Show Commands

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

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
6.0(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.

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
	6.0(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.

show cli alias

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

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

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

Command Default Displays all configured command alias variables.

Command Modes EXEC mode

Command History	Release	Modification
	6.0(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.

show cli history

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

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

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

Command Default Displays the entire formatted history.

Command Modes EXEC mode

Command History	Release	Modification
	6.0(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.

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
6.0(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.

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
	6.0(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.

show configuration session

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

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

Syntax Description

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

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
6.0(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 Jan 06 2013
==============================================================================

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 Jan 06 2013
```

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

Related Commands

Command	Description
configure session	Creates a configuration session.

show copyright

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

show copyright

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
6.0(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) 2002-2013, 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#
```

show debug logfile

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

show debug logfile *filename*

Syntax Description

filename	Name of the debug log file.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
6.0(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.

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
6.0(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       N6000-FAN            --         ok
Chassis-2       N6000-FAN            --         ok
Chassis-3       N6000-FAN            --         ok
Chassis-4       N6000-FAN            --         ok
PS-1            N55-PAC-1100W        --         ok
PS-2            N55-PAC-1100W        --         ok
PS-3            N55-PAC-1100W        --         ok
PS-4            --                   --         absent
PS-5            --                   --         absent
PS-6            --                   --         absent


Temperature
-----------------------------------------------------------------
Module   Sensor     MajorThresh   MinorThres   CurTemp     Status
                    (Celsius)     (Celsius)    (Celsius)
-----------------------------------------------------------------
0        Sup-Asic   95            90           29          ok
0        Internal-1 70            60           19          ok
0        Outlet-1   70            60           17          ok
1        Outlet-1   70            0            32          minor alarm
2        Outlet-1   70            0            29          minor alarm
3        Outlet-1   70            0            30          minor alarm
4        Outlet-1   70            0            32          minor alarm
5        Outlet-1   70            0            30          minor alarm
```

```
6        Outlet-1   70            0            28          minor alarm
7        Outlet-1   70            0            30          minor alarm
8        Outlet-1   70            0            27          minor alarm


Power Supply:
Voltage: 12 Volts
------------------------------------------------------------
PS  Model                Input Power       Current   Status
                         Type  (Watts)     (Amps)
------------------------------------------------------------
1   N55-PAC-1100W        AC    1050.00     87.50     ok
2   N55-PAC-1100W        AC    1050.00     87.50     ok
3   N55-PAC-1100W        AC    1050.00     87.50     ok
4   --                   --         --        --     absent
5   --                   --         --        --     absent
6   --                   --         --        --     absent


Mod Model                   Power     Current     Power     Current     Status
                            Requested Requested   Allocated Allocated
                            (Watts)   (Amps)      (Watts)   (Amps)
--- ----------------------  -------   ----------  --------- ----------  ----------
0    N6K-C6004-96Q-SUP      132.00    11.00       132.00    11.00       powered-up
1    N6K-FIXED-LEM          252.00    21.00       252.00    21.00       powered-up
2    N6K-FIXED-LEM          252.00    21.00       252.00    21.00       powered-up
3    N6K-FIXED-LEM          252.00    21.00       252.00    21.00       powered-up
4    N6K-FIXED-LEM          252.00    21.00       252.00    21.00       powered-up
5    N6K-C6004-M12Q         252.00    21.00       252.00    21.00       powered-up
6    N6K-C6004-M12Q         252.00    21.00       252.00    21.00       powered-up
7    N6K-C6004-M12Q         252.00    21.00       252.00    21.00       powered-up
8    N6K-C6004-M12Q         252.00    21.00       252.00    21.00       powered-up


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

Total Power Capacity                             3150.00 W

Power reserved for Supervisor(s)                  132.00 W
Power currently used by Modules                  2016.00 W

                                                -------------
Total Power Available                             1002.00 W
                                                -------------
switch#
```

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
6.0(2)N1(1)	This command was introduced.

Examples

This example shows how to display the state of all features on a switch:

```
switch# show feature
Feature Name          Instance  State
--------------------  --------  --------
Flexlink              1         disabled
amt                   1         disabled
bgp                   1         disabled
cts                   1         enabled
dhcp                  1         disabled
dot1x                 1         enabled
eigrp                 1         disabled
eigrp                 2         disabled
eigrp                 3         disabled
eigrp                 4         disabled
eth_port_sec          1         enabled
fcoe                  1         disabled
fcoe-npv              1         disabled
fex                   1         disabled
glbp                  1         disabled
hsrp_engine           1         enabled
interface-vlan        1         enabled
isis                  1         disabled
isis                  2         disabled
isis                  3         disabled
isis                  4         disabled
lacp                  1         enabled
ldap                  1         disabled
lldp                  1         enabled
msdp                  1         disabled
oim                   1         disabled
ospf                  1         enabled
ospf                  2         enabled (not-running)
ospf                  3         enabled (not-running)
ospf                  4         enabled (not-running)
ospfv3                1         enabled
```

```
ospfv3                2         enabled (not-running)
ospfv3                3         enabled (not-running)
ospfv3                4         enabled (not-running)
pbr                   1         disabled
pim                   1         enabled
poe                   1         disabled
private-vlan          1         enabled
privilege             1         disabled
ptp                   1         disabled
rip                   1         disabled
rip                   2         disabled
rip                   3         disabled
rip                   4         disabled
scpServer             1         disabled
sftpServer            1         disabled
sshServer             1         enabled
tacacs                1         enabled
telnetServer          1         enabled
udld                  1         enabled
vem                   1         disabled
vpc                   1         enabled
vrrp                  1         disabled
vtp                   1         disabled
switch#
```

Related Commands

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

show file

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

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

Syntax Description

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

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

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
6.0(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.

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
6.0(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.

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
6.0(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.

show incompatibility system

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

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

Syntax Description

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

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

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
6.0(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.

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
6.0(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
Verifying image bootflash:/n6000-uk9-kickstart.6.0.2.N1.0.368.5P.bin.v1 for boot variable
"kickstart".
[####################] 100% -- SUCCESS

Verifying image bootflash:/n6000-uk9.6.0.2.N1.0.368.5P.bin.v1 for boot variable "system".
[####################] 100% -- SUCCESS

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

Extracting "system" version from image bootflash:/n6000-uk9.6.0.2.N1.0.368.5P.bin.v1.
[####################] 100% -- SUCCESS

Extracting "kickstart" version from image
bootflash:/n6000-uk9-kickstart.6.0.2.N1.0.368.5P.bin.v1.
[####################] 100% -- SUCCESS
```

```
Extracting "bios" version from image bootflash:/n6000-uk9.6.0.2.N1.0.368.5P.bin.v1.
[####################] 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
------  --------  --------------  ------------  ------
     0       yes  non-disruptive          none
     1       yes  non-disruptive       rolling



Images will be upgraded according to following table:
Module            Image         Running-Version             New-Version  Upg-Required
------  ---------------  ----------------------  ----------------------  ------------
     0           system              6.0(2)N1(1)             6.0(2)N1(1)            no
     0        kickstart              6.0(2)N1(1)             6.0(2)N1(1)            no
     0             bios      v2.6.0(11/21/2012)      v2.6.0(11/21/2012)            no
     0        power-seq                    v3.0                    v3.0            no
     0   xbar-power-seq                    v1.0                    v1.0            no
     1        power-seq                    v2.0                    v2.0            no
     0               uC                 v1.1.0.3                v1.1.0.3            no


Additional info for this installation:
--------------------------------------
Remove QoS & ACL config on L3 interfaces and SVIs if any

Service "stp" : Port: port-channel200 in MST0000 is Designated. Topology change could
occur during ISSU.
Upgrade needs to be disruptive!!!

Service "vpc" : STP Preupgrade Check failed on VPC peer switch
```

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#
```

Related Commands

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

show inventory

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

show inventory [**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
6.0(2)N1(1)	This command was introduced.

Examples

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

```
switch# show inventory

Fan:
----------------------------------------------------
Fan             Model                Hw         Status
----------------------------------------------------
Chassis-1       N6000-FAN            --         ok
Chassis-2       N6000-FAN            --         ok
Chassis-3       N6000-FAN            --         ok
Chassis-4       N6000-FAN            --         ok
PS-1            N55-PAC-1100W        --         ok
PS-2            N55-PAC-1100W        --         ok
PS-3            N55-PAC-1100W        --         ok
PS-4            --                   --         absent
PS-5            --                   --         absent
PS-6            --                   --         absent


Temperature
-------------------------------------------------------------------
Module   Sensor     MajorThresh   MinorThres   CurTemp     Status
                    (Celsius)     (Celsius)    (Celsius)
-------------------------------------------------------------------
0        Sup-Asic   95            90           29          ok
0        Internal-1 70            60           19          ok
0        Outlet-1   70            60           17          ok
1        Outlet-1   70            0            32          minor alarm
2        Outlet-1   70            0            29          minor alarm
3        Outlet-1   70            0            30          minor alarm
4        Outlet-1   70            0            32          minor alarm
5        Outlet-1   70            0            30          minor alarm
```

```
6        Outlet-1   70            0            28          minor alarm
7        Outlet-1   70            0            30          minor alarm
8        Outlet-1   70            0            27          minor alarm


Power Supply:
Voltage: 12 Volts
------------------------------------------------------------
PS  Model                Input Power       Current   Status
                         Type  (Watts)     (Amps)
------------------------------------------------------------
1   N55-PAC-1100W        AC    1050.00     87.50     ok
2   N55-PAC-1100W        AC    1050.00     87.50     ok
3   N55-PAC-1100W        AC    1050.00     87.50     ok
4   --                   --         --        --     absent
5   --                   --         --        --     absent
6   --                   --         --        --     absent


Mod Model                   Power     Current     Power     Current     Status
                            Requested Requested   Allocated Allocated
                            (Watts)   (Amps)      (Watts)   (Amps)
--- ----------------------  -------   ----------  --------- ----------  ----------
0    N6K-C6004-96Q-SUP      132.00    11.00       132.00    11.00       powered-up
1    N6K-FIXED-LEM          252.00    21.00       252.00    21.00       powered-up
2    N6K-FIXED-LEM          252.00    21.00       252.00    21.00       powered-up
3    N6K-FIXED-LEM          252.00    21.00       252.00    21.00       powered-up
4    N6K-FIXED-LEM          252.00    21.00       252.00    21.00       powered-up
5    N6K-C6004-M12Q         252.00    21.00       252.00    21.00       powered-up
6    N6K-C6004-M12Q         252.00    21.00       252.00    21.00       powered-up
7    N6K-C6004-M12Q         252.00    21.00       252.00    21.00       powered-up
8    N6K-C6004-M12Q         252.00    21.00       252.00    21.00       powered-up


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

Total Power Capacity                             3150.00 W

Power reserved for Supervisor(s)                  132.00 W
Power currently used by Modules                  2016.00 W

                                                -------------
Total Power Available                             1002.00 W
                                                -------------
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.

show license

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

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

Syntax Description

brief	(Optional) Displays a list of license files installed on a device.
default	(Optional) Displays the services that use the default license.
file *filename*	(Optional) Displays information for a specific license file.

Command Default

Displays information about the installed licenses.

Command Modes

EXEC mode

Command History

Release	Modification
6.0(2)N1(1)	This command was introduced.

Examples

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

```
switch# show license file enhanced_layer2_pkg.lic
enhanced_layer2_pkg.lic:
SERVER this_host ANY
VENDOR cisco
FEATURE ENHANCED_LAYER2_PKG cisco 1.0 permanent uncounted \
        HOSTID=VDH=FOC1621R00U \
        NOTICE="<LicFileID>enhanced_layer2_pkg.lic</LicFileID><LicLineID>0</Lic
LineID> \
        <PAK></PAK>" SIGN=B9B981D2F4E2
switch#
```

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

```
switch# show license brief
enhanced_layer2_pkg.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
l3.lic:
SERVER this_host ANY
VENDOR cisco
FEATURE LAN_ENTERPRISE_SERVICES_PKG cisco 1.0 permanent uncounted \
        HOSTID=VDH=FOC1621R00U \
        NOTICE="<LicFileID>lan_base_and_lan_enterprise_services_pkg.lic</LicFil
eID><LicLineID>0</LicLineID> \
        <PAK></PAK>" SIGN=F23A3CB8C826
FEATURE LAN_BASE_SERVICES_PKG cisco 1.0 permanent uncounted \
        HOSTID=VDH=FOC1621R00U \
        NOTICE="<LicFileID>lan_base_and_lan_enterprise_services_pkg.lic</LicFil
eID><LicLineID>1</LicLineID> \
        <PAK></PAK>" SIGN=FE0C687AF058

enhanced_layer2_pkg.lic:
SERVER this_host ANY
VENDOR cisco
FEATURE ENHANCED_LAYER2_PKG cisco 1.0 permanent uncounted \
        HOSTID=VDH=FOC1621R00U \
        NOTICE="<LicFileID>enhanced_layer2_pkg.lic</LicFileID><LicLineID>0</Lic
LineID> \
        <PAK></PAK>" SIGN=B9B981D2F4E2

switch#
```

Related Commands

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

show license host-id

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

show license host-id

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
6.0(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.

show license usage

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

show license usage [*PACKAGE*]

Syntax Description

PACKAGE	(Optional) List of licensed features in use for the specified license package.

Command Default

Displays license usage for the switch.

Command Modes

EXEC mode

Command History

Release	Modification
6.0(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
--------------------------------------------------------------------------------
FCOE_NPV_PKG                  No    -   Unused             Grace 119D 22H
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.

Table 1 show license usage Columns (continued)

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

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

```
switch# show license usage FC_FEATURES_PKG
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.

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
	6.0(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 -
```

```
        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.

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
6.0(2)N1(1)	This command was introduced.

Examples

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

```
switch# show module
Mod Ports Module-Type                       Model                 Status
--- ----- --------------------------------- --------------------- ------------
0   0     Norcal 384 Supervisor             N6K-C6004-96Q-SUP     active *
1   48    Norcal Ethernet Module            N6K-C6004-M12Q-FIX    ok

Mod  Sw              Hw      World-Wide-Name(s) (WWN)
---  --------------  ------  --------------------------------------------------
0    6.0(2)N1(1)     1.0     --
1    6.0(2)N1(1)     1.0     --

Mod  MAC-Address(es)                         Serial-Num
---  --------------------------------------  ----------
0    547f.eea6.f648 to 547f.eea6.f667         FOC16192WJZ
1    a44c.11e7.c450 to a44c.11e7.c45f         FOC16191MQ1
switch#
```

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

```
switch# show module 1
Mod Ports Module-Type                       Model                 Status
--- ----- --------------------------------- --------------------- ------------
1   48    Norcal Ethernet Module            N6K-C6004-M12Q-FIX    ok

Mod  Sw              Hw      World-Wide-Name(s) (WWN)
---  --------------  ------  --------------------------------------------------
1    6.0(2)N1(1)     1.0     --

Mod  MAC-Address(es)                         Serial-Num
```

```
---  -------------------------------------  ----------
1    a44c.11e7.c450 to a44c.11e7.c45f         FOC16191MQ1
switch#
```

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

```
switch# show module fex 111
FEX Mod Ports Card Type                          Model              Status
--- --- ----- -------------------------------- ------------------ -----------
111 1   48    Fabric Extender 48x1GE + 4x10G Module   N2K-C2248TP-1GE    present

FEX Mod Sw              Hw      World-Wide-Name(s) (WWN)
--- --- --------------  ------  --------------------------------------------------
111 1   6.0(2)N1(1)     4.3     --

FEX Mod  MAC-Address(es)                         Serial-Num
--- ---  --------------------------------------  ----------
111 1    a456.300b.0140 to a456.300b.016f        SSI15450FZSswitch#
6.0(2)N1(1)
```

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
--- --- ----- -------------------------------- ------------------ -----------
111 1   48    Fabric Extender 48x1GE + 4x10G Module   N2K-C2248TP-1GE    present

FEX Mod Sw              Hw      World-Wide-Name(s) (WWN)
--- --- --------------  ------  --------------------------------------------------
111 1   6.0(2)N1(1)     4.3     --

FEX Mod  MAC-Address(es)                         Serial-Num
--- ---  --------------------------------------  ----------
111 1    a456.300b.0140 to a456.300b.016f        SSI15450FZS
switch#
```

Related Commands

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

show processes

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

show processes

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
6.0(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_eh_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
```

```
 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.

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
6.0(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_eh_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
```

```
 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.

show processes log

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

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

Syntax Description

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

Command Default

Displays summary information for all processes on the device.

Command Modes

EXEC mode

Command History

Release	Modification
6.0(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
---------------  ------  -----------  -----  -----  ---------------
adjmgr           3684              N      Y      N  Mon Oct 22 02:42:36 2012
bigsurusd        3650              N      Y      N  Thu Oct 18 20:04:39 2012
bigsurusd        3656              N      Y      N  Thu Oct 18 19:32:03 2012
ethpc            3642              N      Y      N  Mon Oct 22 02:40:31 2012
fwm              3649              N      Y      N  Wed Sep 19 18:26:55 2012
fwm              3655              N      Y      N  Tue Sep 18 21:44:49 2012
fwm              3661              N      Y      N  Wed Sep 19 12:05:50 2012
fwm              3665              N      Y      N  Tue Sep 18 19:34:38 2012
fwm              3668              N      Y      N  Wed Sep 19 20:20:14 2012
fwm              3687              N      Y      N  Fri Nov  2 22:07:54 2012
fwm              3694              N      Y      N  Sat Nov 24 00:09:58 2012
fwm              3712              N      Y      N  Fri Oct 19 18:24:14 2012
fwm              3721              N      Y      N  Thu Oct 18 19:32:53 2012
pfstat           3629              N      Y      N  Mon Oct 22 02:43:18 2012
snmpd            3741              N      Y      N  Mon Oct 22 02:42:44 2012
vlan_mgr         3874              N      Y      N  Tue Dec 18 15:25:46 2012
vsh              18527             N      N      N  Wed Oct 17 11:23:23 2012
switch#
```

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

```
switch# show processes log details
==================================================
Service: adjmgr
Description: Adjacency Manager
Executable: /isan/bin/routing-sw/am

Started at Sun Oct 21 14:47:11 2012 (67548 us)
```

```
Stopped at Mon Oct 22 02:42:36 2012 (404404 us)
Uptime: 11 hours 55 minutes 25 seconds

Start type: SRV_OPTION_RESTART_STATELESS (23)
Death reason: SYSMGR_DEATH_REASON_FAILURE_HEARTBEAT (9)
Last heartbeat 61.08 secs ago
RLIMIT_AS: 560052518
System image name: n5000-uk9.6.0.2.N1.0.335.bin
System image version: 6.0(2)N1(0.335) S0

PID: 3729
Exit code: signal 6 (no core)

Threads: 3719 3716 3684 3717 4057 3775 3774 3766

CWD: /var/sysmgr/work

RLIMIT_AS:      560052518

Virtual Memory:

    CODE      08048000 - 08097A80
    DATA      08098A80 - 0809A308
    BRK       080C1000 - 081CA000
    STACK     7FE64370
    TOTAL     260936 KB

Memory Map: 08048000 a 08098000 a 4143F000 ld-2.8.s 41459000 ld-2.8.s 4145A000 ld-2.8.s
4145D000 libc-2.8.
s 41596000 libc-2.8.s 41598000 libc-2.8.s 4159E000 libdl-2.8.s 415A0000 libdl-2.8.s
415A1000 libdl-2.8.s 4
15BE000 libpthread-2.8.s 415D2000 libpthread-2.8.s 415D3000 libpthread-2.8.s 415D8000
libm-2.8.s 415FC000
libm-2.8.s 415FD000 libm-2.8.s 41600000 libtinfo.so.5. 41615000 libtinfo.so.5. 41634000
librt-2.8.s 4163B0
00 librt-2.8.s 4163C000 librt-2.8.s 41654000 libz.so.1.2. 41666000 libz.so.1.2. 50000000
rsw:shm:sm 531200
00 rsw:shm:a 53230000 rsw:shm:u6ri 53330000 dev/zer 54240000 rsw:shm:u6rib-notif 54860000
rsw:shm:uri 5496
0000 dev/zer 5A280000 rsw:shm:urib-redis 5B0C0000 rsw:shm:i 6C8C4000 sem.urib-api-00
6C945000 sem.u6rib-ap
i-00 6CA26000 mts 6EA26000 libmtsdlutils.so.0.0. 6EA27000 libmtsdlutils.so.0.0. 6EA28000
rwse 6EF2F000 lib
ufdmstatsapi.so.0.0. 6EF30000 libufdmstatsapi.so.0.0. 6EF31000 liboim.so.0.0. 6EF3D000
liboim.so.0.0. 6EFA
1000 libtmifdb.so.0.0. 6EFA3000 libtmifdb.so.0.0. 6EFA4000 libtmifdb_stub.so.0.0. 6EFA6000
libtmifdb_stub.
so.0.0. 6EFA7000 libncurses.so.5. 6EFC4000 libncurses.so.5. 6EFE4000 libsatcfg.so.0.0.
6EFF1000 libsatcfg.
so.0.0. 6F072000 libvsh_util.so.0.0. 6F077000 libvsh_util.so.0.0. 6F078000
libprocjob.so.0.0. 6F07E000 lib
procjob.so.0.0. 6F08F000 libuspace_utils.so.0.0. 6F091000 libuspace_utils.so.0.0. 6F092000
libsatmgr.so.0.
0. 6F09C000 libsatmgr.so.0.0. 6F09D000 libsatmgr_stub.so.0.0. 6F0A0000
libsatmgr_stub.so.0.0. 6F0A1000 lib
pcm_sdb.so.0.0. 6F0A6000 libpcm_sdb.so.0.0. 6F0A7000 libethpm.so.0.0. 6F0D1000
libethpm.so.0.0. 6F0D6000 l
ibsviifdb.so.0.0. 6F0D8000 libsviifdb.so.0.0. 6F0DB000 libcrdcfgnuova.so.0.0. 6F943000
libcrdcfgnuova.so.0
.0. 7700C000 libpixm.so.0.0. 77027000 libpixm.so.0.0. 77029000 libethpm_gldb.so.0.0.
7702C000 libethpm_gld
b.so.0.0. 7702D000 libfsmutils.so.0.0. 7702E000 libfsmutils.so.0.0. 7702F000
libmcm.so.0.0. 7703B000 libmc
```

```
m.so.0.0. 7703D000 libqosmgr.so.0.0. 77045000 libqosmgr.so.0.0. 77052000 libcrack.so.2.8.
77058000 libcrac
--More--
switch#
```

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

```
switch# show processes log pid 3650
==========================================================
Service: bigsurusd
Description: Bigsur user space driver
Executable: /isan/bin/bigsurusd

Started at Thu Oct 18 19:38:03 2012 (505482 us)
Stopped at Thu Oct 18 20:04:39 2012 (206756 us)
Uptime: 26 minutes 36 seconds

Start type: SRV_OPTION_RESTART_STATELESS (23)
Death reason: SYSMGR_DEATH_REASON_FAILURE_SIGNAL (2)
Last heartbeat 0.00 secs ago
RLIMIT_AS: 468996352
System image name: n6000-uk9.6.0.2.N1.0.335.bin
System image version: 6.0(2)N1(0.335) S0

PID: 3650
Exit code: signal 11 (core dumped)

CWD: /var/sysmgr/work

RLIMIT_AS:      4294967295

Virtual Memory:

    CODE      08048000 - 0843EE38
    DATA      0843F000 - 085219B8
    BRK       0C0A2000 - 0C28B000
    STACK     7FC3C7E0
    TOTAL     469344 KB

Memory Map: 08048000 bigsurus 0843F000 bigsurus 4145D000 libc-2.8.s 41596000 libc-2.8.s
41598000 libc-2.8.
s 4159E000 libdl-2.8.s 415A0000 libdl-2.8.s 415A1000 libdl-2.8.s 415BE000 libpthread-2.8.s
415D2000 libpth
read-2.8.s 415D3000 libpthread-2.8.s 415D8000 libm-2.8.s 415FC000 libm-2.8.s 415FD000
libm-2.8.s 41600000
libtinfo.so.5. 41615000 libtinfo.so.5. 41634000 librt-2.8.s 4163B000 librt-2.8.s 4163C000
librt-2.8.s 4165
4000 libz.so.1.2. 41666000 libz.so.1.2. 5F8FF000 me 618FF000 me 638FF000 me 658FF000 me
678FF000 kbigsu 67
900000 kbigsu 679A4000 kbigsu 679B9000 kbigsu 679D9000 kbigsu 679F9000 kbigsu 67A19000
kbigsu 67A39000 kbi
gsu 67A59000 kbigsu 67A79000 kbigsu 67A99000 kbigsu 67AB9000 kbigsu 67AD9000 kbigsu
67AF9000 kbigsu 67B190
00 kbigsu 67B39000 kbigsu 67B59000 kbigsu 67B79000 kbigsu 67B99000 kbigsu 67BB9000 kbigsu
67BD9000 kbigsu
67BF9000 kbigsu 67C19000 kbigsu 67C39000 kbigsu 67C59000 kbigsu 67C79000 kbigsu 67C99000
kbigsu 67CB9000 k
bigsu 67CD9000 kbigsu 67CF9000 kbigsu 67D19000 kbigsu 67D39000 kbigsu 67D59000 kbigsu
67D79000 kbigsu 67D9
9000 kbigsu 67DB9000 kbigsu 67DD9000 kbigsu 67DF9000 kbigsu 6860A000 me 6BDA8000
libsyserr-data.so.0.0. 6B
EB0000 libsyserr-data.so.0.0. 6BEDB000 mts 6DEDB000 libmtsdlutils.so.0.0. 6DEDC000
libmtsdlutils.so.0.0. 6
```

```
E5E8000 liboim.so.0.0. 6E5F4000 liboim.so.0.0. 6E658000 libtmifdb.so.0.0. 6E65A000
libtmifdb.so.0.0. 6E65B
000 libtmifdb_stub.so.0.0. 6E65D000 libtmifdb_stub.so.0.0. 6E65E000 libncurses.so.5.
6E67B000 libncurses.s
o.5. 6E69B000 libsatcfg.so.0.0. 6E6A8000 libsatcfg.so.0.0. 6E729000 libvsh_util.so.0.0.
6E72E000 libvsh_ut
il.so.0.0. 6E72F000 libprocjob.so.0.0. 6E735000 libprocjob.so.0.0. 6E746000
libuspace_utils.so.0.0. 6E7480
00 libuspace_utils.so.0.0. 6E749000 libsatmgr.so.0.0. 6E753000 libsatmgr.so.0.0. 6E754000
libsatmgr_stub.s
o.0.0. 6E757000 libsatmgr_stub.so.0.0. 6E758000 libpcm_sdb.so.0.0. 6E75D000
libpcm_sdb.so.0.0. 6E75E000 li
bethpm.so.0.0. 6E788000 libethpm.so.0.0. 6E78D000 libsviifdb.so.0.0. 6E78F000
libsviifdb.so.0.0. 6E792000
libpixm.so.0.0. 6E7AD000 libpixm.so.0.0. 6E7AF000 libethpm_gldb.so.0.0. 6E7B2000
libethpm_gldb.so.0.0. 6E7
B3000 libfsmutils.so.0.0. 6E7B4000 libfsmutils.so.0.0. 6E7B5000 libmcm.so.0.0. 6E7C1000
libmcm.so.0.0. 6E7
--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.

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
6.0(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         mtdblockd
  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#
```

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-redist               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.

show running-config

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

show running-config [**all**]

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

Command Default Displays only the configured information.

Command Modes EXEC mode

Command History	Release	Modification
	6.0(2)N1(1)	This command was introduced.

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

```
switch# show running-config

!Command: show running-config
!Time: Tue Jan  8 19:49:33 2013

version 6.0(2)N1(1)
interface breakout slot 1 port 1-12 map 10g-4x

install feature-set fabricpath
hostname agg-sw0

feature telnet
feature tacacs+
cfs eth distribute
feature ospf
feature ospfv3
feature pim
feature private-vlan
feature port-security
feature udld
feature interface-vlan
feature dot1x
feature hsrp
feature lacp
feature cts
cts role-based access-list c1_deny_all
  deny tcp
  deny udp
  deny all
feature vpc
feature lldp

logging level dot1x 3
username admin password 5 $1$jqhHivzm$jZ9Ezv2pYOTgUzMylRvPC.  role network-admin
```

```
username u1 password 5 !  role network-operator
no password strength-check

banner motd #Nexus 6000 Switch
#

ip domain-lookup
aaa group server radius aaa-private-sg
logging event link-status default
errdisable recovery interval 30
errdisable recovery cause udld
ip access-list copp-system-acl-bgp
  10 permit tcp any gt 1024 any eq bgp
  20 permit tcp any eq bgp any gt 1024
ipv6 access-list copp-system-acl-bgp6
  10 permit tcp any gt 1024 any eq bgp
--More--
```

Related Commands

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

show running-config diff

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

show running-config diff

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
6.0(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
```

```
+   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.

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.
chassis_ID	(Optional) Fabric Extender chassis ID. The chassis ID is from 100 to 199.
module *module-number*	Displays the SPROM contents for an I/O module. The module number range is from 1 to 3.
powersupply *ps-num*	Displays the SPROM contents for a power supply module 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
6.0(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  : 0x16af
 EEPROM Size     : 65535
 Block Count     : 4
 FRU Major Type  : 0x6001
 FRU Minor Type  : 0x0
 OEM String      : Cisco Systems, Inc.
 Product Number  : N6K-C6004-96Q
 Serial Number   : FOC1621XXXX
```

```
 Part Number     : 68-4623-01
 Part Revision   : 13
 Mfg Deviation   : 0
 H/W Version     : 0.0
 Mfg Bits        : 0
 Engineer Use    : 0
 snmpOID         : 9.12.3.1.3.1237.0.0
 Power Consump   : 0
 RMA Code        : 0-0-0-0
 CLEI Code       : 0000000000
 VID             : V00
Chassis specific block:
 Block Signature : 0x6001
 Block Version   : 3
 Block Length    : 39
 Block Checksum  : 0x4c7
 Feature Bits    : 0x0
 HW Changes Bits : 0x0
 Stackmib OID    : 0
 MAC Addresses   : 54-7f-ee-a2-f2-40
 Number of MACs  : 64
 OEM Enterprise  : 0
 OEM MIB Offset  : 0
 MAX Connector Power: 8000
WWN software-module specific block:
 Block Signature : 0x6005
 Block Version   : 1
 Block Length    : 0
 Block Checksum  : 0x66
wwn usage bits:
 00 00 00 00 00 00 00 00
 00 00 00 00 00 00 00 00
 00 00 00 00 00 00 00 00
--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  : 0x16af
 EEPROM Size     : 65535
 Block Count     : 4
 FRU Major Type  : 0x6001
 FRU Minor Type  : 0x0
 OEM String      : Cisco Systems, Inc.
 Product Number  : N6K-C6004-96Q
 Serial Number   : FOC1621R00U
 Part Number     : 68-4623-01
 Part Revision   : 13
 Mfg Deviation   : 0
 H/W Version     : 0.0
 Mfg Bits        : 0
 Engineer Use    : 0
 snmpOID         : 9.12.3.1.3.1237.0.0
 Power Consump   : 0
 RMA Code        : 0-0-0-0
 CLEI Code       : 0000000000
 VID             : V00
Chassis specific block:
```

```
 Block Signature : 0x6001
 Block Version   : 3
 Block Length    : 39
 Block Checksum  : 0x4c7
 Feature Bits    : 0x0
 HW Changes Bits : 0x0
 Stackmib OID    : 0
 MAC Addresses   : 54-7f-ee-a6-f6-40
 Number of MACs  : 64
 OEM Enterprise  : 0
 OEM MIB Offset  : 0
 MAX Connector Power: 8000
WWN software-module specific block:
 Block Signature : 0x6005
 Block Version   : 1
 Block Length    : 0
 Block Checksum  : 0x66
wwn usage bits:
 00 00 00 00 00 00 00 00
 00 00 00 00 00 00 00 00
 00 00 00 00 00 00 00 00
 00 00 00 00 00 00 00 00
 00 00 00 00 00 00 00 00
 00 00 00 00 00 00 00 00
 00 00 00 00 00 00 00 00
 00 00 00 00 00 00 00 00
--more--
switch#
```

Related Commands

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

show startup-config

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

show startup-config

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
6.0(2)N1(1)	This command was introduced.

Examples

This example shows how to display the startup configuration:

```
switch# show startup-config
!Command: show startup-config
!Time: Tue Jan  8 20:58:03 2013
!Startup config saved at: Fri Jan  4 16:37:26 2013

version 6.0(2)N1(1)
interface breakout slot 1 port 1-12 map 10g-4x

install feature-set fabricpath
hostname agg-sw0

feature telnet
feature tacacs+
cfs eth distribute
feature ospf
feature ospfv3
feature pim
feature private-vlan
feature port-security
feature udld
feature interface-vlan
feature dot1x
feature hsrp
feature lacp
feature cts
cts role-based access-list c1_deny_all
  deny tcp
  deny udp
  deny all
feature vpc
feature lldp

logging level dot1x 3
username admin password 5 $1$jqhHivzm$jZ9Ezv2pYOTgUzMylRvPC.  role network-admin
```

```
username u1 password 5 !  role network-operator
no password strength-check

banner motd #Nexus 6000 Switch
#

ip domain-lookup
aaa group server radius aaa-private-sg
logging event link-status default
errdisable recovery interval 30
errdisable recovery cause udld
ip access-list copp-system-acl-bgp
  10 permit tcp any gt 1024 any eq bgp
  20 permit tcp any eq bgp any gt 1024
ipv6 access-list copp-system-acl-bgp6
  10 permit tcp any gt 1024 any eq bgp
  20 permit tcp any eq bgp any gt 1024
ip access-list copp-system-acl-cts
  10 permit tcp any any eq 64999
_
```

Related Commands!

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

show switchname

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

show switchname

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
6.0(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.

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
6.0(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.

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

Release	Modification
6.0(2)N1(1)	This command was introduced.

Examples

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

```
switch# show system reset-reason
----- reset reason for Supervisor-module 1 (from Supervisor in slot 1) ---
1) At 907240 usecs after Mon Jan  7 20:55:27 2013
    Reason: Reset Requested by CLI command reload
    Service:
    Version: 6.0(2)N1(1)

2) At 709569 usecs after Mon Jan  7 19:38:20 2013
    Reason: Reset Requested by CLI command reload
    Service:
    Version: 6.0(2)N1(1)

3) At 439120 usecs after Mon Jan  7 18:21:43 2013
    Reason: Reset Requested by CLI command reload
    Service:
    Version: 6.0(2)N1(1)

4) At 286007 usecs after Mon Jan  7 16:49:42 2013
    Reason: Reset Requested by CLI command reload
    Service:
    Version: 6.0(2)N1(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 ---

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#
```

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
6.0(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:

```
switch(config)# show system resources
Load average:   1 minute: 1.56   5 minutes: 0.96   15 minutes: 0.91
Processes   :   401 total, 2 running
CPU states  :   10.1% user,   12.9% kernel,   77.0% idle
Memory usage:   8248484K total,   3381644K used,   4866840K free

switch(config)#
```

Related Commands

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

show system uptime

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

show system uptime

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
6.0(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#
```

show tech-support

To display information for Cisco technical support, use the **show tech-support** command.

show tech-support [**brief** | **commands** | *feature*]

Syntax Description

brief	(Optional) Displays information only about the status of the device.
commands	(Optional) Displays the complete list of commands that are executed by the **show tech-support** command.
feature	(Optional) Specific feature name. Use the command-line interface (CLI) context-sensitive help (for example, **show tech-support ?**) for the list of features.

Command Default

Displays information for all features.

Command Modes

EXEC mode

Command History

Release	Modification
6.0(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
```

```
  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 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 Jan  8 21:06:25 2013

version 6.0(2)N1(1)
aaa authentication login default local
aaa authorization ssh-publickey default local
aaa authorization ssh-certificate default local
aaa authorization config-commands default local
aaa authorization commands default local
aaa authorization config-commands console local
aaa authorization commands console local
aaa accounting default local
aaa user default-role
aaa authentication login default fallback error local
aaa authentication login console fallback error local
no aaa authentication login error-enable
no aaa authentication login mschap enable
no aaa authentication login mschapv2 enable
no aaa authentication login chap enable
no aaa authentication login ascii-authentication
no radius-server directed-request
no tacacs-server directed-request


`show system internal aaa event-history msgs`

1) Event:E_MTS_RX, length:60, at 403880 usecs after Tue Jan  8 21:06:25 2013
    [REQ] Opc:MTS_OPC_SDWRAP_DEBUG_DUMP(1530), Id:0X099A0F66, Ret:SUCCESS
    Src:0x00001201/20407, Dst:0x00001201/111, Flags:None
    HA_SEQNO:0X00000000, RRtoken:0x099A0F66, Sync:UNKNOWN, Payloadsize:216
    Payload:
    0x0000:  01 00 2f 74 6d 70 2f 64 62 67 64 75 6d 70 32 39


2) Event:E_MTS_RX, length:60, at 367644 usecs after Tue Jan  8 21:06:25 2013
    [NOT] Opc:MTS_OPC_VSH_ACFG_GEN(7663), Id:0X099A0EAD, Ret:SUCCESS
    Src:0x00001201/20406, Dst:0x00001201/111, Flags:None
    HA_SEQNO:0X00000000, RRtoken:0x00000000, Sync:UNKNOWN, Payloadsize:7108
```

```
    Payload:
    0x0000:  b6 4f 00 00 00 02 00 00 ff ff ff ff ff ff ff ff


3) Event:E_MTS_TX, length:48, at 162674 usecs after Tue Jan  8 21:06:25 2013
    [RSP] Opc:MTS_OPC_ACCOUNTING_START_SESSION(150), Id:0X099A0CBA, Ret:SUCCESS
    Src:0x00001201/182, Dst:0x00001201/20404, Flags:None
    HA_SEQNO:0X00000000, RRtoken:0x099A0CB9, Sync:UNKNOWN, Payloadsize:4
    Payload:
    0x0000:  00 00 00 00


--More--
switch#
```

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

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

show terminal

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

show terminal

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
6.0(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.

show version

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

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

Syntax Description

fex *chassis_ID*	(Optional) Specifies the Fabric Extender chassis ID. 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
6.0(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:

```
switch# show version
Cisco Nexus Operating System (NX-OS) Software
TAC support: http://www.cisco.com/tac
Documents: http://www.cisco.com/en/US/products/ps9372/tsd_products_support_serie
s_home.html
Copyright (c) 2002-2012, Cisco Systems, Inc. All rights reserved.
The copyrights to certain works contained herein are owned by
other third parties and are used and distributed under license.
Some parts of this software are covered under the GNU Public
License. A copy of the license is available at
http://www.gnu.org/licenses/gpl.html.

Software
  BIOS:      version 2.6.0
  loader:    version N/A
  kickstart: version 6.0(2)N1(1) [build 6.0(2)N1(0.368.5P)]
  system:    version 6.0(2)N1(1) [build 6.0(2)N1(0.368.5P)]
  power-seq: Module 0: version v3.0
             Module 1: version v2.0
  xbar-power-seq: Module 0: version v1.0
  uC:        version v1.1.0.3
  QSFP uC:   Module 1: v1.3.0.0
  BIOS compile time:       11/21/2012
  kickstart image file is: bootflash:///n6000-uk9-kickstart.6.0.2.N1.0.368.5P.bi
n.v1
  kickstart compile time:  12/15/2012 4:00:00 [12/27/2012 23:45:20]
  system image file is:    bootflash:///n6000-uk9.6.0.2.N1.0.368.5P.bin.v1
  system compile time:     12/15/2012 4:00:00 [01/02/2013 15:26:36]
```

```
Hardware
  cisco Nexus5596 Chassis ("Norcal 384 Supervisor")
  Intel(R) CPU 0 @ 2.00GHz
 with 8248484 kB of memory.
  Processor Board ID FOC16192WJZ

  Device name: agg-sw0
  bootflash:    8028160 kB

Kernel uptime is 1 day(s), 0 hour(s), 15 minute(s), 44 second(s)

Last reset at 907240 usecs after  Mon Jan  7 20:55:27 2013

  Reason: Reset Requested by CLI command reload
  System version: 6.0(2)N1(1)
  Service:

plugin
  Core Plugin, Ethernet Plugin
switch#
```