# StackWise Virtual Commands

# 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** *num* | Clears the events for a specific switch. |
| **module** *num* | Clears the events for a specific module. |
| **switch all** | Clears all the event logs from all the switches. |

## Command Modes

Privileged EXEC (#)

## Command History

## 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 Everest 16.6.1 | 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** *number* | 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.<br>This keyword is supported only on on stacking-capable switches. |
| **test** | Specifies the tests to be run. |
| *name* | Name of the test. |
| *test-id* | ID number of the test. |
| *test-id-range* | 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. |
| *hh:mm:ss* | 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. |

| | |
|---|---|
| *milliseconds* | Monitoring interval, in milliseconds (ms). Enter the test time, in milliseconds, from 0 to 999. |
| *day* | Monitoring interval, in days. Enter the number of days between test, from 0 to 20. |
| **threshold** | Configures the failure threshold. |
| **failure count** *count* | Sets the failure threshold count. |
| **cardindex** *number* | (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** *switch_num* | Specifies the switch number. |
| **module** *module_num* | Specifies the module number. |
| **test** | Specifies the diagnostic test suite attribute. |
| *test-id* | Identification number for the test to be run.<br>Enter the **show diagnostic content** command to display t |
| **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.<br>**per-port** is not supported when specifying a scheduled sy |
| **port** | (Optional) Specifies the port-to-schedule testing. |
| *interface-port- number* | (Optional) Port number. The range is from 1-48. |
| *port-number-list* | (Optional) Range of port numbers, separated by a hyphen 1-48. |
| **all** | (Optional) Specifies all the ports. |
| **on** *month* | Specifies the schedule of a test-based diagnostic task.<br>Enter the month name, for example, January or February lowercase characters). |

| | |
|---|---|
| **daily** *hh:mm* | Specifies the daily schedule of a test-based diagnostic<br>Enter the time as a two-digit number (for a 24-hour cl the colon (**:**) is required. |
| **weekly** *day-of-week* | Specifies the weekly schedule of a test-based diagnos<br>Enter the day of the week, for example, Monday or Tu or 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** *switch_num* | Specifies the switch number. |
| **module** *module_num* | Specifies the module number. |
| **test** | Specifies a test to run. |
| *test-id* | Enter the identification number of the test you want to run.<br>Enter the *test-id-range* or *port_range* 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** *num* | (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** *switch_num* | Specifies the switch number. |
| **module** *module_num* | 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. |
| **show diagnostic events** | Displays the diagnostic event log. |
| **show diagnostic ondemand settings** | Displays the settings for the on-demand diagnostics. |

| Command | Description |
|---|---|
| **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. |
| *id* | 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 Everest 16.6.1 | 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 Everest 16.6.1 | 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 priviledged 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

| | |
|---|---|
| *switch-number* | 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 processorfor the selected switch. |
| **fan-tray** | Selects the fan for the selected switch. |
| **power-supply** *power-supply slot number* | Specifies the power supply slot number. Valid values are 1 to 4. |
| **slot** *slot-number* | 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

Priviledged 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** | **poe** | **temperature** | **voltage** ] | **shutdown** }

## Syntax Description

| | |
|---|---|
| *switch-number* | The switch to access. Valid values are 1 and 2. |
| **slot***slot-number* | Specifies the slot number to access. Valid values are 1 to 4.<br>• 1: Linecard slot 1<br>• 2: Supervisor slot 0<br>• 3: Supervisor slot 1<br>• 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. |
| **poe** | (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 l:

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

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

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

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

```
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 volatge 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***usbflashunmount**

**Syntax Description**

| | |
|---|---|
| *switch number* | 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
```

# set platform software fed switch

To set the packet cache count per SVL port, use the **set platform software fed switch** command in privileged EXEC or user EXEC mode.

**set platform software fed switch** {*switch-number* | **active** | **standby**} {**F0** | **F1 active**} **fss pak-cache** *count*

## Syntax Description

| | |
|---|---|
| **switch** {*switch-number* \| **active** \| **standby**} | Specifies information about the switch. You have the following options:<br>• *switch-number*<br>• **active** —Displays information relating to the active switch.<br>• **standby**—Displays information relating to the standby switch, if available. |
| **F0** | Specifies information about the Embedded Service Processor slot 0. |
| **FP active** | Specifies information about the active Embedded Service Processor. |
| **pak-cache** *count* | Specifies the packet cache count. The range is 10 to 600.The default is 10. |

## Command Default

The default per port packet cache count is 10.

## Command Modes

User EXEC(>)

Privileged EXEC (#)

## Command History

| Release | Modification |
|---|---|
| Cisco IOS XE Gibraltar 16.10.1 | This command was introduced. |

## Usage Guidelines

None

### Example

This example shows how to set the packet cache count per SVL port.

```
Device# set platform software fed switch active F1 active fss pak-cache 40
```

# set platform software nif-mgr switch

To set the packet cache count per SVL port, use the **set platform software nif-mgr switch** command in privileged EXEC or user EXEC mode.

**set platform software nif-mgr switch** {*switch-number* | **active** | **standby** }**R0 pak-cache** *count*

## Syntax Description

| | |
|---|---|
| **switch** {*switch-number* \| **active** \| **standby**} | Specifies information about the switch. You have the following options:<br>• *switch-number*<br>• **active** —Displays information relating to the active switch.<br>• **standby**—Displays information relating to the standby switch, if available. |
| **R0** | Specifies information about the Route Processor (RP) slot 0. |
| **pak-cache** *count* | Specifies the packet cache count. The range is 10 to 600.The default is 10. |

## Command Default

The default per port packet cache count is 10.

## Command Modes

User EXEC(>)

Privileged EXEC (#)

## Command History

| Release | Modification |
|---|---|
| Cisco IOS XE Gibraltar 16.10.1 | This command was introduced. |

## Usage Guidelines

None

### Example

This example shows how to set the packet cache count per SVL port.

```
Device# set platform software nif_mgr switch active R0 pak-cache 40
```

# 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. |
| *link value* | Domain ID configured for Cisco StackWise Virtual. |

## Command Default

Disabled.

## Command Modes

Interface configuration (config-if).

## Command History

| Release | Modification |
|---|---|
| Cisco IOS XE Everest 16.6.1 | 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 Everest 16.6.1 | 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 diagnostic bootup

To show the diagnostic boot information for a switch, use the **show diagnostic bootup** command in privileged EXEC mode.

**show diagnostic bootup level**

## Syntax Description

| | |
|---|---|
| **level** | Shows the diagnostic boot-level information. |

## Command Modes

Privileged EXEC (#)

## Command History

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

## Examples

The following is a sample output of the **show diagnostic bootup level** command:

```
Device# show diagnostic bootup level

Current bootup diagnostic level: minimal
```

# show diagnostic content

To show the diagnostic test content for a switch, use the **show diagnostic content** command in privileged EXEC mode.

**show diagnostic content switch** {*switch-number* **module** {**1** | **2** | **4**} | **all** [**all**]}

## Syntax Description

| | |
|---|---|
| **switch** *switch-number* | Specifies the switch to be selected. |
| **module** | Selects a module of the switch. |
| **1** | Displays the diagnostic test content for the module C9400-LC-48U. |
| **2** | Displays the diagnostic test content for the module C9400-SUP-1. |
| **4** | Displays the diagnostic test content for the module C9400-LC-48T. |
| **switch all** [**all**] | • **switch all**–Selects all the switches.<br>• (Optional) **all**–Displays all the diagnostic test content for all the switches. |

## Command Modes

Privileged EXEC (#)

## Command History

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

The following example shows a sample ouput of the **show diagnostic content switch all** [**all**] command.

```
Device# show diagnostic content switch all all

switch 1, module 1:

  Diagnostics test suite attributes:
    M/C/* - Minimal bootup level test / Complete bootup level test / NA
      B/* - Basic ondemand test / NA
    P/V/* - Per port test / Per device test / NA
    D/N/* - Disruptive test / Non-disruptive test / NA
      S/* - Only applicable to standby unit / NA
      X/* - Not a health monitoring test / NA
      F/* - Fixed monitoring interval test / NA
      E/* - Always enabled monitoring test / NA
      A/I - Monitoring is active / Monitoring is inactive

                                                          Test Interval   Thre-
  ID   Test Name                              Attributes    day hh:mm:ss.ms shold
  ==== ================================== ============    =============== =====
    1) TestGoldPktLoopback -------------> *BPN*X**I       not configured  n/a
    2) TestPhyLoopback -----------------> *BPD*X**I       not configured  n/a
```

```
    3) TestThermal ----------------------> *B*N****A       000 00:01:30.00 1
    4) TestScratchRegister --------------> *B*N****A       000 00:01:30.00 5
    5) TestPoe --------------------------> *B*N*X**I       not configured  n/a
    6) TestUnusedPortLoopback -----------> *BPN****I       not configured  1
    7) TestPortTxMonitoring -------------> *BPN****A       000 00:01:15.00 1


switch 1, module 2:

  Diagnostics test suite attributes:
    M/C/* - Minimal bootup level test / Complete bootup level test / NA
      B/* - Basic ondemand test / NA
    P/V/* - Per port test / Per device test / NA
    D/N/* - Disruptive test / Non-disruptive test / NA
      S/* - Only applicable to standby unit / NA
      X/* - Not a health monitoring test / NA
      F/* - Fixed monitoring interval test / NA
      E/* - Always enabled monitoring test / NA
      A/I - Monitoring is active / Monitoring is inactive

                                                          Test Interval   Thre-
  ID   Test Name                           Attributes     day hh:mm:ss.ms shold
  ==== ================================== ============   =============== =====
    1) TestGoldPktLoopback --------------> *BPN*X**I       not configured  n/a
    2) TestFantray ----------------------> *B*N****A       000 00:01:40.00 1
    3) TestPhyLoopback ------------------> *BPD*X**I       not configured  n/a
    4) TestThermal ----------------------> *B*N****A       000 00:01:30.00 1
    5) TestScratchRegister --------------> *B*N****A       000 00:01:30.00 5
    6) TestMemory -----------------------> *B*D*X**I       not configured  n/a
    7) TestUnusedPortLoopback -----------> *BPN****I       not configured  1
    8) TestPortTxMonitoring -------------> *BPN****A       000 00:01:15.00 1


switch 1, module 4:

  Diagnostics test suite attributes:
    M/C/* - Minimal bootup level test / Complete bootup level test / NA
      B/* - Basic ondemand test / NA
    P/V/* - Per port test / Per device test / NA
    D/N/* - Disruptive test / Non-disruptive test / NA
      S/* - Only applicable to standby unit / NA
      X/* - Not a health monitoring test / NA
      F/* - Fixed monitoring interval test / NA
      E/* - Always enabled monitoring test / NA
      A/I - Monitoring is active / Monitoring is inactive

                                                          Test Interval   Thre-
  ID   Test Name                           Attributes     day hh:mm:ss.ms shold
  ==== ================================== ============   =============== =====
    1) TestGoldPktLoopback --------------> *BPN*X**I       not configured  n/a
    2) TestPhyLoopback ------------------> *BPD*X**I       not configured  n/a
    3) TestThermal ----------------------> *B*N****A       000 00:01:30.00 1
    4) TestScratchRegister --------------> *B*N****A       000 00:01:30.00 5
    5) TestUnusedPortLoopback -----------> *BPN****I       not configured  1
    6) TestPortTxMonitoring -------------> *BPN****A       000 00:01:15.00 1


switch 2, module 1:

  Diagnostics test suite attributes:
    M/C/* - Minimal bootup level test / Complete bootup level test / NA
      B/* - Basic ondemand test / NA
    P/V/* - Per port test / Per device test / NA
    D/N/* - Disruptive test / Non-disruptive test / NA
```

```
      S/* - Only applicable to standby unit / NA
      X/* - Not a health monitoring test / NA
      F/* - Fixed monitoring interval test / NA
      E/* - Always enabled monitoring test / NA
      A/I - Monitoring is active / Monitoring is inactive

                                                          Test Interval   Thre-
  ID   Test Name                           Attributes     day hh:mm:ss.ms shold
  ==== ================================== ============   =============== =====
    1) TestGoldPktLoopback -------------> *BPN*X**I      not configured  n/a
    2) TestPhyLoopback -----------------> *BPD*X**I      not configured  n/a
    3) TestThermal ---------------------> *B*N****A      000 00:01:30.00 1
    4) TestScratchRegister -------------> *B*N****A      000 00:01:30.00 5
    5) TestPoe -------------------------> *B*N*X**I      not configured  n/a
    6) TestUnusedPortLoopback ----------> *BPN****I      not configured  1
    7) TestPortTxMonitoring ------------> *BPN****A      000 00:01:15.00 1


switch 2, module 2:

  Diagnostics test suite attributes:
    M/C/* - Minimal bootup level test / Complete bootup level test / NA
      B/* - Basic ondemand test / NA
    P/V/* - Per port test / Per device test / NA
    D/N/* - Disruptive test / Non-disruptive test / NA
      S/* - Only applicable to standby unit / NA
      X/* - Not a health monitoring test / NA
      F/* - Fixed monitoring interval test / NA
      E/* - Always enabled monitoring test / NA
      A/I - Monitoring is active / Monitoring is inactive

                                                          Test Interval   Thre-
  ID   Test Name                           Attributes     day hh:mm:ss.ms shold
  ==== ================================== ============   =============== =====
    1) TestGoldPktLoopback -------------> *BPN*X**I      not configured  n/a
    2) TestFantray ---------------------> *B*N****A      000 00:01:40.00 1
    3) TestPhyLoopback -----------------> *BPD*X**I      not configured  n/a
    4) TestThermal ---------------------> *B*N****A      000 00:01:30.00 1
    5) TestScratchRegister -------------> *B*N****A      000 00:01:30.00 5
    6) TestMemory ----------------------> *B*D*X**I      not configured  n/a
    7) TestUnusedPortLoopback ----------> *BPN****I      not configured  1
    8) TestPortTxMonitoring ------------> *BPN****A      000 00:01:15.00 1


switch 2, module 4:

  Diagnostics test suite attributes:
    M/C/* - Minimal bootup level test / Complete bootup level test / NA
      B/* - Basic ondemand test / NA
    P/V/* - Per port test / Per device test / NA
    D/N/* - Disruptive test / Non-disruptive test / NA
      S/* - Only applicable to standby unit / NA
      X/* - Not a health monitoring test / NA
      F/* - Fixed monitoring interval test / NA
      E/* - Always enabled monitoring test / NA
      A/I - Monitoring is active / Monitoring is inactive

                                                          Test Interval   Thre-
  ID   Test Name                           Attributes     day hh:mm:ss.ms shold
  ==== ================================== ============   =============== =====
    1) TestGoldPktLoopback -------------> *BPN*X**I      not configured  n/a
    2) TestPhyLoopback -----------------> *BPD*X**I      not configured  n/a
    3) TestThermal ---------------------> *B*N****A      000 00:01:30.00 1
    4) TestScratchRegister -------------> *B*N****A      000 00:01:30.00 5
```

```
5) TestUnusedPortLoopback ----------> *BPN****I       not configured  1
6) TestPortTxMonitoring ------------> *BPN****A       000 00:01:15.00 1
```

# show diagnostic description

To show the diagnostic test description for a switch, use the **show diagnostic description** command in privileged EXEC mode.

**show diagnostic description switch** {*switch-number* **module** {**1** | **2** | **4**} {**test** {*test-id* | **all**}} | **all test** {*test-list* | *test-id* | **all**}}

## Syntax Description

| | |
|---|---|
| **switch** *switch-number* | Specifies the switch to be selected. |
| **switch all** | Selects all the switches. |
| **module** | Selects a module of the switch. |
| **1** | Selects the module C9400-LC-48U. |
| **2** | Selects the module C9400-SUP-1. |
| **4** | Selects the module C9400-LC-48T. |
| **test** *test-id* | Displays the diagnostic test description for the test ID or test name specified. |
| **test** *test-list* | Displays the diagnostic test description for the list of test IDs specified. |
| **test all** | Displays the diagnostic test description for all the test IDs. |

## Command Modes

Privileged EXEC (#)

## Command History

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

## Examples

This example shows sample output of the **show diagnostic description switch** *switch-number* **module 4 test all** command:

```
Device# show diagnostic description switch 1 module 4 test all

TestGoldPktLoopback :
 The GOLD packet Loopback test verifies the MAC level loopback
 functionality. In this test, a GOLD packet, for which doppler
 provides the support in hardware, is sent. The packet loops back
 at MAC level and is matched against the stored packet. It is a
 non-disruptive test.

TestPhyLoopback :
 The PHY Loopback test verifies the PHY level loopback
 functionality. In this test, a packet is sent which loops back
 at PHY level and is matched against the stored packet. It is a
 disruptive test and cannot be run as a health monitoring test.
```

```
TestThermal :
 This test verifies the temperature reading from the sensor is
 below the yellow temperature threshold. It is a non-disruptive
 test and can be run as a health monitoring test.

TestScratchRegister :
 The Scratch Register test monitors the health of
 application-specific integrated circuits (ASICs) by writing values
 into registers and reading back the values from these registers.
 It is a non-disruptive test and can be run as a health monitoring
        test.

TestUnusedPortLoopback :
 This test verifies the PHY level loopback functionality for
 admin-down ports. In this test, a packet is sent which loops back
 at PHY level and is matched against the stored packet. It is a
 non-disruptive test and can be run as a health monitoring test.

TestPortTxMonitoring :
 This test monitors the TX counters of a connected interface.
 This test verifies if the connected port is able to send the
 packets or not. It is a non-disruptive test and can be run
 as a health monitoring test.
```

# show diagnostic events

To show the diagnostic event log for a switch, use the **show diagnostic events** command in privileged EXEC mode.

**show diagnostic events switch** {*switch-number* **module** {**1** | **2** | **4**} | **all** [**event-type** [**error** | **info** | **warning**]]}

## Syntax Description

| | |
|---|---|
| **switch** *switch-number* | Specifies the switch to be selected. |
| **switch all** | Selects all the switches. |
| **module** | Selects a module of the switch. |
| **1** | Displays diagnostic event logs for the C9400-LC-48U module. |
| **2** | Displays diagnostic event logs for the C9400-SUP-1 module. |
| **4** | Displays diagnostic event logs for the C9400-LC-48T module. |
| **event-type** | (Optional) Displays the event log of a specific event type. The following are the valid values:<br>• **error :** Displays the error type event logs.<br>• **info :** Displays the information type event logs.<br>• **warning :** Displays the warning type event logs. |

## Command Modes

Privileged EXEC (#)

## Command History

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

## Examples

This example shows a sample output of the **show diagnostic events switch** *switch-number* **module 2** command.

```
Device# show diagnostic events switch 1 module 2

Diagnostic events (storage for 500 events, 500 events recorded)
Number of events matching above criteria = 500
Event Type (ET): I - Info, W - Warning, E - Error

Time Stamp         ET [Card] Event Message
------------------ -- ------ --------------------------------------------------
07/08 13:54:05.110 E  [1-2]    TestThermal Failed
07/08 13:55:35.111 E  [1-2]    TestThermal Failed
07/08 13:57:05.111 E  [1-2]    TestThermal Failed
```

```
07/08 13:58:35.613 E  [1-2]    TestThermal Failed
07/08 14:00:05.614 E  [1-2]    TestThermal Failed
07/08 14:01:35.615 E  [1-2]    TestThermal Failed
07/08 14:03:05.616 E  [1-2]    TestThermal Failed
07/08 14:04:36.367 E  [1-2]    TestThermal Failed
07/08 14:06:06.368 E  [1-2]    TestThermal Failed
07/08 14:07:37.370 E  [1-2]    TestThermal Failed
07/08 14:09:07.371 E  [1-2]    TestThermal Failed
07/08 14:10:38.372 E  [1-2]    TestThermal Failed
07/08 14:12:10.873 E  [1-2]    TestThermal Failed
07/08 14:13:41.374 E  [1-2]    TestThermal Failed
<Output truncated>
```

# show diagnostic result

To show the diagnostic test result information, use the **show diagnostic result** command in privileged EXEC mode.

**show diagnostic result switch** {*switch-number***module** {**1** | **2** | **4**} [**detail** | **failure** [**detail**] | **test** {*test-id* | **all**} [**detail**] | **xml**] | **all** [**all** [**detail** | **failure** [**detail**]]]}

## Syntax Description

| | |
|---|---|
| **switch** *switch-number* | Specifies the switch to be selected. |
| **module** | Selects a module of the switch. |
| **1** | Displays the diagnostic test results for the module C9400-LC-48U. |
| **2** | Displays the diagnostic test results for the module C9400-SUP-1. |
| **4** | Displays the diagnostic test results for the module C9400-LC-48T. |
| **detail** | (Optional) Displays the detailed test results. |
| **failure** | (Optional) Displays the failed test results. |
| **test** *test-id* | (Optional) Displays the diagnostic test results for the selected test ID or test name or list of test IDs of a module. |
| **test all** | (Optional) Displays the diagnostic test results for all the tests of a module. |
| **xml** | (Optional) Displays the test results in XML format. |
| **switch all** [**all**] | • **switch all**—Displays the diagnostic test results for all the switches.<br>• (Optional)**all**—Displays the diagnostic test results for all the cards of all the switches. |

## Command Modes

Privileged EXEC (#)

## Command History

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

## Examples

This example displays sample output of the **show diagnostic result switch** *switch-number* **module 4** [**failure** [**detail**]] command:

```
Device# show diagnostic result switch 1 module 4 failure detail

Current bootup diagnostic level: minimal

switch 1, module 4:   SerialNo : JAE204700PH

  Overall Diagnostic Result for switch 1, module 4 : PASS
  Diagnostic level at card bootup: minimal

  Test results: (. = Pass, F = Fail, U = Untested)
```

This example displays sample output for the **show diagnostic result switch** *switch-number* **module 4** [**detail**] command.

```
Device# show diagnostic result switch 1 module 4 detail

Current bootup diagnostic level: minimal

switch 1, module 4:   SerialNo : JAE204700PH

  Overall Diagnostic Result for switch 1, module 4 : PASS
  Diagnostic level at card bootup: minimal

  Test results: (. = Pass, F = Fail, U = Untested)

  _____________________________________________________________________________

    1) TestGoldPktLoopback:

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

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


          Error code ------------------> 3 (DIAG_SKIPPED)
          Total run count -------------> 0
          Last test testing type ------> n/a
          Last test execution time ----> n/a
          First test failure time -----> n/a
          Last test failure time ------> n/a
          Last test pass time ---------> n/a
          Total failure count ---------> 0
          Consecutive failure count ---> 0
  _____________________________________________________________________________

    2) TestPhyLoopback:

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

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


          Error code ------------------> 3 (DIAG_SKIPPED)
          Total run count -------------> 0
          Last test testing type ------> n/a
```

```
       Last test execution time ----> n/a
       First test failure time -----> n/a
       Last test failure time ------> n/a
       Last test pass time ---------> n/a
       Total failure count ---------> 0
       Consecutive failure count ---> 0
_____________________________________________________________________________

  3) TestThermal ----------------------> .

       Error code ------------------> 0 (DIAG_SUCCESS)
       Total run count -------------> 1771
       Last test testing type ------> Health Monitoring
       Last test execution time ----> Jul 09 2018 03:06:53
       First test failure time -----> n/a
       Last test failure time ------> n/a
       Last test pass time ---------> Jul 09 2018 03:06:53
       Total failure count ---------> 0
       Consecutive failure count ---> 0
_____________________________________________________________________________

  4) TestScratchRegister -------------> .

       Error code ------------------> 0 (DIAG_SUCCESS)
       Total run count -------------> 1771
       Last test testing type ------> Health Monitoring
       Last test execution time ----> Jul 09 2018 03:06:53
       First test failure time -----> n/a
       Last test failure time ------> n/a
       Last test pass time ---------> Jul 09 2018 03:06:53
       Total failure count ---------> 0
       Consecutive failure count ---> 0
_____________________________________________________________________________

  5) TestUnusedPortLoopback:

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

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


       Error code ------------------> 3 (DIAG_SKIPPED)
       Total run count -------------> 0
       Last test testing type ------> n/a
       Last test execution time ----> n/a
       First test failure time -----> n/a
       Last test failure time ------> n/a
       Last test pass time ---------> n/a
       Total failure count ---------> 0
       Consecutive failure count ---> 0
_____________________________________________________________________________

  6) TestPortTxMonitoring:

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

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

```
          U  U  U  U  U  U  U  U  U  U  U  U  U  U  U  U  U  U  U  U  U  U  .


          Error code ------------------> 0 (DIAG_SUCCESS)
          Total run count -------------> 2146
          Last test testing type ------> Health Monitoring
          Last test execution time ----> Jul 09 2018 03:07:08
          First test failure time -----> n/a
          Last test failure time ------> n/a
          Last test pass time ---------> Jul 09 2018 03:07:08
          Total failure count ---------> 0
          Consecutive failure count ---> 0
  ------------------------------------------------------------------------------
```

This example displays sample output for the **show diagnostic result switch** *switch-number* **module 4** [**test** [*test-id*]] command.

```
Device# show diagnostic result switch 1 module 4 test 3

Current bootup diagnostic level: minimal


  Test results: (. = Pass, F = Fail, U = Untested)

    3) TestThermal ----------------------> .


Switch#show diagnostic result switch 1 module 4 test 3 detail ?
  |     Output modifiers
  <cr>  <cr>

Switch#show diagnostic result switch 1 module 4 test 3 detail

Current bootup diagnostic level: minimal


  Test results: (. = Pass, F = Fail, U = Untested)

  ------------------------------------------------------------------------------

    3) TestThermal ----------------------> .

          Error code ------------------> 0 (DIAG_SUCCESS)
          Total run count -------------> 1772
          Last test testing type ------> Health Monitoring
          Last test execution time ----> Jul 09 2018 03:08:23
          First test failure time -----> n/a
          Last test failure time ------> n/a
          Last test pass time ---------> Jul 09 2018 03:08:23
          Total failure count ---------> 0
          Consecutive failure count ---> 0
  ------------------------------------------------------------------------------
```

This example displays sample output for the **show diagnostic result switch** *switch-number* **module 4** [**xml**] command.

```
Device# show diagnostic result switch 1 module 4 xml

Current bootup diagnostic level: minimal

 <?xml version="1.0" ?><diag>
<diag_results>
<diag_info>
This file report diag test results
```

```
</diag_info>
<diag_card_result>
<result overall_result="DIAG_PASS" new_failure="FALSE" diag_level="DIAG_LEVEL_MINIMAL" />
<card name="switch 1, module 4" index="3198" serial_no="JAE204700PH" >
<card_no>
9
</card_no>
<total_port>
48
</total_port>
<test name="TestGoldPktLoopback" >
<test_result>
<portmask>
00000000-00000000-00000000-00000000-00000000-00000000-11111111-11111111-11111111</portmask>
<per_port_result result="DIAG_RESULT_UNKNOWN" port="1" />
<per_port_result result="DIAG_RESULT_UNKNOWN" port="2" />
<per_port_result result="DIAG_RESULT_UNKNOWN" port="3" />
<per_port_result result="DIAG_RESULT_UNKNOWN" port="4" />
<per_port_result result="DIAG_RESULT_UNKNOWN" port="5" />
<per_port_result result="DIAG_RESULT_UNKNOWN" port="6" />
<per_port_result result="DIAG_RESULT_UNKNOWN" port="7" />
<per_port_result result="DIAG_RESULT_UNKNOWN" port="8" />
<per_port_result result="DIAG_RESULT_UNKNOWN" port="9" />
<per_port_result result="DIAG_RESULT_UNKNOWN" port="10" />
<per_port_result result="DIAG_RESULT_UNKNOWN" port="11" />
<per_port_result result="DIAG_RESULT_UNKNOWN" port="12" />
<per_port_result result="DIAG_RESULT_UNKNOWN" port="13" />

<Output truncated>
```

# show diagnostic simulation failure

To display the diagnostic failure simulation information for a card on a switch, use the **show diagnostic simulation failure** command in privileged EXEC mode.

**show diagnostic simulation failure switch** {*switch-number* **module** {**1** | **2** | **4**} | **all** [**all**]}

## Syntax Description

| | |
|---|---|
| **switch** *switch-number* | Specifies the switch to be selected. |
| **module** | Selects a module of the switch. |
| **1** | Displays diagnostic failure simulation information for the C9400-LC-48U module. |
| **2** | Displays diagnostic failure simulation information for the C9400-SUP-1 module. |
| **4** | Displays diagnostic failure simulation information for the C9400-LC-48T module. |
| **switch all** [**all**] | • **switch all**—Selects all the switches.<br>• (Optional)**all**—Displays all the diagnostic failure simulation information for all the switches. |

## Command Modes

Privileged EXEC (#)

## Command History

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

## Examples

This example shows sample output of the **show diagnostic simulation failure switch all** command:

```
Device# show diagnostic simulation failure switch all

There is no test failure simulation installed.
```

# show diagnostic schedule

To display the diagnostic schedule information for a card on a switch, use the **show diagnostic schedule** command in privileged EXEC mode.

**show diagnostic schedule switch** {*switch-number* **module** {**1** | **2** | **4**} | **all** [**all**]}

## Syntax Description

| | |
|---|---|
| **switch** *switch-number* | Specifies the switch to be selected. |
| **module** | Selects a module of the switch. |
| **1** | Displays diagnostic schedule information for the C9400-LC-48U module. |
| **2** | Displays diagnostic schedule information for the C9400-SUP-1 module. |
| **4** | Displays diagnostic schedule information for the C9400-LC-48T module. |
| **switch all** [**all**] | • **switch all**—Selects all switches.<br>• (Optional)**all**—Displays all the diagnostic schedule information for all the switches. |

## Command Modes

Privileged EXEC (#)

## Command History

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

## Examples

This example shows sample output of the **show diagnostic schedule switch** *switch-number* **module 2** command:

```
Device# show diagnostic schedule  switch 1 module 2

Current Time = 03:14:24 PDT Mon Jul 9 2018

Diagnostic for switch 1, module 2 is not scheduled.
```

# 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 priviledged 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* | Specifies the switch to access; valid values are 1 and 2. |
| **subslot** *slot/subslot* | Specifies module slot or subslot number.<br>Valid values for slot are 1 to 4.<br>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.<br>**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.<br>**Note** Not intended for production use. |
| **tech-support** | Displays subslot information for technical support. |

## Command Default

None

## Command Modes

Priviledged 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

| | |
|---|---|
| *switch-number* | 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** *hh:mm:ss day month year* | (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** *hh:mm:ss day month year* | (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

Priviledged 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. |
| **hw-module logging onboard** | Enables OBFL. |

# show platform software fed

To display the per port SDP/LMP control packet exchange history between FED and Network Interface Manager (NIF Mgr) software processes, use the **show platform software fed** command in privileged EXEC mode.

**show platform software fed switch** {*switch-number* | **active** | **standby**} **fss** {**counters** | **interface-counters interface** {*interface-type interface-number*} | **lmp-packets interface** {*interface-type interface-number*} | **sdp-packets**

## Syntax Description

| | |
|---|---|
| **switch** {*switch-number* \| **active** \| **standby**} | Displays information about the switch. You have the following options:<br>• *switch-number*<br>• **active**—Displays information relating to the active switch.<br>• **standby**—Displays information relating to the standby switch, if available.<br>**Note** This keyword is not supported. |
| **fss** | Specifies information about Front Side Stacking (FSS). |
| **counters** | Displays the number of TX and RX packets of SDP, LMP, OOB1/2, EMP and LOOPBACK types. |
| **interface-counters** | Displays the number of TX and RX packets for all the interfaces. You can filter the output to display for a particular SVL interface using the **interface-counters interface** {*interface-type interface-number*} command. |
| **lmp-packets** | Displays details of LMP packet transactions between FED and NIF Manager for all the SVL interfaces. You can filter the output to display for a particular SVL interface using the **lmp-packets interface** {*interface-type interface-number*} command. |
| **sdp-packets** | Displays details of SDP packets transmitted between FED and NIF Manager for all the SVL interfaces. |

## Command Default

None

## Command Modes

Privileged EXEC (#)

## Command History

| Release | Modification |
|---|---|
| Cisco IOS XE Gibraltar 16.10.1 | This command was introduced. |

## Usage Guidelines

By default, the output of **show platform software fed switch active fss sdp-packets** command displays a packet cache count of 10. You can set the packet cache count per port to a maximum of 600 using the **set platform software fed switch** command.

### Example

The following is sample output from the **show platform software fed switch active fss lmp-packets interface** *interface-type interface-number* command.

```
Device# show platform software fed switch active fss lmp-packets interface
fortygigabitethernet1/0/1

Interface: fortygigabitethernet1/0/1 IFID:0x1d
FED FSS LMP packets max 10:

FED --> Nif Mgr
Timestamp                    Local    Peer       Seq
                             LPN      LPN        Num
-----------------------------------------------------
Tue Sep 18 12:45:13 2018     11       11         4329
Tue Sep 18 12:45:14 2018     11       11         4330
```

The following is sample output from the **show platform software fed switch active fss sdp-packets** command.

```
Device# show platform software fed switch active fss sdp-packets
FED FSS SDP packets max 10:
------------------------

FED-> Nif Mgr
Timestamp                       Src Mac                 Dst Mac.                Seq Num
-------------------------------------------------------------------------------------------
Thu Oct  4 05:54:04 2018        e4aa:5d54:8aa8          ffff:ffff:ffff           262
Thu Oct  4 05:54:08 2018        e4aa:5d54:8aa8          ffff:ffff:ffff           263
Thu Oct  4 05:54:12 2018        e4aa:5d54:8aa8          ffff:ffff:ffff           264
```

The following is sample output from the **show platform software fed switch active fss counters** command.

```
Device# show platform software fed switch active fss counters
FSS Packet Counters
       SDP                                          LMP
TX  |              RX                       TX  |              RX
---------------------                      ---------------------
1493             1494                      4988             4988

       OOB1                                         OOB2
TX  |              RX                       TX  |              RX
---------------------                      ---------------------
22                  8                      134858         133833

       EMP
TX  |              RX                              LOOPBACK
----------------------                     --------------------
0                     0                            71
```

The following is sample output from the **show platform software fed switch active fss interface-counters interface** *interface-type interface-number* command.

```
Device# show platform software fed switch active fss interface-counters
fortygigabitethernet1/0/1
```

```
Interface fortygigabitethernet1/0/1 IFID: 0x1d Counters
       LMP
  TX    |    RX
---------------------
6391        6389
```

## Related Commands

| Command | Description |
|---|---|
| **set platform software fed switch** | Configures the per port packet cache count for an SVL interface. |

# show platform software nif-mgr switch

To display the control packet exchange history between the Network Interface Manager software process (NIF Mgr) and the StackWise Virtual Link (SVL) interfaces, use the **show platform software nif-mgr switch** command in privileged EXEC mode.

**show platform software nif-mgr switch** {*switch-number* | **active** | **standby**} **R0**{**counters** [**lpn** *lpn-index*] | **packets** [**lpn** *lpn-index* ] | **switch-info**}

**show platform software nif-mgr switch** {*switch-number* | **active** | **standby**} **R0counters**{**slot***slot-number* }{**port** *port-number* }**packets**{**slot***slot-number* }{**port** *port-number* }{**switch-info**}

## Syntax Description

| | |
|---|---|
| **switch** {*switch-number* \| **active** \| **standby**} | Displays information about the switch. You have the following options:<br>• *switch-number.*<br>• **active** —Displays information relating to the active switch.<br>• **standby**—Displays information relating to the standby switch, if available.<br>**Note** This keyword is not supported. |
| **R0** | Displays information about the Route Processor (RP) slot 0. |
| **counters** | Displays the number of TX and RX packets of LMP and SDP type. |
| **lpn** *lpn-index* | Specifies the local port number (LPN). The range is 1 to 96.<br>Use the **show platform software nif-mgr switch active R0 switch-info** command for information about *lpn-index*. |
| **packets** | Displays the details of TX and RX packets of LMP and SDP type. |
| **switch-info** | Displays information about NIF Manager operational database. |

## Command Default

None

## Command Modes

Privileged EXEC (#)

## Command History

| Release | Modification |
|---|---|
| Cisco IOS XE Gibraltar 16.10.1 | This command was introduced. |

## Usage Guidelines

The output of the **show platform software nif-mgr switch active R0 counters** command displays counters for LMP and SDP packets that are transmitted.

The output of the **show platform software nif-mgr switch active R0 switch-info** command displays the SVL links details and the protocol flap count on each of the links.

- LMP to FED

- SDP to FED
- FED to LMP
- FED to SDP
- Stack Manager to SDP
- SDP to Stack Manager

The output of the **show platform software nif-mgr switch active R0 packets** command displays the timestamp details of the LMP and SDP packets transmitted.

- Timestamp of last 10 LMP frames from FED
- Timestamp of last 10 LMP frames to FED
- Timestamp of last 10 SDP frames from Stack manager
- Timestamp of last 10 SDP frames to Stack manager

By default, the packet cache count per SVL port during bootup is 10. To set the packet cache count per port, use the **set platform software nif-mgr switch** command.

### Example

The following is sample output from the **show platform software nif-mgr switch active R0 counters** command.

```
Device# show platform software nif-mgr switch active R0 counters
NIF Manager Counters
 Counters:
##################################################
Stack Link : 1
==============================================
FED to NIF Mgr
---------------
Number of LMP RX Packets : 749
NIF Mgr to FED
---------------
Number of LMP TX Packets : 758
Stack Link : 2
==============================================
FED to NIF Mgr
---------------
Number of LMP RX Packets : 0
NIF Mgr to FED
---------------
Number of LMP TX Packets : 0

NIF Mgr to Stack Mgr
----------------------
Number of SDP Success Packets - 1854
Number of SDP Fail Packets - 0
Stack Mgr to NIF Mgr
--------------------
Number of SDP Success Packets - 1850
Number of SDP Fail Packets - 0
```

The following is sample output from the **show platform software nif-mgr switch active R0 counters lpn** *lpn-index* command.

```
Device# show platform software nif_mgr switch active r0 counters lpn 1
Counters:
################################################
LPN : 1 Stack Link : 1 port 1
==============================================
FED to NIF Mgr
---------------
Number of LMP RX Packets : 760
NIF Mgr to FED
---------------
Number of LMP TX Packets : 768
```

The following is sample output from the **show platform software nif-mgr switch active R0 packets** command.

```
Device# show platform software nif-mgr switch active R0 packets
NIF manager packets max 10:

Stack Link :   1
LMP
------------------------
FED->
Nif Mgr
Timestamp                      Local    Peer     Seq
                               LPN      LPN      Num
-------------------------------------------------------------
Wed Jun 20 02:20:49 2018       3        3        1050
Wed Jun 20 02:20:50 2018       3        3        1051
Wed Jun 20 02:20:41 2018       3        3        1042
Wed Jun 20 02:20:42 2018       3        3        1043
Wed Jun 20 02:20:43 2018       3        3        1044
Wed Jun 20 02:20:44 2018       3        3        1045
Wed Jun 20 02:20:45 2018       3        3        1046
Wed Jun 20 02:20:46 2018       3        3        1047
Wed Jun 20 02:20:47 2018       3        3        1048
Wed Jun 20 02:20:48 2018       3        3        1049

Nif Mgr->
FED
Timestamp              Local    Peer     Seq
                               LPN      LPN      Num
-------------------------------------------------------------
Wed Jun 20 02:20:49 2018       3        3        1050
Wed Jun 20 02:20:50 2018       3        3        1051
Wed Jun 20 02:20:41 2018       3        3        1042
Wed Jun 20 02:20:42 2018       3        3        1043
Wed Jun 20 02:20:43 2018       3        3        1044
Wed Jun 20 02:20:44 2018       3        3        1045
Wed Jun 20 02:20:45 2018       3        3        1046
Wed Jun 20 02:20:46 2018       3        3        1047
Wed Jun 20 02:20:47 2018       3        3        1048
Wed Jun 20 02:20:48 2018       3        3        1049

SDP
------------------------
Nif Mgr->
Stack Mgr
Timestamp                      Src Mac        Dst Mac        Seq Num
-----------------------------------------------------------------------
Wed Jun 20 02:20:40 2018       40ce:2499:aa90 ffff:ffff:ffff 320
```

```
Wed Jun 20 02:20:44 2018       40ce:2499:aa90 ffff:ffff:ffff 321
Wed Jun 20 02:20:48 2018       40ce:2499:aa90 ffff:ffff:ffff 322
Wed Jun 20 02:20:12 2018       40ce:2499:aa90 ffff:ffff:ffff 313
Wed Jun 20 02:20:16 2018       40ce:2499:aa90 ffff:ffff:ffff 314
Wed Jun 20 02:20:20 2018       40ce:2499:aa90 ffff:ffff:ffff 315
Wed Jun 20 02:20:24 2018       40ce:2499:aa90 ffff:ffff:ffff 316
Wed Jun 20 02:20:28 2018       40ce:2499:aa90 ffff:ffff:ffff 317
Wed Jun 20 02:20:32 2018       40ce:2499:aa90 ffff:ffff:ffff 318
Wed Jun 20 02:20:36 2018       40ce:2499:aa90 ffff:ffff:ffff 319

Stack Mgr->
Nif Mgr
Timestamp                      Src Mac        Dst Mac        Seq Num
--------------------------------------------------------------------------------
Wed Jun 20 02:20:17 2018       40ce:2499:a9d0 ffff:ffff:ffff 310
Wed Jun 20 02:20:21 2018       40ce:2499:a9d0 ffff:ffff:ffff 311
Wed Jun 20 02:20:25 2018       40ce:2499:a9d0 ffff:ffff:ffff 312
Wed Jun 20 02:20:29 2018       40ce:2499:a9d0 ffff:ffff:ffff 313
Wed Jun 20 02:20:33 2018       40ce:2499:a9d0 ffff:ffff:ffff 314
Wed Jun 20 02:20:37 2018       40ce:2499:a9d0 ffff:ffff:ffff 315
Wed Jun 20 02:20:41 2018       40ce:2499:a9d0 ffff:ffff:ffff 316
Wed Jun 20 02:20:45 2018       40ce:2499:a9d0 ffff:ffff:ffff 317
Wed Jun 20 02:20:49 2018       40ce:2499:a9d0 ffff:ffff:ffff 318
Wed Jun 20 02:20:13 2018       40ce:2499:a9d0 ffff:ffff:ffff 309
```

## Related Commands

| Command | Description |
|---|---|
| **set platform software nif-mgr switch** | Configures the per port packet cache count for an SVL interface. |

# 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** *number* | (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 Everest 16.6.1 | 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
```