



Cisco StackWise Virtual Commands

- [clear diagnostic event-log](#), on page 1
- [stackwise-virtual](#), on page 2
- [diagnostic monitor](#), on page 3
- [diagnostic schedule module](#), on page 4
- [diagnostic start](#), on page 7
- [diagnostic stop](#), on page 9
- [domain id](#), on page 10
- [dual-active detection pagp](#), on page 11
- [hw-module beacon switch](#), on page 11
- [hw-module switch slot](#), on page 12
- [hw-module switch usbflash](#), on page 14
- [stackwise-virtual link](#), on page 14
- [stackwise-virtual dual-active-detection](#), on page 15
- [show hw-module switch subslot](#), on page 15
- [show logging onboard switch](#), on page 17
- [show stackwise-virtual](#), on page 20

clear diagnostic event-log

To clear the diagnostic event logs for a specific switch module or event type, use the **clear diagnostic event-log** command in privileged EXEC mode.

```
clear diagnostic event-log [{event-type {error | info | warning} | switch{switch_num module module_num | all [{event-type {error | info | warning}]}]}
```

Syntax Description

event-type error	Clears the error events.
event-type info	Clears the informative events.
event-type warning	Clears the warning events.
switch <i>num</i>	Clears the events for a specific switch.
module <i>num</i>	Clears the events for a specific module.

switch all Clears all the event logs from all the switches.

Command Modes Privileged EXEC (#)

Command History	Release	Modification
	Cisco IOS XE Fuji 16.9.1	This comamnd was introduced

Examples

This example shows how to clear error event logs:

```
Device# clear diagnostic event-log event-type error
```

This example shows how to clear event logs on switch 1 module 1:

```
Device# clear diagnostic event-log switch 1 module 1
```

This example shows how to clear error event logs on all the switches:

```
Device# clear diagnostic event-log switch all
```

Related Commands

Command	Description
show diagnostic events	Displays the diagnostic event log.

stackwise-virtual

To enable Cisco StackWise Virtual on a switch, use the **stackwise-virtual** command in the global configuration mode. To disable Cisco StackWise Virtual, use the **no** form of this command.

stackwise-virtual
no stackwise-virtual

Syntax Description	stackwise-virtual	Enables Cisco StackWise Virtual.

Command Default Disabled.

Command Modes Global configuration (config)

Command History	Release	Modification
	Cisco IOS XE Fuji 16.9.1	This command was introduced.

Usage Guidelines After disabling Cisco StackWise Virtual, the switches must be reloaded to unstack them.

Example

The following example shows how to enable Cisco StackWise Virtual :

```
Device(config)# stackwise-virtual
```

diagnostic monitor

To configure health-monitoring diagnostic testing, use the **diagnostic monitor** command in global configuration mode. Use the **no** form of this command to disable testing and to return to the default settings.

diagnostic monitor interval switch *number* **module** *number* **test** {*name* | *test-id* | *test-id-range* | **all**} *hh:mm:ss* *milliseconds* *day* [**cardindex** *number*]

diagnostic monitor switch *number* **module** *number* **test** {*name* | *test-id* | *test-id-range* | **all**} [**cardindex** *number*]

diagnostic monitor threshold switch *number* **module** *number* **test** {*name* | *test-id* | *test-id-range* | **all**} **failure count** *count* [**days** *number* | **hours** *number* | **milliseconds** *number* | **minutes** *number* | **runs** *number* | **seconds** *number*] **cardindex** *number*

no diagnostic monitor interval switch *number* **module** *number* **test** {*name* | *test-id* | *test-id-range* | **all**} [**cardindex** *number*]

no diagnostic monitor switch *number* **module** *number* **test** {*name* | *test-id* | *test-id-range* | **all**} [**cardindex** *number*]

no diagnostic monitor threshold switch *number* **module** *number* **test** {*name* | *test-id* | *test-id-range* | **all**} { **failure count** [[*count* [**days** *number* | **hours** *number* | **milliseconds** *number* | **minutes** *number* | **runs** *number* | **seconds** *number*] | **cardindex** *number*] | **cardindex** *number*] }

Syntax	Description
interval	Configures the interval between tests.
switch <i>number</i>	Specifies the switch number, which is the stack member number. If the switch is a standalone switch, the switch number is 1. If the switch is in a stack, the range is from 1 to 9, depending on the switch member numbers in the stack. This keyword is supported only on on stacking-capable switches.
test	Specifies the tests to be run.
<i>name</i>	Name of the test.
<i>test-id</i>	ID number of the test.
<i>test-id-range</i>	Range of test ID numbers. Enter the range as integers separated by a comma and a hyphen (for example, 1,3-6 specifies test IDs 1, 3, 4, 5, and 6).
all	Specifies all the diagnostic tests.

<i>hh:mm:ss</i>	Monitoring interval, in hours, minutes, and seconds. Enter the hours from 0 to 24, minutes from 0 to 60, and seconds from 0 to 60.
<i>milliseconds</i>	Monitoring interval, in milliseconds (ms). Enter the test time, in milliseconds, from 0 to 999.
<i>day</i>	Monitoring interval, in days. Enter the number of days between test, from 0 to 20.
threshold	Configures the failure threshold.
failure count <i>count</i>	Sets the failure threshold count.
cardindex <i>number</i>	(Optional) Specifies the card index number.

Command Default Monitoring is disabled, and a failure threshold value is not set.

Command Modes Global configuration (config)

Command History	Release	Modification
	Cisco IOS XE Gibraltar 16.11.1	This command was introduced.

Usage Guidelines You must configure the failure threshold and the interval between tests before enabling diagnostic monitoring. When entering the **diagnostic monitor switch module test** command, you must isolate network traffic by disabling all the connected ports, and not send test packets during a test.

Examples

This example shows how to set the failure threshold count of Test 1 to 20:

```
Device# configure terminal
Device(config)# diagnostic monitor threshold switch 2 test 1 failure count 20
```

This example shows how to configure the monitoring interval of Test 2:

```
Device# configure terminal
Device(config)# diagnostic monitor interval switch 2 test 2 12:30:00 750 5
```

Related Commands	Command	Description
	show diagnostic content switch module	Displays online diagnostic test results.

diagnostic schedule module

To schedule test-based diagnostic task for a specific switch module or schedule a supervisor engine switchover, use the **diagnostic schedule switch module** command in global configuration mode. To remove the schedule, use the **no** form of this command.

```

diagnostic schedule switch number module module-num test {test-id | {{complete | minimal}} {daily
hh:mm | on month | weekly day-of-week}} | {{all | basic | non-disruptive | per-port}} {daily hh:mm
| on month | port{interface-port-number | port-number-list | all{daily hh:mm | on month | weekly
day-of-week }} | weekly day-of-week }}
no diagnostic schedule switch number module module-num test {test-id | {{complete | minimal}} {daily
hh:mm | on month | weekly day-of-week}} | {{all | basic | non-disruptive | per-port}} {daily hh:mm
| on month | port{interface-port-number | port-number-list | all{daily hh:mm | on month | weekly
day-of-week }} | weekly day-of-week }}

```

Syntax Description

switch <i>switch_num</i>	Specifies the switch number.
module <i>module_num</i>	Specifies the module number.
test	Specifies the diagnostic test suite attribute.
<i>test-id</i>	Identification number for the test to be run. Enter the show diagnostic content command to display the test ID.
all	Runs all the diagnostic tests.
complete	Selects the complete bootup test suite.
minimal	Selects the minimal bootup test suite.
non-disruptive	Selects the nondisruptive test suite.
per-port	Selects the per-port test suite. per-port is not supported when specifying a schedule.
port	(Optional) Specifies the port-to-schedule testing.
<i>interface-port- number</i>	(Optional) Port number. The range is from 1-48.
<i>port-number-list</i>	(Optional) Range of port numbers, separated by a hyphen (-). The range is from 1-48.
all	(Optional) Specifies all the ports.
on month	Specifies the schedule of a test-based diagnostic task. Enter the month name, for example, January or February (use lowercase characters).
daily <i>hh:mm</i>	Specifies the daily schedule of a test-based diagnostic task. Enter the time as a two-digit number (for a 24-hour clock, the colon (:)) is required.
weekly <i>day-of-week</i>	Specifies the weekly schedule of a test-based diagnostic task. Enter the day of the week, for example, Monday or Tuesday (use lowercase characters).

Command Default

Test-based diagnostic task for a specific switch module is not scheduled.

Command Modes Global configuration (config)

Command History	Release	Modification
	Cisco IOS XE Fuji 16.9.1	This command was introduced.

Usage Guidelines Run the **diagnostic schedule switch module test** command to schedule a switchover from the active supervisor engine to the standby supervisor engine.

The **show diagnostic content switch module** command displays the test ID list. The test ID is displayed in the **ScheduleSwitchover** field.

You can specify a periodic switchover (daily or weekly) or a single switchover occurrence at a specific time using these commands:

- **diagnostic schedule switch** *number* **module** *module_num* **test** *test-id* **on** *mm*
- **diagnostic schedule switch** *number* **module** *module_num* **test** *test-id* **daily** *hh:mm*
- **diagnostic schedule switch** *number* **module** *module_num* **test** *test-id* **weekly** *day-of-week*



Note To avoid system downtime in the event that the standby supervisor module cannot switch over the system, we recommend that you schedule a switchover from the standby supervisor module to the active supervisor module 10 minutes after the switchover occurs.

Examples

This example shows how to schedule diagnostic testing on a specific month, date, and time for a specific switch module:

```
Device# configure terminal
Device(config)# diagnostic schedule switch 1 module 1 test 5 on may
```

This example shows how to schedule diagnostic testing to occur daily at a certain time for a specific switch module:

```
Device# configure terminal
Device(config)# diagnostic schedule switch 1 module 1 test 5 daily 12:25
```

This example shows how to schedule diagnostic testing to occur weekly on a certain day for a specific switch module:

```
Device# configure terminal
Device(config)# diagnostic schedule module 1 test 5 weekly friday
```

Related Commands

Command	Description
show diagnostic content	Displays test information, including test ID, test attributes, and supported coverage test levels for all the tests and modules.
show diagnostic schedule	Displays the current scheduled diagnostic tasks.

diagnostic start

To run a specified diagnostic test, use the **diagnostic start** command in privileged EXEC mode.

```
diagnostic start switch number module module_num test {test-id | minimal | complete | {{all | basic | non-disruptive | per-port } {port{num | port_range | all}}}}
```

Syntax Description		
switch <i>switch_num</i>		Specifies the switch number.
module <i>module_num</i>		Specifies the module number.
test		Specifies a test to run.
<i>test-id</i>		Enter the identification number of the test you want to run. Enter the <i>test-id-range</i> or <i>port_range</i> as integers separated by a comma and a hyphen (for example, 1,3-6 specifies test IDs 1, 3, 4, 5, and 6).
minimal		Runs minimal bootup diagnostic tests.
complete		Runs complete bootup diagnostic tests.
basic		Runs basic on-demand diagnostic tests.
per-port		Runs per-port level tests.
non-disruptive		Runs nondisruptive health-monitoring tests.
all		Runs all the diagnostic tests.
port <i>num</i>		(Optional) Specifies the interface port number. The range is from 1-48.

Command Default None

Command Modes Privileged EXEC (#)

Command History	Release	Modification
	Cisco IOS XE Fuji 16.9.1	This command was introduced.

Usage Guidelines Run the **show diagnostic content** command to display the test ID list .
Use the **diagnostic stop** command to stop the testing process.

Examples

This example shows how to run the complete online diagnostic tests:

```
Device# diagnostic start switch 1 module 1 test all
```

```
Diagnostic[switch 1, module 1]: Running test(s) 2 may disrupt normal system operation and requires reload
```

```

Do you want to continue? [no]: y
Device#
*Jul  5 03:04:49.081 PDT: %DIAG-6-TEST_RUNNING: switch 1, module 1: Running
TestGoldPktLoopback{ID=1} ...
*Jul  5 03:04:49.086 PDT: %DIAG-6-TEST_OK: switch 1, module 1: TestGoldPktLoopback{ID=1}
has completed successfully
*Jul  5 03:04:49.086 PDT: %DIAG-6-TEST_RUNNING: switch 1, module 1: Running
TestPhyLoopback{ID=2} ...
*Jul  5 03:04:49.092 PDT: %DIAG-6-TEST_OK: switch 1, module 1: TestPhyLoopback{ID=2} has
completed successfully
*Jul  5 03:04:49.092 PDT: %DIAG-6-TEST_RUNNING: switch 1, module 1: Running TestThermal{ID=3}
...
*Jul  5 03:04:52.397 PDT: %DIAG-6-TEST_OK: switch 1, module 1: TestThermal{ID=3} has completed
successfully
*Jul  5 03:04:52.397 PDT: %DIAG-6-TEST_RUNNING: switch 1, module 1: Running
TestScratchRegister{ID=4} ...
*Jul  5 03:04:52.414 PDT: %DIAG-6-TEST_OK: switch 1, module 1: TestScratchRegister{ID=4}
has completed successfully
*Jul  5 03:04:52.414 PDT: %DIAG-6-TEST_RUNNING: switch 1, module 1: Running TestPoe{ID=5}
...
*Jul  5 03:04:52.415 PDT: %DIAG-6-TEST_OK: switch 1, module 1: TestPoe{ID=5} has completed
successfully
*Jul  5 03:04:52.415 PDT: %DIAG-6-TEST_RUNNING: switch 1, module 1: Running
TestUnusedPortLoopback{ID=6} ...
*Jul  5 03:04:52.415 PDT: %DIAG-6-TEST_OK: switch 1, module 1: TestUnusedPortLoopback{ID=6}
has completed successfully
*Jul  5 03:04:52.415 PDT: %DIAG-6-TEST_RUNNING: switch 1, module 1: Running
TestPortTxMonitoring{ID=7} ...
*Jul  5 03:04:52.416 PDT: %DIAG-6-TEST_OK: switch 1, module 1: TestPortTxMonitoring{ID=7}
has completed successfull

```

Related Commands

Command	Description
diagnostic bootup level	Configures the diagnostic bootup level.
diagnostic event-log size	Modifies the diagnostic event log size dynamically.
diagnostic monitor	Configures health-monitoring diagnostic testing.
diagnostic ondemand	Configures the on-demand diagnostics.
diagnostic schedule	Sets the diagnostic test schedule for a particular bay, slot, or subslot.
diagnostic stop	Stops a specified diagnostic test.
show diagnostic bootup	Displays the configured diagnostics level at bootup.
show diagnostic content module	Displays the available diagnostic tests.
show diagnostic description	Provides the description for diagnostic tests.
show diagnostic events	Displays the diagnostic event log.
show diagnostic ondemand settings	Displays the settings for the on-demand diagnostics.
show diagnostic result	Displays the diagnostic test results for a module.
show diagnostic schedule	Displays the current scheduled diagnostic tasks.

Command	Description
show diagnostic status	Displays the running diagnostics tests.

diagnostic stop

To stop the testing process, use the **diagnostic stop** command in privileged EXEC mode.

diagnostic stop switch *number* **module** *module_num*

Syntax Description		
switch <i>switch_num</i>		Specifies the switch number.
module <i>module_num</i>		Specifies the module number.

Command Default None

Command Modes Privileged EXEC (#)

Command History

Command History	Release	Modification
	Cisco IOS XE Fuji 16.9.1	This command was introduced.

Usage Guidelines Use the **diagnostic start** command to start the testing process.

Examples

This example shows how to stop the diagnostic test process:

```
Device# diagnostic stop module 3
```

Related Commands

Command	Description
diagnostic bootup level	Configures the diagnostic bootup level.
diagnostic event-log size	Modifies the diagnostic event log size dynamically.
diagnostic monitor	Configures health-monitoring diagnostic testing.
diagnostic ondemand	Configures the on-demand diagnostics.
diagnostic schedule	Sets the diagnostic test schedule for a particular bay, slot, or subslot.
diagnostic start	Runs a specified diagnostic test.
show diagnostic bootup	Displays the configured diagnostics level at bootup.
show diagnostic content module	Displays the available diagnostic tests.
show diagnostic description	Provides the description for the diagnostic tests.

Command	Description
show diagnostic events	Displays the diagnostic event log.
show diagnostic ondemand settings	Displays the settings for the on-demand diagnostics.
show diagnostic result	Displays the diagnostic test results for a module.
show diagnostic schedule	Displays the current scheduled diagnostic tasks.
show diagnostic status	Displays the running diagnostics tests.

domain id

To configure Cisco StackWise Virtual domain ID on a switch, use the **domain id** command in the StackWise Virtual configuration mode. To disable, use the **no** form of this command.

domain id
no domain id

Syntax Description	domain	Associates StackWise Virtual configuration with a specific domain.
	<i>id</i>	Value of the domain ID. The range is from 1 to 255. The default is one.

Command Default No domain ID is configured.

Command Modes StackWise Virtual configuration (config-stackwise-virtual)

Command History	Release	Modification
	Cisco IOS XE Fuji 16.9.1	This command was introduced.

Usage Guidelines This command is optional. You must enable Stackwise Virtual, using the **stackwise-virtual** command, before configuring the domain ID.

Example

The following example shows how to enable Cisco StackWise Virtual and configure a domain ID:

```
Device(config)# stackwise-virtual
Device(config-stackwise-virtual)#domain 2
```

dual-active detection pagp

To enable PAgP dual-active detection, use the **dual-active detection pagp** command in the StackWise Virtual configuration mode. To disable PAgP dual-active detection, use the **no** form of the command.

dual-active detection pagp
no dual-active detection pagp

Syntax Description	dual-active detection pagp	Enables pagp dual-active detection.
Command Default	Enabled.	
Command Modes	StackWise Virtual configuration (config-stackwise-virtual)	
Command History	Release	Modification
	Cisco IOS XE Fuji 16.9.1	This command was introduced.

Example:

The following example shows how to enable PAgP dual-active detection trust mode on channel-group:

```
Device(config)# stackwise-virtual
Device(config-stackwise-virtual)#dual-active detection pagp
Device(config-stackwise-virtual)#dual-active detection pagp trust channel-group 1
```

hw-module beacon switch

To control the blue beacon LED in a field-replaceable unit (FRU), use the **hw-module beacon switch** command in privileged EXEC mode.

hw-module beacon switch { *switch-number* | **active** | **standby** }
 { **RP** { **active** | **standby** } | **fan-tray** | **power-supply** *power-supply slot number* | **slot** *slot number* }
 { **off** | **on** | **status** }

Syntax Description	<i>switch-number</i>	The switch to access. Valid values are 1 and 2.
	active	Selects the active instance of the switch.
	standby	Selects the standby instance of the switch.
	RP	Selects the route processor for the selected switch.
	fan-tray	Selects the fan for the selected switch.
	power-supply <i>power-supply slot number</i>	Specifies the power supply slot number. Valid values are 1 to 4.

slot <i>slot-number</i>	Specifies the slot number. Valid values are 1 to 4.
off	Switches off the beacon LED for the route processor and the slot, and switches off the fan and the power supply for the selected switch.
on	Switches on the beacon LED for the route processor and the slot, and switches off the fan and the power supply for the selected switch.
status	Displays the beacon LED status for the route processor, fan-tray, power-supply slot, and slot for the selected switch.

Command Default None

Command Modes Privileged EXEC (#)

Command History	Release	Modification
	Cisco IOS XE Fuji 16.9.1	This command was introduced.

hw-module switch slot

To control components such as linecard or a supervisor available in a slot, use the **hw-module switch slot** command in the global configuration mode.

hw-module switch *switch-number* **slot** *slot-number* { **logging onboard** [**counter** | **environment** | **message** | **po**e | **temperature** | **voltage**] | **shutdown** }

Syntax Description	
<i>switch-number</i>	The switch to access. Valid values are 1 and 2.
slot <i>slot-number</i>	Specifies the slot number to access. Valid values are 1 to 4. <ul style="list-style-type: none"> • 1: Linecard slot 1 • 2: Supervisor slot 0 • 3: Supervisor slot 1 • 4: Linecard slot 4
logging onboard	Enables logging onboard.
counter	(Optional) Configures the logging onboard counter.
environment	(Optional) Configures the logging onboard environment.
message	(Optional) Configures the logging onboard message.
po e	(Optional) Configures the logging onboard PoE.

temperature	(Optional) Configures the logging onboard temperature.
voltage	(Optional) Configures the logging onboard voltage.
shutdown	Shuts down a field-replaceable unit (FRU).

Command Default

None

Command Modes

Global configuration (config)

Command History

Release	Modification
Cisco IOS XE Fuji 16.9.1	This command was introduced.

Examples

This example shows how to enable logging onboard for switch 1, slot 1:

```
Device# hw-module switch 1 slot 1 logging onboard
```

This example shows how to configure the logging onboard counter for switch 1, slot 1:

```
Device# hw-module switch 1 slot 1 logging onboard counter
```

This example shows how to configure the logging onboard environment for switch 1, slot 1:

```
Device# hw-module switch 1 slot 1 logging onboard environment
```

This example shows how to configure the logging onboard message for switch 1, slot 1:

```
Device# hw-module switch 1 slot 1 logging onboard message
```

This example shows how to configure the logging onboard PoE for switch 1, slot 1:

```
Device# hw-module switch 1 slot 1 logging onboard poe
```

This example shows how to configure the logging onboard temperature for switch 1, slot 1:

```
Device# hw-module switch 1 slot 1 logging onboard temperature
```

This example shows how to configure the logging onboard voltage for switch 1, slot 1:

```
Device# hw-module switch 1 slot 1 logging onboard voltage
```

This example shows how to shut down an FRU:

```
Device# hw-module switch 1 slot 1 shutdown
```

hw-module switch usbflash

To unmount the USB SSD, use the **hw-module switch** *switch-number* **usbflash** command in privileged EXEC mode.

hw-module switch *switch-number* **usbflash unmount**

Syntax Description	<i>switch number</i>	The switch to access. Valid values are 1 and 2.
	usbflash unmount	Unmounts the USB SSD.

Command Default None

Command Modes Global Configuration (config)

Command History	Release	Modification
	Cisco IOS XE Fuji 16.9.1	This command was introduced.

Example

This example shows how to unmount the USB SSD from switch 1:

```
Device# hw-module switch 1 usbflash unmount
```

stackwise-virtual link

To associate an interface with configured StackWise Virtual link, use the **stackwise-virtual link** command in the interface configuration mode. To disassociate the interface, use the **no** form of the command.

stackwise-virtual link *link-value*
no stackwise-virtual link *link-value*

Syntax Description	stackwise-virtual link	Associates a 10-G or 40-G interface to StackWise Virtual link.
	<i>link value</i>	Domain ID configured for Cisco StackWise Virtual.

Command Default Disabled.

Command Modes Interface configuration (config-if).

Command History	Release	Modification
	Cisco IOS XE Fuji 16.9.1	This command was introduced.

Example:

This example shows how to associate a 40 Gigabit Ethernet interface with configured Stackwise Virtual Link (SVL):

```
Device(config)# interface FortyGigabitEthernet1/1/1
Device(config-if)#stackwise-virtual link 1
```

stackwise-virtual dual-active-detection

To configure an interface as dual-active-detection link, use the **stackwise-virtual dual-active-detection** command in the interface configuration mode. To disassociate the interface, use the **no** form of the command.

stackwise-virtual dual-active-detection
no stackwise-virtual dual-active-detection

Syntax Description	stackwise-virtual dual-active-detection	Enables Cisco StackWise Virtual dual-active-detection for the specified 10-G or 40-G interface.
--------------------	---	---

Command Default Disabled.

Command Modes Interface configuration (config-if)

Command History	Release	Modification
	Cisco IOS XE Fuji 16.9.1	This command was introduced.

Example:

The following example shows how to configure a 10 Gigabit Ethernet interface as Dual-Active-Detection link:

```
Device(config)# interface TenGigabitEthernet1/0/2
Device(config-if)#stackwise-virtual dual-active-detection
```

show hw-module switch subslot

To display information for all the supported modules in the system and chassis location information, use the **show hw-module switch** *switch-number* **subslot** command in privileged EXEC mode. To disable this feature, use the **no** form of this command.

show hw-module switch *switch-number* **subslot**
 { *slot/subslot* | **all** { **attribute** | **entity** | **oir** | **sensors** [**limits**] | **subblock** | **tech-support** } }

noshow hw-module switch *switch-number* **subslot**
 { *slot/subslot* | **all** { **attribute** | **entity** | **oir** | **sensors** [**limits**] | **subblock** | **tech-support** } }

Syntax Description		
switch number	<i>switch number</i>	Specifies the switch to access; valid values are 1 and 2.
subslot	<i>slot/subslot</i>	Specifies module slot or subslot number. Valid values for slot are 1 to 4. Valid value for subslot is 0.
all		Selects all the supported modules in the subslot level.
attribute		Displays module attribute information.
entity		Displays entity MIB details. Note Not intended for production use.
oir		Displays online insertion and removal (OIR) summary.
sensors		Displays environmental sensor summary.
limits		Displays sensor limits.
subblock		Displays subblock details. Note Not intended for production use.
tech-support		Displays subslot information for technical support.

Command Default None

Command Modes Privileged EXEC (#)

Command History	Release	Modification
	Cisco IOS XE Fuji 16.9.1	This command was introduced.

Examples

This example shows how to obtain module attribute information for switch 1 for all the modules in the subslot level:

```
Device# show hw-module switch 1 subslot all attribute
```

This example shows how to obtain module OIR information for switch 1 for all the modules in the subslot level:

```
Device# show hw-module switch 1 subslot all oir
```


This example shows how to obtain environmental sensor summary for switch 1 for all the modules in the subslot level:

```
Device# show hw-module switch 1 subslot all sensors
```

This example shows how to obtain sensory limits information for switch 1 for all modules in the subslot level:

```
Device# show hw-module switch 1 subslot all sensors limit
```

This example shows how to obtain subslot information for technical support for switch 1 for all modules in the subslot level:

```
Device# show hw-module switch 1 subslot all tech-support
```

show logging onboard switch

To display the on-board failure logging (OBFL) information of a switch, use the **show logging onboard switch** command in privileged EXEC mode.

```
show logging onboard switch {switch-number | active | standby} {RP {standby | active} | slot {1 | 4 | F0 | F1 | R0 | R1}} {{clilog | counter | environment | message | poe | temperature | uptimevo | voltage} [continuous | detail | summary] [start hh:mm:ss day month year] [end hh:mm:ss day month year] } | state | status}
```

Syntax	Description
<i>switch-number</i>	Switch for which OBFL information is displayed.
active	Displays OBFL information about the active switch.
standby	Displays OBFL information about the standby switch.
RP	Specifies the route processor (RP).
slot	Specifies the slot information.
clilog	Displays the OBFL commands that were entered on the standalone switch or specified stack members.
counter	Displays the counter of the standalone switch or specified stack members.
environment	Displays the unique device identifier (UDI) information for the standalone switch or specified stack members. Also displays the product identification (PID), the version identification (VID), and the serial number for all the connected FRU devices.
message	Displays the hardware-related system messages generated by the standalone switch or specified stack members.
poe	Displays the power consumption of the Power over Ethernet (PoE) ports on the standalone switch or specified stack members.

state	Displays the state of the standalone switch or specified stack members.
status	Displays the status of the standalone switch or specified stack members.
temperature	Displays the temperature of the standalone switch or specified stack members.
uptime	Displays the time at which the standalone switch or specified stack members start, the reason the standalone switch or specified members restart, and the length of time the standalone switch or specified stack members have been running since they last restarted.
voltage	Displays the system voltages of the standalone switch or the specified switch stack members.
continuous	(Optional) Displays the data in the continuous file.
detail	(Optional) Displays both the continuous and summary data.
summary	(Optional) Displays the data in the summary file.
start <i>hh:mm:ss day month year</i>	(Optional) Displays the data from the specified time and date. Enter the time as a 2-digit number for a 24-hour clock. Make sure to use the colons (:), for example, 13:32:45. The range of day is from 1 to 31. The month in upper case or lower case letters. You can enter the full name of the month, such as January or august, or the first three letters of the month, such as jan or Aug. The year is a 4-digit number, such as 2008. The range is from 1970 to 2099.
end <i>hh:mm:ss day month year</i>	(Optional) Displays the data up to the specified time and date. Enter the time as a 2-digit number for a 24-hour clock. Make sure to use the colons (:), for example, 13:32:45. The range of day is from 1 to 31. The month in upper case or lower case letters. You can enter the full name of the month, such as January or august, or the first three letters of the month, such as jan or Aug. The year is a 4-digit number, such as 2008. The range is from 1970 to 2099.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
Cisco IOS XE Fuji 16.9.1	This command was introduced.

Usage Guidelines

When OBFL is enabled, the switch records the OBFL data in a continuous file that contains all the data. The continuous file is circular. When the continuous file is full, the switch combines the data into a summary file, which is also known as a historical file. Creating the summary file frees up space in the continuous file so that the switch can write newer data to it.

Use the **start** and **end** keywords to display the data collected only during a particular time period.

Examples

This is a sample output of the **show logging onboard switch 1 RP active message** command:

```
Device# show logging onboard switch 1 RP active message

-----
ERROR MESSAGE SUMMARY INFORMATION
-----
MM/DD/YYYY HH:MM:SS Facility-Sev-Name | Count | Persistence Flag
-----
07/06/2018 00:45:23 %IOSXE-2-DIAGNOSTICS_FAILED : >254 LAST Diagnostics Thermal failed
07/06/2018 00:19:57 %IOSXE-2-DIAGNOSTICS_PASSED : >254 LAST Diagnostics Fantray passed
07/07/2018 11:36:10 %IOSXE-2-TRANSCEIVER_INSERTED : >254 LAST Transceiver module inserted
in TenGigabitEthernet1/2/0/5
05/03/2018 05:49:57 %IOSXE-2-TRANSCEIVER_REMOVED : 82 : LAST : Transceiver module removed
from TenGigabitEthernet1/2/0/7
07/07/2018 08:20:36 %IOSXE-2-SPA_REMOVED : >254 LAST SPA removed from subslot 14/0
07/06/2018 01:50:33 %IOSXE-2-SPA_INSERTED : >254 LAST SPA inserted in subslot 11/0
-----
```

This is a sample output of the **show logging onboard switch 1 slot 4 status** command:

```
Device# show logging onboard switch 1 slot 4 status

-----
OBFL Application Status
-----
Application Uptime:
    Path: /obfl0/
    Cli enable status: enabled
Application Message:
    Path: /obfl0/
    Cli enable status: enabled
Application Voltage:
    Path: /obfl0/
    Cli enable status: enabled
Application Temperature:
    Path: /obfl0/
    Cli enable status: enabled
Application POE:
    Path: /obfl0/
    Cli enable status: enabled
Application Environment:
    Path: /obfl0/
    Cli enable status: enabled
Application Counter:
    Path: /obfl0/
    Cli enable status: enabled
Application Clilog:
    Path: /obfl0/
    Cli enable status: enabled
```

This is a sample output of the **show logging onboard switch 1 slot 4 state** command:

```
Device# show logging onboard switch 1 slot 4 state

GREEN
```

Related Commands

Command	Description
clear logging onboard	Removes the OBFL data from flash memory.

Command	Description
hw-module logging onboard	Enables OBFL.

show stackwise-virtual

To display your Cisco StackWise Virtual configuration information, use the **show stackwise-virtual** command.

```
show stackwise-virtual { [switch [switch number <1-2>] {link | bandwidth | neighbors |
dual-active-detection} }
```

Syntax Description		
switch <i>number</i>		(Optional) Displays information of a particular switch in the stack.
link		Displays Stackwise Virtual link information.
bandwidth		Displays bandwidth availability for StackWise Virtual.
neighbors		Displays Stackwise Virtual neighbors.
dual-active-detection		Displays Stackwise-Virtual dual-active-detection information.

Command Default None

Command Modes Privileged EXEC (#)

Command History	Release	Modification
	Cisco IOS XE Fuji 16.9.1	This command was introduced.

Example:

The following is a sample output from the **show stackwise-virtual** command:

```
Device# show stackwise-virtual

Stackwise Virtual: <Enabled/Disabled>
Domain Number:    <Domain Number>
Switch    Stackwise Virtual Link    Ports
-----
1          1          Tengigabitethernet1/0/4
           2          Tengigabitethernet1/0/5
2          1          Tengigabitethernet2/0/4
           2          Tengigabitethernet2/0/5
```

The following is a sample output from the **show stackwise-virtual link** command:

Device# **show stackwise-virtual link**

Stackwise Virtual Link (SVL) Information:

Flags:

Link Status

U-Up D-Down

Protocol Status

S-Suspended P-Pending E-Error T-Timeout R-Ready

Switch	SVL	Ports	Link-Status	Protocol-Status
1	1	FortyGigabitEthernet1/1/1	U	R
2	1	FortyGigabitEthernet2/1/1	U	R

The following is a sample output from the **show stackwise-virtual bandwidth** command:

Device# **show stackwise-virtual bandwidth**

Switch Bandwidth

1	160
2	160

The following is a sample output from the **show stackwise-virtual neighbors** command:

Device#**show stackwise-virtual neighbors**

Switch Number	Local Interface	Remote Interface
1	Tengigabitethernet1/0/1	Tengigabitethernet2/0/1
	Tengigabitethernet1/0/2	Tengigabitethernet2/0/2
2	Tengigabitethernet2/0/1	Tengigabitethernet1/0/1
	Tengigabitethernet2/0/2	Tengigabitethernet2/0/2

The following is a sample output from the **show stackwise-virtual dual-active-detection** command:

Device#**show stackwise-virtual dual-active-detection**

Stackwise Virtual Dual-Active-Detection (DAD) Configuration:

Switch Number Dual-Active-Detection Interface

1	Tengigabitethernet1/0/10
	Tengigabitethernet1/0/11
2	Tengigabitethernet2/0/12
	Tengigabitethernet2/0/13

Stackwise Virtual Dual-Active-Detection (DAD) Configuration After Reboot:

Switch Number Dual-Active-Detection Interface

1	Tengigabitethernet1/0/10
	Tengigabitethernet1/0/11
2	Tengigabitethernet2/0/12
	Tengigabitethernet2/0/13

show stackwise-virtual