was introduced.

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

```
switch# show processes log
Process          PID      Normal-exit  Stack  Core  Log-create-time
-----
afm              2948      N            Y      N     Fri Dec  4 00:36:19 2009
afm              2997      N            Y      N     Tue Dec 15 04:09:57 2009
afm              3871      N            N      N     Sat Mar 20 18:22:14 2010
afm              3875      N            N      N     Fri Mar 26 08:45:06 2010
afm              3877      N            Y      N     Mon Mar 22 03:56:38 2010
afm              3886      N            N      N     Fri Mar 26 08:45:06 2010
afm              3887      N            N      N     Sat Mar 20 18:22:15 2010
afm              3889      N            N      N     Sun Mar 21 06:15:00 2010
afm              3890      N            N      N     Sat Mar 20 18:22:16 2010
afm              3895      N            N      N     Fri Mar 26 08:45:08 2010
afm              3898      N            N      N     Fri Mar 26 08:45:08 2010
afm              3904      N            Y      N     Mon Apr  5 19:28:56 2010
afm              3915      N            N      N     Sun Mar 21 06:15:01 2010
afm              3918      N            Y      N     Mon Mar 22 03:43:42 2010
afm              3919      N            N      N     Sun Mar 21 06:15:03 2010
afm              3922      N            Y      N     Mon Mar 22 03:56:44 2010
afm              3930      N            N      N     Sun Mar 21 06:15:03 2010
afm              3942      N            Y      N     Wed Apr  7 18:47:39 2010
afm              3943      N            Y      N     Tue Apr  6 00:09:46 2010
afm              3950      N            Y      N     Mon Mar 22 03:43:45 2010
afm              3962      N            Y      N     Mon Mar 22 03:43:47 2010
afm              3967      N            Y      N     Tue Apr  6 21:57:55 2010
afm              4054      N            Y      N     Tue Mar 23 07:30:21 2010
afm              4220      N            N      N     Fri Mar 26 08:45:34 2010
afm              4224      N            N      N     Sat Mar 20 18:22:45 2010
--More--
switch#
```

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

```
switch# show processes log details
=====
Service: afm
Description: Acl manager Daemon

Started at Fri Dec  4 00:36:05 2009 (209115 us)
Stopped at Fri Dec  4 00:36:19 2009 (274038 us)
Uptime: 14 seconds

Start type: SRV_OPTION_RESTART_STATEFUL (24)
Death reason: SYSMGR_DEATH_REASON_FAILURE_SIGNAL (2)
Last heartbeat 0.00 secs ago
RLIMIT_AS: 272490099
System image name: n5000-uk9.4.2.1.N1.0.173.bin
System image version: 4.2(1)N1(0.173) S0

PID: 2948
Exit code: signal 11 (core dumped)

CWD: /var/sysmgr/work

Virtual Memory:

    CODE      08048000 - 081467A4
    DATA     08147000 - 0816A968
    BRK       08192000 - 085E3000
    STACK     BFFFA90
    TOTAL     99840 KB

Register Set:

    EBX B6FA2178      ECX 00000001      EDX 0836EF98
    ESI 0000000C      EDI 0836F040      EBP BFFFEB48
    EAX BFFFEB70      XDS C010007B      XES 0000007B
    EAX FFFFFFFF (orig)  EIP 00000000      XCS 00000073
    EFL 00010296      ESP BFFFEB1C      XSS 0000007B

Stack: 3956 bytes. ESP BFFFEB1C, TOP BFFFA90

0xBFFFEB1C: B6F3B1EA BFFFEB70 B6568860 00000001 ....p...`.V.....
0xBFFFEB2C: B6F3B1CE 00000000 B6FA2294 0000024F .....".O...
0xBFFFEB3C: 00000007 0000000C 00000000 BFFFEBD8 .....
0xBFFFEB4C: 08107B82 0836F040 BFFFEB70 BFFFEB68 {...@.6.p...h...
0xBFFFEB5C: BFFFEB6C B6F71C64 00000000 BFFFEB88 l...d.....
0xBFFFEB6C: B6F4F72A 00000000 00000008 B6F75D71 *.....q]..
--More--
switch#
```

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

```
switch# show processes log pid 2948
=====
Service: afm
Description: Acl manager Daemon

Started at Fri Dec  4 00:36:05 2009 (209115 us)
Stopped at Fri Dec  4 00:36:19 2009 (274038 us)
Uptime: 14 seconds

Start type: SRV_OPTION_RESTART_STATEFUL (24)
Death reason: SYSMGR_DEATH_REASON_FAILURE_SIGNAL (2)
Last heartbeat 0.00 secs ago
```

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```
RLIMIT_AS: 272490099
System image name: n5000-uk9.4.2.1.N1.0.173.bin
System image version: 4.2(1)N1(0.173) S0
```

```
PID: 2948
Exit code: signal 11 (core dumped)
```

```
CWD: /var/sysmgr/work
```

```
Virtual Memory:
```

```
CODE      08048000 - 081467A4
DATA      08147000 - 0816A968
BRK       08192000 - 085E3000
STACK     BFFFFFFA90
TOTAL     99840 KB
```

```
Register Set:
```

```
EBX B6FA2178      ECX 00000001      EDX 0836EF98
ESI 0000000C      EDI 0836F040      EBP BFFFEB48
EAX BFFFEB70      XDS C010007B      XES 0000007B
EAX FFFFFFFF (orig) EIP 00000000      XCS 00000073
EFL 00010296      ESP BFFFEB1C      XSS 0000007B
```

```
Stack: 3956 bytes. ESP BFFFEB1C, TOP BFFFFFFA90
```

```
0xBFFFEB1C: B6F3B1EA BFFFEB70 B6568860 00000001 ....p...`.V....
0xBFFFEB2C: B6F3B1CE 00000000 B6FA2294 0000024F .....".O...
0xBFFFEB3C: 00000007 0000000C 00000000 BFFFEBD8 .....
0xBFFFEB4C: 08107B82 0836F040 BFFFEB70 BFFFEB68 {...@.6.p...h...
0xBFFFEB5C: BFFFEB6C B6F71C64 00000000 BFFFEB88 l...d.....
0xBFFFEB6C: B6F4F72A 00000000 00000008 B6F75D71 *.....q]..
--More--
switch#
```

Related Commands

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

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show processes memory

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

show processes memory [shared [detail]]

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

Command Default Displays memory allocated to the processes.

Command Modes EXEC mode

Command History	Release	Modification
	5.0(2)N1(1)	This command was introduced.

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

```
switch# show processes memory
```

```

PID      MemAlloc  StkSize   RSSMem   LibMem   StackBase/Ptr   Process
-----  -
   1      147456    86016    495616   1126400  bffffea0/bffff990  init
   2           0         0         0         0         0/0                ksoftirqd/0
   3           0         0         0         0         0/0                desched/0
   4           0         0         0         0         0/0                events/0
   5           0         0         0         0         0/0                khelper
  10           0         0         0         0         0/0                kthread
  18           0         0         0         0         0/0                kacpid
 169           0         0         0         0         0/0                kblockd/0
 182           0         0         0         0         0/0                khubd
 247           0         0         0         0         0/0                pdflush
 248           0         0         0         0         0/0                pdflush
 249           0         0         0         0         0/0                kswapd0
 250           0         0         0         0         0/0                aio/0
 251           0         0         0         0         0/0                SerrLogKthread
 809           0         0         0         0         0/0                kide/0
 812           0         0         0         0         0/0                ata/0
 817           0         0         0         0         0/0                mtblockd
 845           0         0         0         0         0/0                scsi_eh_0
 846           0         0         0         0         0/0                usb-storage
1362           0         0         0         0         0/0                kjournald
1370           0         0         0         0         0/0                kjournald
2127           0         0         0         0         0/0                jffs2_gcd_mtd2
2184           0         0         0         0         0/0                kjournald
2644    155648    86016    438272   1216512  bffffdf0/bffffcf0  portmap
--More--
switch#
```

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

```
switch# show processes memory shared
Component          Shared Memory      Size      Used  Available  Reference
                   Address      (kbytes)  (kbytes)  (kbytes)  Count
smm                0X60000000      1024         3      1021        21
cli                0X60110000     30720*     13982     16738         6
npacl              0X61F20000      4096*         1      4095         1
u6rib-ufdm         0X62330000       320*        188       132         1
am                 0X62390000      1024*        13      1011         4
urib               0X624A0000     32768*       700     32068        11
urib-redis        0X644B0000      4096*         0      4096        11
icmpv6             0X648C0000      1024         0      1024         1
u6rib              0X649D0000     16384*       665     15719         5
urib-ufdm         0X659E0000      2048*         0      2048         1
ip                 0X65BF0000      2048         68      1980         10
u6rib-notify      0X65E00000      2048*       795     1253         5
ipv6               0X66010000      1024         59       965          3
igmp               0X66120000      1024         0      1024         1
Shared memory totals - Size: 98 MB, Used: 17 MB, Available: 82 MB
switch#
```

Related Commands

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

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show running-config

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

show running-config [all]

Syntax Description	all (Optional) Displays all the default and configured information.				
Command Default	Displays only the configured information.				
Command Modes	EXEC mode				
Command History	<table border="1"> <thead> <tr> <th>Release</th> <th>Modification</th> </tr> </thead> <tbody> <tr> <td>5.0(2)N1(1)</td> <td>This command was introduced.</td> </tr> </tbody> </table>	Release	Modification	5.0(2)N1(1)	This command was introduced.
Release	Modification				
5.0(2)N1(1)	This command was introduced.				

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

Need newo output

```
switch# show running-config

!Command: show running-config
!Time: Tue Jul 13 06:05:42 2010

version 4.2(1)N2(1)
feature fcoe
feature telnet
feature tacacs+
feature udld
feature interface-vlan
feature lacp
feature vpc
feature lldp
feature fex
snmp-server enable traps entity fru
role name default-role
  description This is a system defined role and applies to all users.
  rule 5 permit command feature environment
  rule 4 permit command feature hardware
  rule 3 permit command feature module
  rule 2 permit command feature snmp
  rule 1 permit command feature system
role name praveena
username admin password 5 $1$VrQsB2KX$4jkUcx3sXWU8lhI1mlwLa/ role network-admin
username oregon password 5 $1$p3VJ0/BY$Kp22A08NeqCQ0asxUKXq91 role network-oper
ator
no password strength-check
ip domain-lookup
ip host switch 192.168.2.215
ip host BEND-1 192.168.2.215
```

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```

tacacs-server host 192.168.2.54 key 7 "wawy1234"
aaa group server tacacs+ t1
    server 192.168.2.54
    use-vrf management
aaa group server tacacs+ tacacs
radius-server host 192.168.2.5 key 7 "KkwyCet" authentication accounting
aaa group server radius r1
    server 192.168.2.5
    use-vrf management
hostname switch
logging event link-status default
errdisable recovery interval 30
no errdisable detect cause link-flap
errdisable recovery cause pause-rate-limit
--More--
switch#

```

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

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

Related Commands

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

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show running-config diff

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

show running-config diff

Syntax Description This command has no arguments or keywords.

Command Default None

Command Modes EXEC mode

Command History	Release	Modification
	5.0(2)N1(1)	This command was introduced.

Usage Guidelines [Table 2](#) describes the notations used in the command output.

Table 2 *show running-config diff* Notations

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

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
*****
*** 1874,1883 ****
--- 1873,1883 ----
    system cores tftp://192.168.2.5/tftpboot/ vrf management
    vsan database
        vsan 700
    cfs eth distribute
    fcdomain fcid database
```


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```

+ vsan 700 wwn 10:00:00:00:00:15:43:e8 fcid 0x350000 dynamic
vsan 1 wwn 20:44:00:0d:ec:b0:fc:40 fcid 0x780000 dynamic
vsan 1 wwn 20:43:00:0d:ec:b0:fc:40 fcid 0x780001 dynamic
vsan 1 wwn 24:01:00:0d:ec:b0:fc:40 fcid 0x780002 dynamic

interface Vlan1
*****
*** 2089,2103 ***
--- 2089,2113 ----
    priority-flow-control mode on
    speed 1000
    flowcontrol receive on
    service-policy type qos input 1

+ interface port-channel1932
+ shutdown
+ switchport mode trunk
+ switchport trunk allowed vlan 600
+ spanning-tree bpdufilter enable
+ speed 10000
+
interface vfc1

interface vfc199
    bind mac-address 00:00:11:11:22:22
+ fcoe fcf-priority 1
    no shutdown
+ vsan database
+ vsan 700 interface vfc199

interface fc3/1

interface fc3/2

--More--
switch#

```

Related Commands

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

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show sprom

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

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

Syntax Description		
all		Displays the SPROM contents for all components on the physical device.
backplane		Displays the SPROM contents for the backplane.
fex		Displays information about the attached Fabric Extender units.
<i>chassis_ID</i>		(Optional) Fabric Extender chassis ID. The chassis ID is from 100 to 199.
module <i>module-number</i>		Displays the SPROM contents for an I/O module. The module number range is from 1 to 3.
powersupply <i>ps-num</i>		Displays the SPROM contents for a power supply module number. The power supply module number is 1 or 2.
sup		Displays the SPROM contents for the active supervisor module.

Command Default None

Command Modes EXEC mode

Command History	Release	Modification
	5.0(2)N1(1)	This command was introduced.

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

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

```
switch# show sprom all
DISPLAY backplane sprom contents:
Common block:
Block Signature : 0xabab
Block Version   : 3
Block Length    : 160
Block Checksum  : 0x17d7
EEPROM Size     : 65535
Block Count     : 4
FRU Major Type  : 0x6001
FRU Minor Type  : 0x0
OEM String      : Cisco Systems, Inc.
Product Number  : N5K-C5020P-BF
Serial Number   : SSI13390FZT
```

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```

Part Number      : 68-3301-06
Part Revision    : A0
Mfg Deviation    : 0
H/W Version      : 0.0
Mfg Bits         : 0
Engineer Use     : 0
snmpOID          : 9.12.3.1.3.719.0.0
Power Consump    : 0
RMA Code         : 0-0-0-0
CLEI Code        : COMXG00ARC
VID              : V04
Chassis specific block:
Block Signature  : 0x6001
Block Version    : 3
Block Length     : 39
Block Checksum   : 0x3ca
Feature Bits     : 0x0
HW Changes Bits  : 0x0
Stackmib OID     : 0
MAC Addresses    : 00-0d-ec-e7-df-40
Number of MACs   : 64
OEM Enterprise   : 0
OEM MIB Offset   : 0
MAX Connector Power: 0
WWN software-module specific block:
Block Signature  : 0x6005
Block Version    : 1
Block Length     : 0
Block Checksum   : 0x20dd
wwn usage bits:
00 00 00 00 00 00 00 00
--More--
switch#

```

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

```

switch# show sprom backplane
DISPLAY backplane sprom contents:
Common block:
Block Signature  : 0xabab
Block Version    : 3
Block Length     : 160
Block Checksum   : 0x17d7
EEPROM Size      : 65535
Block Count      : 4
FRU Major Type   : 0x6001
FRU Minor Type   : 0x0
OEM String       : Cisco Systems, Inc.
Product Number   : N5K-C5020P-BF
Serial Number    : SSI13390FZT
Part Number      : 68-3301-06
Part Revision    : A0
Mfg Deviation    : 0
H/W Version      : 0.0
Mfg Bits         : 0
Engineer Use     : 0
snmpOID          : 9.12.3.1.3.719.0.0
Power Consump    : 0
RMA Code         : 0-0-0-0
CLEI Code        : COMXG00ARC
VID              : V04
Chassis specific block:
Block Signature  : 0x6001
Block Version    : 3

```

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```
--More--  
switch#
```

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

```
switch# show sprom fex 101 all
```

Related Commands

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

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show startup-config

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

show startup-config

Syntax Description This command has no arguments or keywords.

Command Default None

Command Modes EXEC mode

Command History	Release	Modification
	5.0(2)N1(1)	This command was introduced.

Examples This example shows how to display the startup configuration:

Need new output¹

```
switch# show startup-config

!Command: show startup-config
!Time: Tue Jul 13 06:14:51 2010
!Startup config saved at: Fri Jul 9 23:19:25 2010

version 4.2(1)N2(1)
feature fcoe
feature telnet
feature tacacs+
feature udd
feature interface-vlan
feature lacp
feature vpc
feature lldp
feature fex
snmp-server enable traps entity fru
role name default-role
  description This is a system defined role and applies to all users.
  rule 5 permit command feature environment
  rule 4 permit command feature hardware
  rule 3 permit command feature module
  rule 2 permit command feature snmp
  rule 1 permit command feature system
role name praveena
username admin password 5 $1$VrQsB2KX$4jkUcx3sXWU8lhI1mlwLa/ role network-admin
username oregon password 5 $1$p3VJ0/BY$Kp22A08NeqCQ0asxUKXq91 role network-oper
ator
--More--
switch#
```

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

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show switchname

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

```
show switchname
```

Syntax Description This command has no arguments or keywords.

Command Default None

Command Modes EXEC mode

Command History	Release	Modification
	5.0(2)N1(1)	This command was introduced.

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

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

```
switch# show switchname
```

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

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show system cores

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

```
show system cores
```

Syntax Description This command has no arguments or keywords.

Command Default None

Command Modes EXEC mode

Command History	Release	Modification
	5.0(2)N1(1)	This command was introduced.

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

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

```
switch# show system cores
Cores are transferred to tftp://192.168.2.5/tftpboot/
switch#
```

Related Commands	Command	Description
	system cores	Configures the system core filename.

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show system reset-reason

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

```
show system reset-reason [fex chassis_ID]
```

Syntax Description	fex chassis_ID (Optional) Specifies the Fabric Extender chassis ID. The chassis ID is from 100 to 199.				
Command Default	None				
Command Modes	EXEC mode				
Command History	<table border="1"> <thead> <tr> <th>Release</th> <th>Modification</th> </tr> </thead> <tbody> <tr> <td>5.0(2)N1(1)</td> <td>This command was introduced.</td> </tr> </tbody> </table>	Release	Modification	5.0(2)N1(1)	This command was introduced.
Release	Modification				
5.0(2)N1(1)	This command was introduced.				

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

Need new output¹

```
switch# show system reset-reason
----- reset reason for Supervisor-module 1 (from Supervisor in slot 1) ---
1) No time
   Reason: Unknown
   Service:
   Version: 4.2(1)N2(1)

2) No time
   Reason: Unknown
   Service:
   Version: 4.2(1)N2(1)

3) At 543557 usecs after Fri Jul  9 18:20:45 2010
   Reason: Reset due to upgrade
   Service:
   Version: 4.2(1)N1(1)

4) At 572283 usecs after Fri Jul  9 05:12:27 2010
   Reason: Reset due to upgrade
   Service:
   Version: 4.2(1)N2(1)

switch#
```

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

```
switch# show system reset-reason fex 100
----- reset reason for FEX 100 ---
```

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```
1) At 0 usecs after Unknown time
   Reset Reason: Unknown (0)
   Service (Additional Info):
   Image Version: 4.2(1)N2(1)

2) At 0 usecs after Unknown time
   Reset Reason: Unknown (0)
   Service (Additional Info):
   Image Version: 4.2(1)N2(1)

3) At 713709 usecs after Fri Jul  9 18:36:32 2010
   Reset Reason: Reset due to upgrade (88)
   Service (Additional Info): Reset due to upgrade
   Image Version: 4.2(1)N1(1)

4) At 702748 usecs after Fri Jul  9 05:27:06 2010
   Reset Reason: Reset due to upgrade (88)
   Service (Additional Info): Reset due to upgrade
   Image Version: 4.2(1)N2(1)

switch#
```

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show system resources

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

show system resources

Syntax Description This command has no arguments or keywords.

Command Default None

Command Modes Any command mode

Command History	Release	Modification
	5.0(2)N1(1)	This command was introduced.

Usage Guidelines This command does not require a license.

Examples This example shows how to display the system resources on a switch that runs Cisco NX-OS Release 5.0(3)N1(1):

```
switch(config)# show system resources
Load average:  1 minute: 3.31   5 minutes: 1.21   15 minutes: 0.58
Processes   : 270 total, 2 running
CPU states  : 4.0% user,   5.0% kernel,  91.1% idle
Memory usage: 2073416K total,  1386684K used,   686732K free

switch(config)#
```

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

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show system uptime

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

```
show system uptime
```

Syntax Description This command has no arguments or keywords.

Command Default None

Command Modes EXEC mode

Command History	Release	Modification
	5.0(2)N1(1)	This command was introduced.

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

```
switch# show system uptime
System start time:      Mon Jul 12 01:37:08 2010
System uptime:         1 days, 4 hours, 42 minutes, 19 seconds
Kernel uptime:        1 days, 4 hours, 44 minutes, 19 seconds
Active supervisor uptime: 1 days, 4 hours, 42 minutes, 19 seconds
switch#
```

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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.
<i>feature</i>	(Optional)	Specific feature name. Use the command-line interface (CLI) context-sensitive help (for example, show tech-support ?) for the list of features.

Command Default Displays information for all features.

Command Modes EXEC mode

Command History	Release	Modification
	5.0(2)N1(1)	This command was introduced.

Usage Guidelines The output from the **show tech-support** command is very long. To better manage this output, you can redirect the output to a file (for example, **show tech-support > filename**) in the local writable storage file system or the remote file system.

You can use one of the following redirection methods:

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

Examples This example shows how to display technical support information:

```
switch# show tech-support
---- show tech-support ----
`show switchname`
switch
`show system uptime`
System start time:      Mon Jul 12 01:37:08 2010
System uptime:         1 days, 4 hours, 42 minutes, 53 seconds
Kernel uptime:        1 days, 4 hours, 44 minutes, 54 seconds
Active supervisor uptime: 1 days, 4 hours, 42 minutes, 53 seconds
`show interface mgmt0`
mgmt0 is up
  Hardware: GigabitEthernet, address: 000d.ece7.df40 (bia 000d.ece7.df40)
  Internet Address is 192.168.1.215/24
  MTU 1500 bytes, BW 1000000 Kbit, DLY 10 usec,
    reliability 255/255, txload 1/255, rxload 1/255
```

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```

Encapsulation ARPA
full-duplex, 1000 Mb/s
1 minute input rate 5408 bits/sec, 4 packets/sec
1 minute output rate 1320 bits/sec, 1 packets/sec
Rx
  465934 input packets 311703 unicast packets 73820 multicast packets
  80411 broadcast packets 250277048 bytes
Tx
  158490 output packets 155374 unicast packets 1725 multicast packets
  1391 broadcast packets 13184030 bytes

`show system resources`
Load average:  1 minute: 2.28   5 minutes: 1.77   15 minutes: 1.30
--More--
switch#

```

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

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

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

Need new output

```

switch# show tech-support brief
Switch Name           : switch
Switch Type           : 40x10GE/Supervisor
Kickstart Image       : 4.2(1)N2(1) bootflash:/sanity-kickstart
System Image          : 4.2(1)N2(1) bootflash:/sanity-system
IP Address/Mask       : 192.168.1.215/24
No of VSANs           : 2
Configured VSANs     : 1,700

VSAN    1:    name:VSAN0001, state:active, interop mode:default
           domain id:0x78(120), WWN:20:01:00:0d:ec:e7:df:41 [Principal]
           active-zone:<NONE>, default-zone:deny

VSAN   700:   name:VSAN0700, state:active, interop mode:default
           domain id:0x35(53), WWN:22:bc:00:0d:ec:e7:df:41 [Principal]
           active-zone:<NONE>, default-zone:permit

```

```

-----
Interface  Vsan   Admin  Admin  Status           SFP   Oper  Oper  Port
          Mode   Mode   Trunk  Mode              Mode  Speed Channel
                               (Gbps)
-----
fc3/1     1       auto   on     sfpAbsent        --   --   --
fc3/2     1       auto   on     sfpAbsent        --   --   --
fc3/3     1       auto   on     down              swl   --   --
fc3/4     1       auto   on     down              swl   --   --
fc3/5     1       auto   on     sfpAbsent        --   --   --
--More--
switch#

```

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

```

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

!Command: show running-config aaa all
!Time: Tue Jul 13 06:23:49 2010

version 4.2(1)N2(1)

```

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```
aaa authentication login default local
aaa authorization config-commands default local
aaa authorization commands default local
aaa accounting default local
aaa user default-role
no aaa authentication login error-enable
no aaa authentication login mschap enable
no aaa authentication login mschapv2 enable
no aaa authentication login ascii-authentication
no radius-server directed-request
no tacacs-server directed-request

`show system internal aaa event-history msgs`
1) Event:E_MTS_RX, length:60, at 932934 usecs after Tue Jul 13 06:23:49 2010
   [REQ] Opc:MTS_OPC_SDWRAP_DEBUG_DUMP(1530), Id:0X011968A2, Ret:SUCCESS
   Src:0x00000101/7389, Dst:0x00000101/111, Flags:None
   HA_SEQNO:0X00000000, RRtoken:0x011968A2, Sync:UNKNOWN, Payloadsize:216
   Payload:
   0x0000:  01 00 2f 74 6d 70 2f 64 62 67 64 75 6d 70 31 39

--More--
switch#
```

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

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

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show terminal

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

show terminal

Syntax Description This command has no arguments or keywords.

Command Default None

Command Modes EXEC mode

Command History	Release	Modification
	5.0(2)N1(1)	This command was introduced.

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

```
switch# show terminal
TTY: /dev/pts/1 Type: "ansi"
Length: 29 lines, Width: 80 columns
Session Timeout: 0 minutes
Event Manager CLI event bypass: no
Redirection mode: ascii
switch#
```

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

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1

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

show version [**fex chassis_ID** | **image filename**]

Syntax Description	
fex chassis_ID	(Optional) Specifies the Fabric Extender chassis ID. The chassis ID is from 100 to 199.
image filename	(Optional) Displays the version information for a system or kickstart image file.

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

Command Modes EXEC mode

Command History	Release	Modification
	5.0(2)N1(1)	This command was introduced.

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

Need new output

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

Software
  BIOS:          version 1.3.0
  loader:        version N/A
  kickstart:     version 4.2(1)N2(1)
  system:        version 4.2(1)N2(1)
  power-seq:     version v1.2
  BIOS compile time:      09/08/09
  kickstart image file is: bootflash:/sanity-kickstart
  kickstart compile time: 7/28/2010 11:00:00 [07/07/2010 22:20:39]
  system image file is:   bootflash:/sanity-system
  system compile time:    7/28/2010 11:00:00 [07/07/2010 23:47:55]

Hardware
  cisco Nexus5020 Chassis ("40x10GE/Supervisor")
```

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```
Intel(R) Xeon(R) CPU          with 2074288 kB of memory.
Processor Board ID JAF1344BHNK
```

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

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

```
Last reset
Reason: Unknown
System version: 4.2(1)N2(1)
Service:
```

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

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

```
switch# show version fex 100
Software
  Bootloader version:      1.12
  System boot mode:       primary
  System image version:    4.2(1)N2(1) [build 4.2(1)N2(1)]

Hardware
  Module:                  Fabric Extender 48x1GE Module
  CPU:                     Motorola, e300c1
  Serial number:          JAF1302ABDP
  Bootflash:              locked
```

```
Kernel uptime is 0 day(s), 9 hour(s), 9 minutes(s), 16 second(s)
```

```
Last reset at Fri Jul 02 04:27:04 2010
Reason: Reset Requested by CLI command reload
Service: Reload requested by supervisor
switch#
```

This example shows how to display the version information for the kickstart and system image running on a device that runs Cisco NX-OS Release 5.0(2)N2(1):

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

Software
  BIOS:                    version 1.3.0
  loader:                  version N/A
  kickstart:               version 5.0(2)N2(1) [build 5.0(2)N2(1)]
  system:                  version 5.0(2)N2(1) [build 5.0(2)N2(1)]
  power-seq:               version v1.2
  BIOS compile time:      09/08/09
  kickstart image file is: bootflash:/sanity-kickstart
  kickstart compile time: 12/6/2010 7:00:00 [12/06/2010 07:35:14]
  system image file is:   bootflash:/sanity-system
  system compile time:    12/6/2010 7:00:00 [12/06/2010 08:56:45]
```

```
Hardware
```

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```
cisco Nexus5010 Chassis ("20x10GE/Supervisor")
Intel(R) Celeron(R) M CPU    with 2073416 kB of memory.
Processor Board ID JAF1228BTAS
```

```
Device name: BEND-2
bootflash:    1003520 kB
```

```
Kernel uptime is 0 day(s), 3 hour(s), 30 minute(s), 45 second(s)
```

```
Last reset
Reason: Unknown
System version:
Service:
```

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

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