Show Commands

This chapter describes the system management **show** commands.

show diagnostic bootup level

To display the current bootup diagnostic level on the switch, use the **show diagnostic bootup level** command.

show diagnostic bootup level

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display the current bootup diagnostic level:

```
switch# show diagnostic bootup level

        Current bootup diagnostic level: complete

switch#
```

Related Commands

Command	Description
diagnostic bootup level	Configures the bootup diagnostic level for a faster module bootup time.
show diagnostic result	Displays the results of the diagnostics tests.

show diagnostic result

To display the results of the diagnostic tests, use the **show diagnostic result** command.

show diagnostic result module {*module-no* | **all**}

Syntax Description

module	Specifies the module for which diagnostic results are displayed.
module-no	Module number. Valid values are 1 to 3.
all	Displays the diagnostic results for all modules.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display the diagnostic results for a specific module:

```
switch# show diagnostic result module 1

Current bootup diagnostic level: complete

Module 1: 48X10GE/Supervisor  SerialNo : JAF1339ANGH

  Overall Diagnostic Result for Module 1 : PASS
  Diagnostic level at card bootup: complete

  Test results: (. = Pass, F = Fail, I = Incomplete,
                 U = Untested, A = Abort)

     1) TestUSBFlash ----------------------> .
     2) TestSPROM -------------------------> .
     3) TestPCIe --------------------------> .
     4) TestLED ---------------------------> .
     5) TestOBFL --------------------------> .
     6) TestNVRAM -------------------------> .
     7) TestPowerSupply -------------------> F
     8) TestTemperatureSensor ---------------> .
     9) TestFan ---------------------------> .
    10) TestVoltage ----------------------> .
    11) TestGPIO -------------------------> .
    12) TestInbandPort -------------------> .
    13) TestManagementPort ---------------> .
    14) TestMemory -----------------------> .
    15) TestFabricEngine :

   Eth    1  2  3  4  5  6  7  8  9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
   Port ------------------------------------------------------------------------
          .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .
```

```
   Eth   25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48
   Port ------------------------------------------------------------------------
          .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .


    16) TestFabricPort :

   Eth    1  2  3  4  5  6  7  8  9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
   Port ------------------------------------------------------------------------
          .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .

   Eth   25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48
   Port ------------------------------------------------------------------------
          .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .


    17) TestForwardingEngine :

   Eth    1  2  3  4  5  6  7  8  9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
   Port ------------------------------------------------------------------------
          .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .

   Eth   25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48
   Port ------------------------------------------------------------------------
          .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .


    18) TestForwardingEnginePort :

   Eth    1  2  3  4  5  6  7  8  9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
   Port ------------------------------------------------------------------------
          .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .

   Eth   25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48
   Port ------------------------------------------------------------------------
          .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .


    19) TestFrontPort :

   Eth    1  2  3  4  5  6  7  8  9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
   Port ------------------------------------------------------------------------
          .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .

   Eth   25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48
   Port ------------------------------------------------------------------------
          .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .

switch#
```

Related Commands

Command	Description
diagnostic bootup level	Configures the bootup diagnostic level for a faster module bootup time.
show diagnostic bootup level	Displays the bootup diagnostics level.

show hosts

To display the Domain Name Server (DNS) name servers and domain names, use the **show hosts** command.

show hosts

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display the IP addresses of the DNS servers that are used to resolve host names:

```
switch# show hosts
DNS lookup enabled
Default domain for vrf:default is mysite.com
Name/address lookup uses domain service
Name servers are 255.255.255.255

Vrf                 Use-vrf             Token           Config

default             management          domain          mysite.com
default             management          add. domain(s)  mysite2.com

Host                   Address
switch#
```

Related Commands

Command	Description
ip domain-list	Defines a list of domains.
ip domain lookup	Enables DNS-based host name-to-address translation.
ip domain-name	Configures a name server.

show ip dns source-interface

To display the source interfaces configured for Domain Name Server (DNS) domain lookup, use the **show ip dns source-interface** command.

show ip dns source-interface [**vrf** {*vrf-name* | **all** | **default** | **management**}]

Syntax Description

vrf	(Optional) Displays information about the virtual routing and forwarding (VRF) instance.
vrf-name	(Optional) VRF name. The name is case sensitive and can be a maximum of 32 characters.
all	(Optional) Displays all VRF instances.
default	(Optional) Displays the default VRF information.
management	(Optional) Displays the management VRF information.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to display the source interfaces configured for DNS domain lookup:

```
switch# show ip dns source-interface
VRF Name                                Interface
default                                 Ethernet1/5
switch#
```

Related Commands

Command	Description
ip domain-lookup	Enables the DNS lookup feature.
ip dns source-interface	Configures interfaces for DNS domain lookup.

show logging console

To display the console logging configuration, use the **show logging console** command.

show logging console

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display the console logging configuration:

```
switch# show logging console
```

Related Commands

Command	Description
logging console	Configures logging to the console.

show logging info

To display the logging configuration, use the **show logging info** command.

show logging info

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display the logging configuration:

```
switch# show logging info
```

Related Commands

Command	Description
logging level	Enables logging messages from a defined facility.

show logging last

To display the last number of lines of the logfile, use the **show logging last** command.

show logging last *number*

Syntax Description		
	number	Enters the number of lines to display from 1 to 9999.

Command Default None

Command Modes EXEC mode

Command History	Release	Modification
	5.2(1)N1(1)	This command was introduced.

Examples This example shows how to display the last 42 lines of the log file:

```
switch# show logging last 42
```

Related Commands	Command	Description
	logging level	Enables logging messages from a defined facility.

show logging level

To display the facility logging severity level configuration, use the **show logging level** command.

show logging level [*facility*]

Syntax Description

facility	(Optional) Logging facility. The facilities are listed in Table A-1 of Appendix A, "System Message Logging Facilities."

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display the EtherChannel logging severity level configuration:

```
switch# show logging level port-channel
```

This example shows how to display the Flex Links logging severity level configuration:

```
switch# show logging level flexlink
Facility        Default Severity        Current Session Severity
--------        ----------------        ------------------------
Flexlink                2                       5

0(emergencies)          1(alerts)       2(critical)
3(errors)               4(warnings)     5(notifications)
6(information)          7(debugging)

switch#
```

This example shows how to display the FCoE NPV logging severity level configuration:

```
switch# show logging level fcoe_mgr
Facility        Default Severity        Current Session Severity
--------        ----------------        ------------------------
fcoe_mgr                2                       3

0(emergencies)          1(alerts)       2(critical)
3(errors)               4(warnings)     5(notifications)
6(information)          7(debugging)

switch#
```

Related Commands

Command	Description
logging level	Configures the facility logging level.

show logging logfile

To display the messages in the log file that were timestamped within the span entered, use the **show logging logfile** command.

show logging logfile [**start-time** *yyyy mmm dd hh:mm:ss*] [**end-time** *yyyy mmm dd hh:mm:ss*]

Syntax Description

start-time *yyyy mmm dd hh:mm:ss*	(Optional) Specifies a start time in the format *yyyy mmm dd hh:mm:ss*. Use three characters for the month (*mmm*) field, digits for the year (*yyyy*) and day (*dd*) fields, and digits separated by colons for the time (*hh:mm:ss*) field.
end-time *yyyy mmm dd hh:mm:ss*	(Optional) Specifies an end time in the format *yyyy mmm dd hh:mm:ss*. Use three characters for the month (*mmm*) field, digits for the year (*yyyy*) and day (*dd*) fields, and digits separated by colons for the time (*hh:mm:ss*) field.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Usage Guidelines

If you do not enter an end time, the current time is used.

Examples

This example shows how to display the messages in the log file that were timestamped within the span shown:

```
switch# show logging logfile start-time 2008 mar 11 12:10:00
```

Related Commands

Command	Description
logging logfile	Configures logging to a log file.

show logging module

To display the module logging configuration, use the **show logging module** command.

show logging module

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display the module logging configuration:

```
switch# show logging module
```

Related Commands

Command	Description
logging module	Configures module logging.

show logging monitor

To display the monitor logging configuration, use the **show logging monitor** command.

show logging monitor

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display the monitor logging configuration:

```
switch# show logging monitor
```

Related Commands

Command	Description
logging monitor	Configures logging on the monitor.

show logging nvram

To display the messages in the nonvolatile random access memory (NVRAM) log, use the **show logging nvram** command.

show logging nvram [**last** *number-lines*]

Syntax Description

last *number-lines*	(Optional) Specifies the number of lines to display. The number of lines is from 1 to 100.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display the last 20 messages in the NVRAM log:

```
switch# show logging nvram last 20
```

Related Commands

Command	Description
logging level	Enables logging messages from a defined facility.

show logging onboard

To display the onboard logging information based on the error type, use the **show logging onboard** command.

show logging onboard {**boot-uptime** | **device-version** | **endtime** | **environmental-history** | **exception-log** | **kernel-trace** | **obfl-history** | **obfl-logs** | **stack-trace** | **starttime** | **status**} [**>** *file* | | *type*]

Syntax Description

boot-uptime	Displays the onboard failure logging (OBFL) boot and uptime information.
device-version	Displays the OBFL device version information.
endtime	Displays the OBFL logs until the specified end time in the following format: *mm*/*dd*/*yy*-*HH*:*MM*:*SS*
environmental-history	Displays the OBFL environmental history.
exception-log	Displays the OBFL exception log.
kernel-trace	Displays the OBFL kernel trace information.
obfl-history	Displays the OBFL history information.
obfl-logs	Displays the OBFL technical support log information.
stack-trace	Displays the OBFL kernel stack trace information.
starttime	Displays the OBFL logs from the specified start time in the following format: *mm*/*dd*/*yy*-*HH*:*MM*:*SS*
status	Displays the OBFL status enable or disable.
> *file*	(Optional) Redirects the output to a file. See the "Usage Guidelines" section for additional information.
| ***type***	(Optional) Filters the output. See the "Usage Guidelines" section for additional information.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Usage Guidelines

The date and time arguments for the **starttime** and **endtime** keywords are entered as the date month/day/year (*mm*/*dd*/*yy*), followed by a hyphen, and the time in 24-hour format in hours:minutes:seconds (*HH:MM:SS*). For example:

- **starttime** 03/17/08-15:01:57
- **endtime** 03/18/08-15:04:57

The valid values for *file* are as follows:

- **bootflash:**
- **ftp:**
- **scp:**
- **sftp:**
- **tftp:**
- **volatile:**

The valid values for *type* are as follows:

- **begin** [**-i**] [**-x**] [*word*]—Begin with the line that matches the text.
  - **-i**—Ignores the case difference when comparing the strings.
  - **-x**—Prints only the lines where the match is a whole line.
  - *word*—Specifies for the expression.
- **count** [**>** *file* | **|** *type*]—Counts number of lines.
- **egrep** | **grep** *print-match*—Egrep or Grep. Egrep searches for lines of text that match more sophisticated regular expression syntax than grep. Grep searches for lines of text that match one or many regular expressions, and outputs only the matching lines.
  - **-A** *num*—Prints the specifies number of lines of context after every matching line. Range: 1 to 999.
  - **-B** *num*—Prints the specifies number of lines of context before every matching line. Range: 1 to 999.
  - **-c**—Prints a total count of matching lines only.
  - **-i**—Ignores the case difference when comparing the strings.
  - **-n**—Prints each match preceded by its line number.
  - **-v**—Prints only the lines that contain no matches for the *word* argument.
  - **-w**—Prints only lines where the match is a complete word.
  - **-x**—Prints only the lines where the match is a whole line.
  - *word*—Specifies for the expression.
- **exclude** [**-i**] [**-x**] [*word*]—Excludes the lines that match.
  - **-i**—Ignores the case difference when comparing the strings.
  - **-x**—Prints only the lines where the match is a whole line.
  - *word*—Specifies for the expression.
- **head** [**-n** *num*]—Stream Editor. The optional **-n** *num* keyword and argument allow you to specify the number of lines to print. Range: 0 to 2147483647.
- **include** [**-i**] [**-x**] [*word*]—Include the lines that match.
  - **-i**—Ignores the case difference when comparing the strings.
  - **-x**—Prints only the lines where the match is a whole line.
  - *word*—Specifies for the expression.
- **last** [*num*]—Displays the last lines to print. The optional *num* specifies the number of lines to print. Range: 0 to 9999.
- **less [-E** | **-d**]—Quits at the end of the file.

  - **-E**—(Optional) Quits at the end of the file.
  - **-d**—(Optional) Specifies a dumb terminal.
- **no-more**—Turns-off pagination for command output.
- **sed** *command*—Stream Editor
- **wc**—Counts words, lines, and characters.
  - **-c**—(Optional) Specifies the output character count.
  - **-l**—(Optional) Specifies the output line count.
  - **-w**—(Optional) Specifies the output word count.
  - **>**—Redirects it to a file.
  - **|**—Pipes command output to filter.

Use this command to view OBFL data from the system hardware. The OBFL feature is enabled by default and records operating temperatures, hardware uptime, interrupts, and other important events and messages that can assist with diagnosing problems with hardware cards or modules installed in a Cisco router or switch. Data is logged to files stored in nonvolatile memory. When the onboard hardware is started up, a first record is made for each area monitored and becomes a base value for subsequent records.

The OBFL feature provides a circular updating scheme for collecting continuous records and archiving older (historical) records, ensuring accurate data about the system. Data is recorded in one of two formats: continuous information that displays a snapshot of measurements and samples in a continuous file, and summary information that provides details about the data being collected. The message “No historical data to display” is seen when historical data is not available.

Examples

This example shows how to display the OBFL boot and uptime information:

```
switch# show logging onboard boot-uptime
----------------------------
OBFL Data for
    Module:  0
----------------------------


Sun Dec 16 16:03:39 2012:  Boot Record
-------------------------------------------------------------------------------
Boot Time..........:  Sun Dec 16 16:03:39 2012
Module Number......:  1
Serial Number......:  FOC16191MQ1
Bios Version.......:
Firmware Version...:


Sun Dec 16 16:44:08 2012:  Boot Record
-------------------------------------------------------------------------------
Boot Time..........:  Sun Dec 16 16:44:07 2012
Module Number......:  0
Serial Number......:  FOC16192WJZ
Bios Version.......:    v1.2.0(06/09/12)
Firmware Version...:  6.0(2)N1(1) [build 6.0(2)N1(0.365.5P)]
--More--
```

Table 1 describes the significant fields shown in the display.

Table 1 show logging onboard boot-uptime Command Output

Field	Description
Boot Time	Time boot occurred.
Slot Number	Slot number.
Serial Number	Serial number of the module.
Bios Version	Primary binary input and output system (BIOS) version.
Firmware Version	Firmware version.

This example shows how to display the OBFL logging device information:

```
switch# show logging onboard device-version
----------------------------
OBFL Data for
    Module:  1
----------------------------

Device Version Record
------------------------------------------------------------------------
Timestamp                  Device Name      Instance Hardware Software
                                                Num  Version  Version
------------------------------------------------------------------------
Sun Nov  3 07:07:00 2008   GATOS                 2        2         0
Sun Nov  3 07:07:00 2008   GATOS                 3        2         0
Sun Nov  3 07:07:00 2008   GATOS                 4        2         0
Sun Nov  3 07:07:00 2008   GATOS                 5        2         0
Sun Nov  3 07:07:00 2008   GATOS                 6        2         0
Sun Nov  3 07:07:00 2008   GATOS                 7        2         0
Sun Nov  3 07:07:00 2008   GATOS                 8        2         0
Sun Nov  3 07:07:00 2008   GATOS                 9        2         0
Sun Nov  3 07:07:00 2008   GATOS                10        2         0
Sun Nov  3 07:07:00 2008   GATOS                11        2         0
Sun Nov  3 07:07:00 2008   GATOS                12        2         0
Sun Nov  3 07:07:00 2008   GATOS                13        2         0
Mon Nov  4 00:15:08 2008   ALTOS                 0        2         0
Mon Nov  4 00:15:08 2008   GATOS                 0        2         0
Mon Nov  4 00:15:08 2008   GATOS                 1        2         0
Mon Nov  4 00:15:08 2008   GATOS                 2        2         0
```

Table 2 describes the significant fields shown in the display.

Table 2 show logging onboard device-version Command Output

Field	Description
Timestamp	Day, date, and time.
Device Name	Device name.
Instance Num	Number of instances.
Hardware Version	Hardware device version.
Software Version	Software device version.

This example shows how to display the OBFL history information:

```
switch# show logging onboard obfl-history
```

The **show logging onboard obfl-history** command displays the following information:

- Timestamp when OBFL is manually disabled.
- Timestamp when OBFL is manually enabled.
- Timestamp when OBFL data is manually cleared.

This example shows how to display the OBFL kernel stack trace information:

```
switch# show logging onboard stack-trace
```

The **show logging onboard stack-trace** command displays the following information:

- Time in seconds
- Time in microseconds
- Error description string
- Current process name and identification
- Kernel jiffies
- Stack trace

Related Commands

Command	Description
clear logging onboard	Clears the OBFL entries in the persistent log.
hw-module logging onboard	Enables or disabled OBFL entries based on the error type.

show logging pending

To display the pending changes to the syslog server configuration, use the **show logging pending** command.

show logging pending

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display the pending changes to the syslog server configuration:

```
switch# show logging pending
switch#
```

Related Commands

Command	Description
logging abort	Cancels the pending changes to the syslog server configuration.

show logging pending-diff

To display the differences from the current syslog server configuration to the pending changes of the syslog server configuration, use the **show logging pending-diff** command.

show logging pending-diff

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display the pending differences of the syslog server configuration:

```
switch# show logging pending-diff
switch#
```

Related Commands

Command	Description
logging abort	Cancels the pending changes to the syslog server configuration.

show logging session status

To display the logging session status, use the **show logging session status** command.

show logging session status

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display the logging session status:

```
switch# show logging session status
```

Related Commands

Command	Description
logging level	Enables logging messages from a defined facility.

show logging server

To display the syslog server configuration, use the **show logging server** command.

show logging server

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display the syslog server configuration:

```
switch# show logging server
```

Related Commands

Command	Description
logging server	Configures a remote syslog server.

show logging status

To display the logging status, use the **show logging status** command.

show logging status

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display the logging status:

```
switch# show logging status
Fabric Distribute     : Enabled
Session State         : IDLE
switch#
```

Related Commands

Command	Description
logging distribute	Enables the distribution of the syslog server configuration to network switches using the Cisco Fabric Services (CFS) infrastructure.

show logging timestamp

To display the logging time-stamp configuration, use the **show logging timestamp** command.

show logging timestamp

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display the logging time-stamp configuration:

```
switch# show logging timestamp
```

Related Commands

Command	Description
logging timestamp	Configures the logging time stamp granularity.

show monitor session

To display information about the Switched Port Analyzer (SPAN) or Encapsulated Remote Switched Port Analyzer (ERSPAN) sessions, use the **show monitor session** command.

show monitor session [*session* | **all** [**brief**] | **range** *range* [**brief**] | **status**]

Syntax Description

session	(Optional) Number of the session. The range is from 1 to 18.
all	(Optional) Displays all sessions.
brief	(Optional) Displays a brief summary of the information.
range *range*	(Optional) Displays a range of sessions. The range is from 1 to 18.
status	(Optional) Displays the operational state of all sessions. **Note** This keyword applies only to SPAN sessions.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display information about SPAN session 1:

```
switch# show monitor session 1
session 1
---------------
description       : A Local SPAN session
type              : local
state             : down (No operational src/dst)
source intf       :
    rx            : Eth1/5
    tx            : Eth1/5
    both          : Eth1/5
source VLANs      :
    rx            :
source VSANs      :
    rx            :
destination ports : Eth1/21

Legend: f = forwarding enabled, l = learning enabled

switch#
```

This example shows how to display a brief information about a SPAN session:

```
switch# show monitor session range 1 brief
session 1
---------------
```

```
description       : A Local SPAN session
type              : local
state             : down (No operational src/dst)
source intf       :
    rx            : Eth1/5
    tx            : Eth1/5
    both          : Eth1/5
source VSANs      :
destination ports : Eth1/21

Legend: f = forwarding enabled, l = learning enabled

switch#
```

This example shows how to display the information about an ERSPAN session:

```
switch# show monitor session 1
session 1
---------------
description       : ERSPAN Source configuration
type              : erspan-source
state             : down (No valid global IP Address)
flow-id           : 1
vrf-name          : default
destination-ip    : 192.0.2.1
ip-ttl            : 255
ip-dscp            : 0
origin-ip         : origin-ip not specified
source intf       :
    rx            : Eth1/5
    tx            : Eth1/5
    both          : Eth1/5
source VLANs      :
    rx            : 5

switch#
```

Related Commands

Command	Description
monitor session	Creates a new Switched Port Analyzer (SPAN) session configuration.
show running-config monitor	Displays the running configuration information about SPAN sessions.

show ntp authentication-status

To display the status of the Network Time Protocol (NTP) authentication, use the **show ntp authentication-status** command.

show ntp authentication-status

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

Any command mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display the authentication status for NTP:

```
switch(config)# show ntp authentication-status
```

Related Commands

Command	Description
[**no**] **ntp authenticate**	Displays information about NTP peers.

show ntp peer-status

To display the status of the Network Time Protocol (NTP) peers, use the **show ntp peer-status** command.

show ntp peer-status

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display the peer status for NTP:

```
switch(config)# show ntp peer-status
```

Related Commands

Command	Description
show ntp peers	Displays information about NTP peers.

show ntp peers

To display information about Network Time Protocol (NTP) peers, use the **show ntp peers** command.

show ntp peers

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display information about NTP peers:

```
switch(config)# show ntp peers
```

Related Commands

Command	Description
show ntp peer-status	Displays status information about NTP peers.

show ntp statistics

To display Network Time Protocol (NTP) statistics, use the **show ntp statistics** command.

show ntp statistics {**io** | **local** | **memory** | **peer** {**ipaddr** *address* | **name** *name1* [*..nameN*]}

Syntax Description

io	Displays the input-output statistics.
local	Displays the counters maintained by the local NTP.
memory	Displays the statistics counters related to the memory code.
peer	Displays the per-peer statistics counter of a peer.
ipaddr *address*	Displays statistics for the peer with the configured IPv4 or IPv6 address. The IPv4 address format is dotted decimal, x.x.x.x. The IPv6 address format is hexadecimal A:B::C:D.
name *name1*	Displays statistics for a named peer.
..nameN	(Optional) Displays statistics for one or more named peers.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display the statistics for NTP:

```
switch(config)# show ntp statistics local
```

Related Commands

Command	Description
clear ntp statistics	Clears NTP statistics

show ntp timestamp-status

To display the Network Time Protocol (NTP) time-stamp information, use the **show ntp timestamp-status** command.

show ntp timestamp-status

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display the NTP time-stamp status:

```
switch(config)# show ntp timestamp-status
```

Related Commands

Command	Description
clear ntp statistics	Clears NTP statistics
ntp	Configures NTP peers and servers on the switch.

show ptp brief

To display the PTP information, use the **show ptp brief** command.

show ptp brief

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display the PTP status:

```
switch(config)# show ptp brief
```

Related Commands

Command	Description
show ptp clock	Displays the properties of the local clock.
show ptp clocks foreign-masters-record	Displays the state of foreign masters known to the PTP process.
show ptp corrections	Displays the last few PTP corrections.
show ptp parent	Displays the properties of the PTP parent and grandmaster clock.
show ptp port interface	Displays the status of the PTP port.
show ptp time-property	Displays the PTP clock time properties.

show ptp clock

To display the properties of the local PTP clock including clock identity, use the **show ptp clock** command.

show ptp clock

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display the properties of the local clock:

```
switch(config)# show ptp clock
```

Related Commands

Command	Description
show ptp brief	Displays the PTP status.
show ptp clocks foreign-masters-record	Displays the state of foreign masters known to the PTP process.
show ptp corrections	Displays the last few PTP corrections.
show ptp parent	Displays the properties of the PTP parent and grandmaster clock.
show ptp port interface	Displays the status of the PTP port.
show ptp time-property	Displays the PTP clock time properties.

show ptp clocks foreign-masters-record

To display the state of the foreign masters known to the PTP process, use the **show ptp clocks foreign-masters-record** command.

show ptp clocks foreign-masters-record [**ethernet** *slot/*[*QSFP-module/*]*port*]

Syntax Description

ethernet	Specifies an Ethernet interface.
slot/[*QSFP-module/*]*port*	(Optional) Specifies the Ethernet interface and its slot number and port number. The slot number is from 1 to 255. The *QSFP-module* number is from 1 to 4. The port number is from 1 to 128. **Note** The *QSFP-module* number applies only to the QSFP+ Generic Expansion Module (GEM).

Command Modes

Global configuration mode

Command History

Release	Modification
6.0(2)N1(2)	Support for the QSFP+ GEM was added.
5.2(1)N1(1)	This command was introduced.

Usage Guidelines

For each foreign master, the output displays the clock identity, basic clock properties, and whether the clock is being used as a grandmaster.

Examples

This example shows how to display the foreign masters known to the PTP process:

```
switch(config)# show ptp foreign-masters-record
```

Related Commands

Command	Description
show ptp brief	Displays the PTP status.
show ptp clock	Displays the properties of the local clock.
show ptp corrections	Displays the last few PTP corrections.
show ptp port interface	Displays the status of the PTP port.
show ptp parent	Displays the properties of the PTP parent and grandmaster clock.
show ptp time-property	Displays the PTP clock time properties.

show ptp corrections

To display the last few PTP corrections, use the **show ptp corrections** command.

show ptp corrections

Syntax Description

There are no arguments or keywords for this command.

Command Default

None

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display the most recent PTP corrections on the switch:

```
switch(config)# show ptp corrections
```

Related Commands

Command	Description
show ptp brief	Displays the PTP status.
show ptp clock	Displays the properties of the local clock.
show ptp clocks foreign-masters-record	Displays the state of foreign masters known to the PTP process.
show ptp port interface	Displays the status of the PTP port.
show ptp parent	Displays the properties of the PTP parent and grandmaster clock.
show ptp time-property	Displays the PTP clock time properties.

show ptp parent

To display the properties of the PTP parent and grandmaster clock, use the **show ptp parent** command.

show ptp parent

Syntax Description

There are no arguments or keywords for this command.

Command Default

None

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display the properties of the PTP parent and grandmaster clock:

```
switch(config)# show ptp parent
```

Related Commands

Command	Description
show ptp brief	Displays the PTP status.
show ptp clock	Displays the properties of the local clock.
show ptp clocks foreign-masters-record	Displays the state of foreign masters known to the PTP process.
show ptp corrections	Displays the last few PTP corrections.
show ptp port interface	Displays the status of the PTP port.
show ptp time-property	Displays the PTP clock time properties.

show ptp port interface

To display the status of the PTP port, use the **show ptp port interface ethernet** command.

show ptp port interface [**ethernet** *slot/*[*QSFP-module/*]*port*]

Syntax Description

ethernet	Specifies an Ethernet interface.
slot/[*QSFP-module/*]*port*	(Optional) Specifies the Ethernet interface and its slot number and port number. The *slot* number is from 1 to 255. The *QSFP-module* number is from 1 to 4. The *port* number is from 1 to 128. **Note** The *QSFP-module* number applies only to the QSFP+ Generic Expansion Module (GEM).

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
6.0(2)N1(2)	Support for the QSFP+ GEM was added.
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display the status of the PTP port on the switch:

```
switch(config)# show ptp port interface ethernet 5/1
```

Related Commands

Command	Description
show ptp brief	Displays the PTP status.
show ptp clock	Displays the properties of the local clock.
show ptp clocks foreign-masters-record	Displays the state of foreign masters known to the PTP process.
show ptp corrections	Displays the last few PTP corrections.
show ptp port interface	Displays the status of the PTP port.
show ptp parent	Displays the properties of the PTP parent and grandmaster clock.
show ptp time-property	Displays the PTP clock time properties.

show ptp time-property

To display the PTP clock time properties, use the **show ptp time-property** command.

show ptp time-property

Syntax Description

There are no arguments or keywords for this command.

Command Default

None

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display the PTP clock time properties:

```
switch(config)# show ptp time-property
```

Related Commands

Command	Description
show ptp brief	Displays the PTP status.
show ptp clock	Displays the properties of the local clock.
show ptp clocks foreign-masters-record	Displays the state of foreign masters known to the PTP process.
show ptp corrections	Displays the last few PTP corrections.
show ptp parent	Displays the properties of the PTP parent and grandmaster clock.
show ptp port interface	Displays the status of the PTP port.

show running-config monitor

To display the running configuration for the Switched Port Analyzer (SPAN) or Encapsulated Remote Switched Port Analyzer (ERSPAN) session, use the **show running-config monitor** command.

show running-config monitor [**all**]

Syntax Description

all	(Optional) Displays current SPAN configuration information including default settings.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display information on the running SPAN configuration:

```
switch# show running-config monitor

!Command: show running-config monitor
!Time: Thu Jan  1 06:48:56 2009

version 5.2(1)N1(1)
monitor session 1
  description A Local SPAN session
  source interface Ethernet1/5 both
  destination interface Ethernet1/21
  no shut

switch#
```

This example shows how to display detailed information on the running SPAN configuration:

```
switch# show running-config monitor all

!Command: show running-config monitor all
!Time: Thu Jan  1 06:51:08 2009

version 5.2(1)N1(1)
monitor session 1 type local
  description A Local SPAN session
  source interface Ethernet1/5 both
  destination interface Ethernet1/21
  no shut

switch#
```

Related Commands

Command	Description
monitor session	Configures SPAN or ERSPAN sessions.
show monitor session	Displays information about SPAN or ERSPAN sessions.

show running-config port-security

To display the running system configuration information about secure ports, use the **show running-config port-security** command.

show running-config port-security [**all**]

Syntax Description

all	(Optional) Displays detailed information about secure ports, including default settings.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to display the running system configuration of all secure ports on an interface:

```
switch# show running-config port-security

!Command: show running-config port-security
!Time: Tue Apr 12 10:06:56 2005

version 5.2(1)N1(1)
feature port-security


interface Ethernet1/5
  switchport port-security
  switchport port-security aging time 3
  switchport port-security maximum 10
  switchport port-security mac-address sticky

switch#
```

Related Commands

Command	Description
clear port-security dynamic	Clears the dynamically secured addresses on a port.
show startup-config port-security	Displays the configuration information in the startup file.

show snmp community

To display the Simple Network Management Protocol (SNMP) community strings configured on the switch, use the **show snmp community** command.

show snmp community

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display the SNMP community strings:

```
switch# show snmp community
Community            Group / Access      context    acl_filter
---------            --------------      -------    ----------
public                network-admin
switch#
```

Related Commands

Command	Description
snmp-server community	Configures the community access string to permit access to the SNMP protocol.

show snmp context

To display the Simple Network Management Protocol (SNMP) contexts configured on the switch, use the **show snmp context** command.

show snmp context

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display the SNMP contexts:

```
switch# show snmp context
```

Related Commands

Command	Description
snmp-server context	Configures an SNMP context.

show snmp engineID

To display the identification of the local Simple Network Management Protocol (SNMP) engine, use the **show snmp engineID** command.

show snmp engineID

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Usage Guidelines

An SNMP engine is a copy of SNMP that can reside on a local or remote device. SNMP passwords are localized using the SNMP engine ID of the authoritative SNMP engine.

Examples

This example shows how to display the SNMP engine ID:

```
switch# show snmp engineID
Local SNMP engineID: [Hex] 8000000903000DECB230C0
                     [Dec] 128:000:000:009:003:000:013:236:178:048:192
switch#
```

Related Commands

Command	Description
show running-config snmp	Displays the running configuration information about SNMP.

show snmp group

To display the names of the Simple Network Management Protocol (SNMP) groups configured on the switch, use the **show snmp group** command.

show snmp group

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display the SNMP groups:

```
switch# show snmp group

Role: network-admin
  Description: Predefined network admin role has access to all commands
  on the switch
  ------------------------------------------------------------------
  Rule    Perm    Type        Scope               Entity
  ------------------------------------------------------------------
  1       permit  read-write

Role: network-operator
  Description: Predefined network operator role has access to all read
  commands on the switch
  ------------------------------------------------------------------
  Rule    Perm    Type        Scope               Entity
  ------------------------------------------------------------------
  1       permit  read

Role: vdc-admin
  Description: Predefined vdc admin role has access to all commands within
  a VDC instance
  ------------------------------------------------------------------
  Rule    Perm    Type        Scope               Entity
  ------------------------------------------------------------------
  1       permit  read-write

Role: vdc-operator
  Description: Predefined vdc operator role has access to all read commands
  within a VDC instance
  ------------------------------------------------------------------
  Rule    Perm    Type        Scope               Entity
  ------------------------------------------------------------------
  1       permit  read
```

```
Role: priv-3
  Description: This is a system defined privilege role.
  vsan policy: permit (default)
  Vlan policy: permit (default)
  Interface policy: permit (default)
  Vrf policy: permit (default)

Role: priv-2
  Description: This is a system defined privilege role.
  vsan policy: permit (default)
  Vlan policy: permit (default)
  Interface policy: permit (default)
  Vrf policy: permit (default)

Role: priv-1
  Description: This is a system defined privilege role.
  vsan policy: permit (default)
  Vlan policy: permit (default)
  Interface policy: permit (default)
  Vrf policy: permit (default)

Role: priv-0
  Description: This is a system defined privilege role.
  vsan policy: permit (default)
  Vlan policy: permit (default)
  Interface policy: permit (default)
  Vrf policy: permit (default)
  ----------------------------------------------------------------
  Rule    Perm    Type        Scope               Entity
  ----------------------------------------------------------------
  10      permit  command                         traceroute6 *
  9       permit  command                         traceroute *
  8       permit  command                         telnet6 *
  7       permit  command                         telnet *
  6       permit  command                         ping6 *
  5       permit  command                         ping *
  4       permit  command                         ssh6 *
  3       permit  command                         ssh *
  2       permit  command                         enable *
  1       permit  read

Role: priv-15
  Description: This is a system defined privilege role.
  vsan policy: permit (default)
  Vlan policy: permit (default)
  Interface policy: permit (default)
  Vrf policy: permit (default)
  ----------------------------------------------------------------
  Rule    Perm    Type        Scope               Entity
  ----------------------------------------------------------------
  1       permit  read-write
switch#
```

Related Commands

Command	Description
show running-config snmp	Displays the running configuration information about SNMP.

show snmp host

To display the Simple Network Management Protocol (SNMP) host information, use the **show snmp host** command.

show snmp host

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display the SNMP host:

```
switch# show snmp host
```

Related Commands

Command	Description
snmp-server host	Configures an SNMP host.

show snmp sessions

To display the current Simple Network Management Protocol (SNMP) sessions, use the **show snmp sessions** command.

show snmp sessions

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display the SNMP sessions:

```
switch# show snmp sessions
```

Related Commands

Command	Description
show running-config snmp	Displays the running configuration information about SNMP.

show snmp trap

To display the Simple Network Management Protocol (SNMP) link trap generation information, use the **show snmp trap** command.

show snmp trap

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display the SNMP traps:

```
switch# show snmp trap
--------------------------------------------------------------------------------
Trap type                         Description                    Enabled
--------------------------------------------------------------------------------
entity               : entity_mib_change                           Yes
entity               : entity_module_status_change                 Yes
entity               : entity_power_status_change                  Yes
entity               : entity_module_inserted                      Yes
entity               : entity_module_removed                       Yes
entity               : entity_unrecognised_module                  Yes
entity               : entity_fan_status_change                    Yes
link                 : linkDown                                    Yes
link                 : linkUp                                      Yes
link                 : IETF-extended-linkDown                      Yes
link                 : IETF-extended-linkUp                        Yes
link                 : cisco-extended-linkDown                     Yes
link                 : cisco-extended-linkUp                       Yes
callhome             : event-notify                                No
callhome             : smtp-send-fail                              No
cfs                  : state-change-notif                          No
cfs                  : merge-failure                               No
rf                   : redundancy_framework                        Yes
aaa                  : server-state-change                         No
license              : notify-license-expiry                       Yes
license              : notify-no-license-for-feature               Yes
license              : notify-licensefile-missing                  Yes
license              : notify-license-expiry-warning               Yes
zone                 : unsupp-mem                                  No
upgrade              : UpgradeOpNotifyOnCompletion                 Yes
upgrade              : UpgradeJobStatusNotify                      Yes
feature-control      : FeatureOpStatusChange                       No
sysmgr               : cseFailSwCoreNotifyExtended                 No
rmon                 : risingAlarm                                 No
```

```
rmon                : fallingAlarm                          No
rmon                : hcRisingAlarm                         No
rmon                : hcFallingAlarm                        No
config              : ccmCLIRunningConfigChanged            No
snmp                : authentication                        No
bridge              : topologychange                        No
bridge              : newroot                               No
stp                 : inconsistency                         No
stpx                : loop-inconsistency                    No
stpx                : root-inconsistency                    No
switch#
```

Related Commands

Command	Description
snmp trap link-status	Enables SNMP link trap generation.

show snmp user

To display information on each Simple Network Management Protocol (SNMP) user, use the **show snmp user** command.

show snmp user

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display the SNMP users configured on the switch:

```
switch# show snmp user
_____________________________________________________________
                  SNMP USERS
_____________________________________________________________

User                          Auth  Priv(enforce) Groups
____                          ____  ______________ ______
admin                         md5   des(no)       network-admin
_____________________________________________________________
 NOTIFICATION TARGET USERS (configured  for sending V3 Inform)
_____________________________________________________________

User                          Auth  Priv
____                          ____  ____
switch#
```

This example shows how to display information about a specific SNMP user:

```
switch# show snmp user admin
switch#
```

Related Commands

Command	Description
snmp-server user	Configures a new user to an SNMP group.

show monitor session

To display information about the Switched Port Analyzer (SPAN) or Encapsulated Remote Switched Port Analyzer (ERSPAN) sessions, use the **show monitor session** command.

show monitor session [*session* | **all** [**brief**] | **range** *range* [**brief**] | **status**]

Syntax Description

session	(Optional) Number of the session. The range is from 1 to 18.
all	(Optional) Displays all sessions.
brief	(Optional) Displays a brief summary of the information.
range *range*	(Optional) Displays a range of sessions. The range is from 1 to 18.
status	(Optional) Displays the operational state of all sessions. **Note** This keyword applies only to SPAN sessions.

Command Default

None

Command Modes

EXEC mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display information about SPAN session 1:

```
switch# show monitor session 1
session 1
---------------
description       : A Local SPAN session
type              : local
state             : down (No operational src/dst)
source intf       :
    rx            : Eth1/5
    tx            : Eth1/5
    both          : Eth1/5
source VLANs      :
    rx            :
source VSANs      :
    rx            :
destination ports : Eth1/21

Legend: f = forwarding enabled, l = learning enabled

switch#
```

This example shows how to display a brief information about a SPAN session:

```
switch# show monitor session range 1 brief
session 1
---------------
```

```
description       : A Local SPAN session
type              : local
state             : down (No operational src/dst)
source intf       :
    rx            : Eth1/5
    tx            : Eth1/5
    both          : Eth1/5
source VSANs      :
destination ports : Eth1/21

Legend: f = forwarding enabled, l = learning enabled

switch#
```

This example shows how to display the information about an ERSPAN session:

```
switch# show monitor session 1
session 1
---------------
description       : ERSPAN Source configuration
type              : erspan-source
state             : down (No valid global IP Address)
flow-id           : 1
vrf-name          : default
destination-ip    : 192.0.2.1
ip-ttl            : 255
ip-dscp            : 0
origin-ip         : origin-ip not specified
source intf       :
    rx            : Eth1/5
    tx            : Eth1/5
    both          : Eth1/5
source VLANs      :
    rx            : 5

switch#
```

Related Commands

Command	Description
monitor session	Creates a new Switched Port Analyzer (SPAN) session configuration.
show running-config monitor	Displays the running configuration information about SPAN sessions.