startup (test boolean) through write mib-data

startup (test boolean)

To specify whether an event can be triggered for the Boolean trigger test, use the **startup** command in event trigger boolean configuration mode. To disable the configured settings, use the **no** form of this command.

startup

no startup

Syntax Description

This command has no arguments or keywords.

Command Default

The startup event is enabled when the Boolean trigger test is enabled.

Command Modes

Event trigger boolean configuration (config-event-trigger-boolean)

Command History

Release	Modification
12.4(20)T	This command was introduced.
12.2(33)SRE	This command was integrated into Cisco IOS Release 12.2(33)SRE.
12.2(50)SY	This command was integrated into Cisco IOS Release 12.2(50)SY.

Usage Guidelines

The **startup** command triggers an event when the conditions specified for the Boolean trigger test are met.

Examples

The following example shows how to specify startup for the Boolean trigger test:

```
Router(config)# snmp mib event trigger owner owner1 name EventA
Router(config-event-trigger)# test boolean
Router(config-event-trigger-boolean)# startup
Router(config-event-trigger-boolean)# end
```

Related Commands

Command	Description
test	Enables a trigger test.

startup (test existence)

To specify whether an event can be triggered for the existence trigger test, use the **startup** command in event trigger existence configuration mode. To disable the configured settings, use the **no** form of this command.

startup {**present**| **absent**}

no startup {**present**| **absent**}

Syntax Description

present	Triggers the present startup test when the existence trigger conditions are met.
absent	Triggers the absent startup test when the existence trigger conditions are met.

Command Default

By default, both present and absent startup tests are triggered.

Command Modes

Event trigger existence configuration (config-event-trigger-existence)

Command History

Release	Modification
12.4(20)T	This command was introduced.
12.2(33)SRE	This command was integrated into Cisco IOS Release 12.2(33)SRE.
12.2(50)SY	This command was integrated into Cisco IOS Release 12.2(50)SY.

Usage Guidelines

The **startup** command triggers an event when the conditions specified for the existence trigger test are met.

Examples

The following example shows how to specify startup for the existence trigger test:

```
Router(config)# snmp mib event trigger owner owner1 name EventA
Router(config-event-trigger)# test existence
Router(config-event-trigger-existence)# startup
Router(config-event-trigger-existence)# end
```

Related Commands

Command	Description
test	Enables a trigger test.

startup (test threshold)

To specify whether an event can be triggered for the threshold trigger test, use the **startup** command in event trigger threshold configuration mode. To disable the configured settings, use the **no** form of this command.

startup {**rising**| **falling**| **rise-or-falling**}

no startup

Syntax Description

rising	Specifies the rising threshold value to check against the set value during startup when the trigger type is threshold.
falling	Specifies the falling threshold value to check against the set value during startup when the trigger type is threshold.
rise-or-falling	Specifies the rising or falling threshold value to check against the set value during startup when the trigger type is threshold. This is the default value.

Command Default

The rising or falling threshold value is checked against the set value during startup when the trigger type is threshold.

Command Modes

Event trigger threshold configuration (config-event-trigger-threshold)

Command History

Release	Modification
12.4(20)T	This command was introduced.
12.2(33)SRE	This command was integrated into Cisco IOS Release 12.2(33)SRE.
12.2(50)SY	This command was integrated into Cisco IOS Release 12.2(50)SY.

Usage Guidelines

The **startup** command starts an event when conditions for the threshold trigger test are met.

Examples

The following example shows how to specify startup for the threshold trigger test:

```
Router(config)# snmp mib event trigger owner owner1 name EventA
Router(config-event-trigger)# test threshold
Router(config-event-trigger-threshold)# startup rising
Router(config-event-trigger-threshold)# end
```

Related Commands

Command	Description
test	Enables a trigger test.

test (event trigger)

To specify the type of test to perform during an event trigger, use the **test** command in event trigger configuration mode. To disable the trigger test configuration settings, use the **no** form of this command.

test {**existence**| **boolean**| **threshold**}

no test {**existence**| **boolean**| **threshold**}

Syntax Description

existence	Enables the existence trigger test.
boolean	Enables the Boolean trigger test. Boolean test is the default trigger test performed during event triggers.
threshold	Enables the threshold trigger test.

Command Default

The Boolean trigger test is enabled by default.

Command Modes

Event trigger configuration (config-event-trigger)

Command History

Release	Modification
12.4(20)T	This command was introduced.
12.2(33)SRE	This command was integrated into Cisco IOS Release 12.2(33)SRE.
12.2(50)SY	This command was integrated into Cisco IOS Release 12.2(50)SY.

Usage Guidelines

The trigger table in the Event MIB has supplementary tables for additional objects that are configured based on the type of test performed for the trigger. For each trigger entry type such as existence, threshold, or Boolean, the corresponding tables (existence, threshold, and Boolean tables) are populated with the information required to perform the test. You can set event triggers based on existence, threshold, and Boolean trigger types.

The existence trigger tests are performed based on the following parameters:

- Absent
- Present
- Changed

The Boolean tests are comparison tests that are performed based on one of the following parameters:

- Unequal
- Equal
- Less
- Less Or Equal
- Greater
- Greater Or Equal

The threshold tests are performed based on the following parameters:

- Rising
- Falling
- Rising or Falling

Examples

The following example shows how to enable the existence trigger test:

```
Router(config)# snmp mib event trigger owner owner1 name triggerA
Router(config-event-trigger)# test existence
Router(config-event-trigger-existence)#
```

The following example shows how to enable the Boolean trigger test:

```
Router(config)# snmp mib event trigger owner owner1 name EventA
Router(config-event-trigger)# test boolean
Router(config-event-trigger-boolean)#
```

The following example shows how to enable the threshold trigger test:

```
Router(config)# snmp mib event trigger owner owner1 name triggerA
Router(config-event-trigger)# test threshold
Router(config-event-trigger-threshold)#
```

Related Commands

Command	Description
comparison	Specifies the type of Boolean comparison to be performed.
event owner	Specifies the event owner for an event trigger according to the trigger type and status of the trigger.
object list	Configures a list of objects during an event.
startup	Specifies whether an event can be triggered for the Boolean, existence, or threshold trigger test.
value	Sets a value for the Boolean trigger test.

test snmp trap auth-framwork sec-violation

To test CISCO-AUTH-FRAMEWORK-MIB Simple Network Management Protocol (SNMP) notifications (traps and informs), use the **test snmp trap auth-framwork sec-violation**command in priveleged EXEC mode.

test snmp trap auth-framwork sec-violation

Syntax Description

This command has no keywords or arguments.

Command Default

This command has no default setting.

Command Modes

Privileged EXEC mode

Command History

Release	Modification
12.2(33)SXI	This command was introduced on the Supervisor Engine 720.

Examples

This example shows the output of the SNMP camSecurityViolationNotif trap when it is not configured:

```
Router# test
 snmp trap auth-framework sec-violation
cafSecurityViolationNotif was disabled.
Router#
```

This example shows the output of the SNMP camSecurityViolationNotif trap when it is configured:

```
Router# test
 snmp trap auth-framework sec-violation
cafSecurityViolationNotif was sent.
Router#
```

test snmp trap bridge

To test BRIDGE-MIB Simple Network Management Protocol (SNMP) notifications (traps and informs), use the **test snmp trap bridge**command in priveleged EXEC mode.

test snmp trap bridge {**newroot**| **topologychange**}

Syntax Description

newroot	Tests SNMP newRoot notifications.
topologychange	Tests SNMP topologyChange notifications.

Command Default

This command has no default setting.

Command Modes

Priveleged EXEC mode

Command History

Release	Modification
12.2(33)SXI	This command was introduced on the Supervisor Engine 720 and Supervisor Engine 32.

Examples

This example shows the output of **test snmp trap bridge newroot** when snmp-server enable traps bridge newroot is not configured:

```
Router# test
 snmp trap bridge newroot
newRoot notification is disabled.
Router#
```

This example shows the output of **test snmp trap bridge newroot** when snmp-server enable traps bridge newroot is configured:

```
Router# test
 snmp trap bridge newroot
newRoot notification was sent.
Router#
```

Related Commands

Command	Description
snmp-server enable traps bridge	Enables the SNMP BRIDGE-MIB notifications.

test snmp trap c6kxbar

To test CISCO-CAT6K-CROSSBAR-MIB Simple Network Management Protocol (SNMP) notifications (traps and informs), use the **test snmp trap c6kxbar**command in priveleged EXEC mode.

test snmp trap c6kxbar {**flowctrl-bus**| **intbus-crccvrd**| **intbus-crcexcd**| **swbus**| **tm-channel-above**| **tm-channel-below**| **tm-swbus-above**| **tm-swbus-below**}

Syntax Description

flowctrl-bus	Tests SNMP cc6kxbarFlowCtrlBusThrExcdNotif notifications.
intbus-crcvrd	Tests SNMP cc6kxbarIntBusCRCErrRcvrdNotif notifications.
intbus-crcexcd	Tests SNMP cc6kxbarIntBusCRCErrExcdNotif notifications.
swbus	Tests SNMP cc6kxbarSwBusStatusChangeNotif notifications.
tm-channel-above	Tests cc6kxbarTMChUtilAboveNotif notifications.
tm-channel-below	Tests cc6kxbarTMChUtilBelowNotif notifications.
tm-swbus-above	Tests cc6kxbarTMSwBusUtilAboveNotif notifications.
tm-swbus-below	Tests cc6kxbarTMSwBusUtilBelowNotif notifications.

Command Default

This command has no default setting.

Command Modes

Priveleged EXEC mode

Command History

Release	Modification
12.2(33)SXI	This command was introduced on the Supervisor Engine 720.
12.2(33)SXI5	Added **tm-channel-above**, **tm-channel-below**and **tm-swbus-above**, **tm-channel-below**keywords.

Usage Guidelines

The **flowctrl-bus** keyword is supported on the Supervisor Engine 32 only.

The **tm-channel-above** and **tm-channel-below** keywords are not supported on Supervisor Engine 32.

Examples

This example shows the output of the SNMP cc6kxbarFlowCtrlBusThrExcdNotif notification when it is not configured:

```
Router# test
 snmp trap c6kxbar flowctrl-bus
cc6kxbarFlowCtrlBusThrExcdNotif notification is disabled.
Router#
```

This example shows the output of the SNMP cc6kxbarFlowCtrlBusThrExcdNotif notification when it is configured:

```
Router# test
 snmp trap c6kxbar flowctrl-bus
cc6kxbarFlowCtrlBusThrExcdNotif notification was sent.
Router#
```

This example shows the output of the SNMP cc6kxbarIntBusCRCErrExcdNotif notification when it is not configured:

```
Router# test
 snmp trap c6kxbar intbus-crcexcd
cc6kxbarIntBusCRCErrExcdNotif notification is disabled.
Router#
```

This example shows the output of the SNMP cc6kxbarIntBusCRCErrExcdNotif notification when it is configured:

```
Router# test
 snmp trap c6kxbar intbus-crcexcd
cc6kxbarIntBusCRCErrExcdNotif notification was sent.
Router#
```

This example shows the output of the SNMP cc6kxbarIntBusCRCErrRcvrdNotif notification when it is not configured:

```
Router# test snmp trap c6kxbar intbus-crcvrd
cc6kxbarIntBusCRCErrExcdNotif notification is disabled.
Router#
```

This example shows the output of the SNMP cc6kxbarIntBusCRCErrRcvrdNotif notification when it is configured:

```
Router# test snmp trap c6kxbar intbus-crcvrd
cc6kxbarIntBusCRCErrExcdNotif notification was sent.
Router#
```

This example shows the output of the SNMP cc6kxbarSwBusStatusChangeNotif notification when it is not configured:

```
Router# test snmp trap c6kxbar swbus
cc6kxbarSwBusStatusChangeNotif notification is disabled.
Router#
```

This example shows the output of the SNMP cc6kxbarSwBusStatusChangeNotif notification when it is configured:

```
Router# test snmp trap c6kxbar swbus
cc6kxbarSwBusStatusChangeNotif notification was sent.
Router#
```

This example shows the output of the SNMP cc6kxbarTMChUtilAboveNotif notification when it is not configured:

```
Router# test snmp trap c6kxbar tm-channel-above
cc6kxbarTMChUtilAboveNotif notification is disabled.
Router#
```

This example shows the output of the SNMP cc6kxbarTMChUtilAboveNotif notification when it is configured:

```
Router# test snmp trap c6kxbar tm-channel-above
cc6kxbarTMChUtilAboveNotif notification was sent.
Router#
```

This example shows the output of the SNMP cc6kxbarTMChUtilBelowNotif notification when it is not configured:

```
Router# test snmp trap c6kxbar tm-channel-below
cc6kxbarTMChUtilBelowNotif notification is disabled.
Router#
```

This example shows the output of the SNMP cc6kxbarTMChUtilBelowNotif notification when it is configured:

```
Router# test snmp trap c6kxbar tm-channel-below
cc6kxbarTMChUtilBelowNotif notification was sent.
Router#
```

This example shows the output of the SNMP cc6kxbarTMSwBusUtilAboveNotif notification when it is not configured:

```
Router# test snmp trap c6kxbar tm-swbus-above
cc6kxbarTMSwBusUtilAboveNotif notification is disabled.
Router#
```

This example shows the output of the SNMP cc6kxbarTMSwBusUtilAboveNotif notification when it is configured:

```
Router# test snmp trap c6kxbar tm-swbus-above
cc6kxbarTMSwBusUtilAboveNotif notification was sent.
Router#
```

This example shows the output of the SNMP cc6kxbarTMSwBusUtilBelowNotif notification when it is not configured:

```
Router# test snmp trap c6kxbar tm-swbus-below
cc6kxbarTMSwBusUtilBelowNotif notification is disabled.
Router#
```

This example shows the output of the SNMP cc6kxbarTMSwBusUtilBelowNotif notification when it is configured:

```
Router# test snmp trap c6kxbar tm-swbus-below
cc6kxbarTMSwBusUtilBelowNotif notification was sent.
Router#
```

Related Commands

Command	Description
snmp-server enable traps c6kxbar	Enables the SNMP c6kxbar notification traps.

test snmp trap call-home

To test CISCO-CALLHOME-MIB Simple Network Management Protocol (SNMP) notifications (traps and informs), use the **test snmp trap call-home**command in priveleged EXEC mode.

test snmp trap call-home {**message-send-fail**| **server-fail**}

Syntax Description

message-send-fail	Tests SNMP ccmSmtpMsgSendFailNotif notifications.
server-fail	Tests SNMP ccmSmtpServerFailNotif notifications.

Command Default

This command has no default setting.

Command Modes

Privileged EXEC mode

Command History

Release	Modification
12.2(33)SXI	This command was introduced on the Supervisor Engine 720.

Examples

This example shows the output of the SNMP ccmSmtpMsgSendFailNotif notification when it is not configured:

```
Router# test
 snmp trap call-home message-send-fail
ccmSmtpMsgSendFailNotif notification is disabled.
Router#
```

This example shows the output of the SNMP ccmSmtpMsgSendFailNotif notification when it is configured:

```
Router# test
 snmp trap call-home message-send-fail
ccmSmtpMsgSendFailNotif notification was sent.
Router#
```

This example shows the output of the SNMP ccmSmtpServerFailNotif notification when it is not configured:

```
Router# test
 snmp trap call-home server-fail
ccmSmtpServerFailNotif notification is disabled.
Router#
```

This example shows the output of the SNMP ccmSmtpServerFailNotif notification when it is configured:

```
Router# test
 snmp trap call-home server-fail
ccmSmtpServerFailNotif notification was sent.
Router#
```

test snmp trap config-copy

To verify the reception of config-copy notifications by the Network Management System (NMS) or the Simple Network Management Protocol (SNMP) manager in a simulated scenario, use the **test snmp trap config-copy** command in privileged EXEC mode.

test snmp trap config-copy

Syntax Description

This command has no arguments or keywords.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
12.2(33)SXI	This command was introduced.
12.2(33)SRE	This command was integrated into Cisco IOS Release 12.2(33)SRE.

Usage Guidelines

The Config-Copy MIB facilitates the copying of SNMP agent configuration files to the startup configuration or the local Cisco IOS file system, and vice versa. The config-copy notifications are sent to the NMS or the SNMP manager to indicate the successful completion of config-copy operation to or from the SNMP agent.

Examples

The following example shows how to simulate the verification of config-copy traps:

```
Router#
 test snmp trap config-copy
Generating CONFIG-COPY-MIB trap
00:20:44: SNMP: Queuing packet to 10.2.14.2
00:20:44: SNMP: V2 Trap, reqid 2, errstat 0, erridx 0
 sysUpTime.0 = 124470
 snmpTrapOID.0 = ccCopyMIBTraps.1
 ccCopyTable.1.5.2 = 10.10.10.10
 ccCopyTable.1.6.2 =
 ccCopyTable.1.10.2 = 3
 ccCopyTable.1.11.2 = 124470
 ccCopyTable.1.12.2 = 124470
Router#
```

Related Commands

Command	Description
debug snmp packet	Displays information about every SNMP packet sent or received by the router.
snmp-server enable traps	Enables all SNMP notification types that are available on your system.

Command	Description
snmp-server host	Specifies the recipient of an SNMP notification operation.

test snmp trap dhcp bindings

To test the cdsBindingsNotification trap, use the **test snmp trap dhcp bindings**EXEC command.

test snmp trap dhcp bindings

Syntax Description

This command has no keywords or arguments.

Command Default

This command has no default settings.

Command Modes

Privileged EXEC mode

Command History

Release	Modification
12.2(33)SXI	Support for this command was introduced on the Catalyst 6500 series switch.

Examples

This example shows how to test the cdsBindingsNotification traps:

```
Router# test snmp trap dhcp bindings
cdsBindingsNotification notification is disabled.
```

test snmp trap dhcp-snooping bindings

To test the cdsBindingsNotification trap, use the **test snmp trap dhcp-snooping bindings**privileged EXEC command.

test snmp trap dhcp-snooping bindings

Syntax Description

This command has no keywords or arguments.

Command Default

This command has no default settings.

Command Modes

Privileged EXEC mode

Command History

Release	Modification
12.2(33)SXI4	Support for this command was introduced on the Catalyst 6500 series.

Examples

This example shows how to test the cdsBindingsNotification trap:

```
Router# test snmp trap dhcp-snooping bindings
cdsBindingsNotification notification is disabled.
```

test snmp trap dot1x

To test CISCO-PAE-MIB Simple Network Management Protocol (SNMP) notifications (traps and informs), use the **test snmp trap dot1x**command in priveleged EXEC mode.

test snmp trap dot1x {**auth-fail-vlan**| **guest-vlan**| **no-auth-fail-vlan**| **no-guest-vlan**}

Syntax Description

auth-fail-vlan	Tests SNMP cpaeAuthFailVlanNotif notifications.
guest-vlan	Tests SNMP cpaeGuestVlanNotif notifications.
no-auth-fail-vlan	Tests SNMP cpaeNoAuthFailedVlanNotif notifications.
no-guest-vlan	Tests SNMP cpaeNoGuestVlanNotif notifications.

Command Default

This command has no default setting.

Command Modes

Privileged EXEC mode

Command History

Release	Modification
12.2(33)SXI	This command was introduced on the Supervisor Engine 720.

Examples

This example shows the output of the SNMP cpaeAuthFailVlanNotif notification when it is not configured:

```
Router# test
 snmp trap dot1x auth-fail-vlan
cpaeAuthFailVlanNotif notification was disabled.
Router#
```

This example shows the output of the SNMP cpaeAuthFailVlanNotif notification when it is configured:

```
Router# test
 snmp trap dot1x auth-fail-vlan
cpaeAuthFailVlanNotif notification was sent.
Router#
```

test snmp trap entity-diag

To test CISCO-ENTITY-DIAG-MIB Simple Network Management Protocol (SNMP) notifications (traps and informs), use the **test snmp trap c6kxbar**command in privileged EXEC mode.

test snmp trap entity-diag {**boot-up-fail| hm-test-recover| hm-thresh-reached| scheduled-test-fail**}

Syntax Description

boot-up-fail	Tests SNMP ceDiagBootUpFailedNotif notifications.
hm-test-recover	Tests SNMP ceDiagHMTestRecoverNotif notifications.
hm-thresh-reached	Tests SNMP ceDiagHMThresholdReachedNotif notifications.
scheduled-test-fail	Tests SNMP ceDiagScheduledTestFailedNotif notifications.

Command Default

This command has no default setting.

Command Modes

Privileged EXEC mode

Command History

Release	Modification
12.2(33)SXI	This command was introduced on the Supervisor Engine 720.

Examples

This example shows the output of the SNMP ceDiagBootupFailedNotif notification when it is not configured:

```
Router# test
 snmp trap entity-diag boot-up-fail
ceDiagBootupFailedNotif notification is disabled.
Router#
```

This example shows the output of the SNMP ceDiagBootupFailedNotif notification when it is configured:

```
Router# test
 snmp trap entity-diag boot-up-fail
ceDiagBootupFailedNotif notification was sent.
Router#
```

This example shows the output of the SNMP ceDiagHMTestRecoverNotif notification when it is not configured:

```
Router# test
 snmp trap dot1x hm-test-recover
ceDiagHMTestRecoverNotif notification is disabled.
Router#
```

This example shows the output of the SNMP ceDiagHMTestRecoverNotif notification when it is configured:

```
Router# test
 snmp trap dot1x hm-test-recover
ceDiagHMTestRecoverNotif notification was sent.
Router#
```

This example shows the output of the SNMP ceDiagHMThresholdReachedNotif notification when it is not configured:

```
Router# test snmp trap entity-diag hm-thresh-reached
ceDiagHMThresholdReachedNotif notification is disabled.
Router#
```

This example shows the output of the SNMP ceDiagHMThresholdReachedNotif notification when it is configured:

```
Router# test snmp trap entity-diag hm-thresh-reached
ceDiagHMThresholdReachedNotif notification was sent.
Router#
```

This example shows the output of the SNMP ceDiagScheduledTestFailedNotif notification when it is not configured:

```
Router# test snmp trap entity-diag scheduled-test-fail
ceDiagHMThresholdReachedNotif notification is disabled.
Router#
```

This example shows the output of the SNMP ceDiagScheduledTestFailedNotif notification when it is configured:

```
Router# test snmp trap entity-diag scheduled-test-fail
ceDiagHMThresholdReachedNotif notification was sent.
Router#
```

test snmp trap errdisable ifevent

To test CISCO-ERR-DISABLE-MIB cErrDisableInterfaceEventRev1 Simple Network Management Protocol (SNMP) traps and informs, use the **test snmp trap errdisable ifevent**command in priveleged EXEC mode.

test snmp trap errdisable ifevent

Syntax Description

This command has no keywords or arguments.

Command Default

This command has no default settings.

Command Modes

Privileged EXEC mode

Command History

Release	Modification
12.2(33)SXI4	This command was introduced on the Supervisor Engine 720 and Supervisor Engine 32.

Examples

This example shows the output of **test snmp trap errdisable ifevent** when snmp-server enable traps errdisable is not configured:

```
Router# test
 snmp trap errdisable ifevent
cErrDisableInterfaceEventRev1 notification is disabled.
Router#
```

This example shows the output of **test snmp trap errdisable ifevent** when snmp-server enable traps errdisable is configured:

```
Router# test
 snmp trap errdisable ifevent
cErrDisableInterfaceEventRev1 notification was sent.
Router#
```

Related Commands

Command	Description
snmp-server enable traps errdisable	Enables SNMP errdisable notifications.

test snmp trap flex-links status

To test CISCO-FLEX-LINKS-MIB cflIfStatusChangeNotif traps Simple Network Management Protocol (SNMP) traps and informs, use the **test snmp trap flex-links status**command in priveleged EXEC mode.

test snmp trap flex-links status

Syntax Description

This command has no keywords or arguments.

Command Default

This command has no default settings.

Command Modes

Privileged EXEC mode

Command History

Release	Modification
12.2(33)SXI	This command was introduced on the Supervisor Engine 720 and Supervisor Engine 32.

Examples

This example shows the output of the SNMP cflIfStatusChangeNotif trap when it is not configured:

```
Router# test
 snmp trap flex-links status
cflIfStatusChangeNotifnotification is disabled.
Router#
```

This example shows the output of the SNMP cflIfStatusChangeNotif trap when it is configured:

```
Router# test
 snmp trap flex-links status
cflIfStatusChangeNotif notification was sent.
Router#
```

test snmp trap fru-ctrl

To test CISCO-ENTITY-FRU-CONTROL-MIB traps Simple Network Management Protocol (SNMP) traps and informs, use the **test snmp trap fru-ctrl**command in privileged EXEC mode.

test snmp trap fru-ctrl {**insert**| **module-status**| **power-status**| **ps-out-change**| **remove**}

Syntax Description

insert	Tests SNMP cefcFRUInserted notifications.
module-status	Tests SNMP cefcModuleStatusChange notifications.
power-status	Tests SNMP cefcPowerStatusChange notifications.
ps-out-change	Tests SNMP cefcPowerSupplyOutputChange notifications.
remove	Tests SNMP cefcFRURemoved notifications.

Command Default

This command has no default settings.

Command Modes

Privileged EXEC mode

Command History

Release	Modification
12.2(33)SXI	This command was introduced on the Supervisor Engine 720 and Supervisor Engine 32.

Examples

This example shows the output of the test SNMP cefcFRUInserted trap when it is not configured:

```
Router# test
 snmp trap fru-ctrl insert
cefcFRUInserted notification is disabled.
Router#
```

This example shows the output of the SNMP cefcFRUInserted trap when it is configured:

```
Router# test
 snmp trap fru-ctrl insert
cefcFRUInserted notification was sent.
Router#
```

test snmp trap l2-control vlan

To test CISCO-ENTITY-FRU-CONTROL-MIB clcVLANMacLimitNotif traps Simple Network Management Protocol (SNMP) traps and informs, use the **test snmp trap l2-control vlan**command in privileged EXEC mode.

test snmp trap l2-control vlan

Syntax Description

This command has no keywords or arguments.

Command Default

This command has no default settings.

Command Modes

Privileged EXEC mode

Command History

Release	Modification
12.2(33)SXI	This command was introduced on the Supervisor Engine 720 and Supervisor Engine 32.

Examples

This example shows the output of the clcVLANMacLimitNotif trap when it is not configured:

```
Router# test
 snmp trap l2-control vlan
clcVLANMacLimitNotif notification is disabled.
Router#
```

This example shows the output of the SNMP clcVLANMacLimitNotif trap when it is configured:

```
Router# test
 snmp trap l2-control vlan
clcVLANMacLimitNotif notification was sent.
Router#
```

test snmp trap l2tc

To test CISCO-L2-TUNNEL-CONFIG-MIB traps Simple Network Management Protocol (SNMP) traps and informs, use the **test snmp trap l2tc**command in privileged EXEC mode.

test snmp trap l2tc {**drop**| **shutdown**| **sys-threshold**}

Syntax Description

drop	Tests SNMP cltcTunnelDropThresholdExceeded notifications.
shutdown	Tests SNMP cltcTunnelShutdwonThresholdExceeded notifications.
sys-threshold	Tests SNMP cltcTunnelSysDropThresholdExceeded notifications.

Command Default

This command has no default settings.

Command Modes

Privileged EXEC mode

Command History

Release	Modification
12.2(33)SXI	This command was introduced on the Supervisor Engine 720 and Supervisor Engine 32.

Examples

This example shows the output of the cltcTunnelDropThresholdExceeded trap when it is not configured:

```
Router# test
 snmp trap l2tc drop
cltcTunnelDropThresholdExceeded notification is disabled.
Router#
```

This example shows the output of the SNMP cltcTunnelDropThresholdExceeded trap when it is configured:

```
Router# test
 snmp trap l2tc drop
cltcTunnelDropThresholdExceeded notification was sent.
Router#
```

test snmp trap mac-notification

To test CISCO-MAC-NOTIFICATION-MIB traps Simple Network Management Protocol (SNMP) traps and informs, use the **test snmp trap mac-notification**command in privileged EXEC mode.

test snmp trap mac-notification {**change**| **move**| **threshold**}

Syntax Description

change	Tests SNMP cmnMacChangeNotification notifications.
move	Tests SNMP cmnMacMoveNotification notifications.
threshold	Tests SNMP cmnMacThresholdExceedNotif notifications.

Command Default

This command has no default settings.

Command Modes

Privileged EXEC mode

Command History

Release	Modification
12.2(33)SXI	This command was introduced on the Supervisor Engine 720 and Supervisor Engine 32.

Examples

This example shows the output of the SNMP cmnMacChangeNotification trap when it is not configured:

```
Router# test
 snmp trap mac-notification change
cmnMacChangeNotification notification is disabled.
Router#
```

This example shows the output of the SNMP cmnMacChangeNotification trap when it is configured:

```
Router# test
 snmp trap mac-notification change
cmnMacChangeNotification notification was sent.
Router#
```

test snmp trap module-auto-shutdown

To test CISCO-MODULE-AUTO-SHUTDOWN-MIB traps Simple Network Management Protocol (SNMP) traps and informs, use the **test snmp trap module-auto-shutdown**command in privileged EXEC mode.

test snmp trap module-auto-shutdown {**auto-shutdown**| **sys-action**}

Syntax Description

auto-shutdown	Tests SNMP cmasModuleAutoShutdown notifications.
sys-action	Tests SNMP cmasModuleSysActionNotif notifications.

Command Default

This command has no default settings.

Command Modes

Privileged EXEC mode

Command History

Release	Modification
12.2(33)SXI	This command was introduced on the Supervisor Engine 720 and Supervisor Engine 32.

Examples

This example shows the output of the SNMP cmasModuleAutoShutdown trap when it is not configured:

```
Router# test
 snmp trap module-auto-shutdown auto-shutdown
cmasModuleAutoShutdown notification is disabled.
Router#
```

This example shows the output of the SNMP cmasModuleAutoShutdown trap when it is configured:

```
Router# test
 snmp trap module-auto-shutdown auto-shutdown
cmasModuleAutoShutdown notification is sent.
Router#
```

test snmp trap port-security

To test CISCO-PORT-SECURITY-MIB traps Simple Network Management Protocol (SNMP) traps and informs, use the **test snmp trap port-security**command in privileged EXEC mode.

test snmp trap port-security {**ifvlan-mac**| **mac**}

Syntax Description

ifvlan-mac	Tests SNMP cpsIfVlanSecureMacAddrViolation notifications.
mac	Tests SNMP cpsSecureMacAddrViolation notifications.

Command Default

This command has no default settings.

Command Modes

Privileged EXEC mode

Command History

Release	Modification
12.2(33)SXI	This command was introduced on the Supervisor Engine 720 and Supervisor Engine 32.

Examples

This example shows the output of the SNMP cpsIfVlanSecureMacAddrViolation trap when it is not configured:

```
Router# test
 snmp trap port-security ifvlan-mac
cpsIfVlanSecureMacAddrViolation notification is disabled.
Router#
```

This example shows the output of the SNMP cpsIfVlanSecureMacAddrViolation trap when it is configured:

```
Router# test
 snmp trap port-security ifvlan-mac
cpsIfVlanSecureMacAddrViolation notification was sent.
Router#
```

test snmp trap power-ethernet port-on-off

To test POWER-ETHERNET-MIB traps Simple Network Management Protocol (SNMP) traps and informs, use the **test snmp trap power-ethernet**command in privieleged EXEC mode.

test snmp trap power-ethernet port-on-off

Syntax Description

This command has no keywords or arguments.

Command Default

This command has no default settings.

Command Modes

Privileged EXEC mode

Command History

Release	Modification
12.2(33)SXI	This command was introduced on the Supervisor Engine 720 and Supervisor Engine 32.

Examples

This example shows the output of the SNMP pethPsePortOnOffNotification trap when it is not configured:

```
Router# test
 snmp trap power-ethernet port-on-off
pethPsePortOnOffNotification notification is disabled.
Router#
```

This example shows the output of the SNMP pethPsePortOnOffNotification trap when it is configured:

```
Router# test
 snmp trap power-ethernet port-on-off
pethPsePortOnOffNotification notification was sent.
Router#
```

test snmp trap snmp

To verify the reception of Simple Network Management Protocol (SNMP) notifications by the Network Management System (NMS) or the SNMP manager in a simulated scenario, use the **test snmp trap snmp** command in privileged EXEC mode.

test snmp trap snmp {**authentication**| **coldstart**| **linkup**| **linkdown**| **warmstart**}

Syntax Description

authentication	Verifies the generation and reception of the SNMP authentication failure notification by the SNMP manager. The authentication failure trap indicates that the SNMP agent has received a protocol message from the SNMP manager that is not properly authenticated.
coldstart	Verifies the generation and reception of the SNMP coldStart notifications by the SNMP manager. A coldStart trap indicates that the SNMP agent is reinitializing and its configuration may have changed.
linkup	Verifies the generation and reception of the SNMP linkUp notifications by the SNMP manager. A linkUp trap indicates if a communication link represented in the agent's configuration is activated.
linkdown	Verifies the generation and reception of the SNMP linkDown notifications by the SNMP manager. A linkDown trap indicates if a communication link represented in the agent's configuration fails.
warmstart	Verifies the generation and reception of the SNMP warmStart notifications by the SNMP manager. A warmStart trap indicates that the SNMP agent is reinitializing and its configuration is not modified.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
12.2(33)SXI	This command was introduced.
12.2(33)SRE	This command was integrated into Cisco IOS Release 12.2(33)SRE.

Usage Guidelines

SNMP traps or notifications provide information about improper user authentication, restarts, closing of a connection, loss of connection to a neighbor router, or other significant events to the NMS.

Before testing the SNMP traps, configure the SNMP manager for the device and enable SNMP traps.

Examples

The following example shows how to simulate the verification of the authentication failure trap:

```
Router#
 test snmp trap snmp authentication
Generating Authentication failure trap
Sep 12 08:37:49.935: SNMP: Queuing packet to 10.4.9.2
Sep 12 08:37:49.935: SNMP: V1 Trap, ent snmpTraps, addr 192.168.0.1, gentrap 4
lsystem.5.0 = 10.10.10.10
 ciscoMgmt.412.1.1.1.1.0 = 1
 ciscoMgmt.412.1.1.2.0 = 10.10.10.10
Sep 12 08:38:55.995: SNMP: Packet sent via UDP to 10.4.9.2
Sep 12 08:38:56.263: SNMP: Packet sent via UDP to 10.4.9.2
```

Related Commands

Command	Description
debug snmp packet	Displays information about every SNMP packet sent or received by the router.
snmp-server enable traps	Enables all SNMP notification types that are available on your system.
snmp-server host	Specifies the recipient of an SNMP notification operation.

test snmp trap stack

To test CISCO-STACK-MIB traps Simple Network Management Protocol (SNMP) traps and informs, use the **test snmp trap stack**command in privileged EXEC mode.

test snmp trap stack {**chassis-off**| **chassis-on**| **module-down**| **module-up**}

Syntax Description

chassis-off	Test SNMP chassisAlarmOff notifications.
chassis-on	Tests SNMP chassisAlarmOn notifications.
module-down	Tests SNMP moduleDown notifications.
module-up	Tests SNMP moduleUp notifications.

Command Default

This command has no default settings.

Command Modes

Privileged EXEC mode

Command History

Release	Modification
12.2(33)SXI	This command was introduced on the Supervisor Engine 720 and Supervisor Engine 32.

Examples

This example shows the output of the SNMP chassisAlarmOff trap when it is not configured:

```
Router# test
 snmp trap stack chassis-off
chassisAlarmOff notification is disabled.
Router#
```

This example shows the output of the SNMP chassisAlarmOff trap when it is configured:

```
Router# test
 snmp trap stack chassis-off
chassisAlarmOff notification was sent.
Router#
```

test snmp trap storm-control

To test the Simple Network Management Protocol (SNMP) CISCO-PORT-STORM-CONTROL-MIB traps, use the **test snmp trap storm-control**command in privileged EXEC mode.

test snmp trap strom-control event-rev1

Syntax Description

event-rev1	Tests the cpscEventRev1 trap.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
12.2(33)SXJ	This command was introduced.

Usage Guidelines

SNMP traps or notifications provide information about storm-control events.

Examples

The following example shows how to test the SNMP CISCO-PORT-STORM-CONTROL-MIB trap:

```
Router#
 test snmp trap storm-control event-rev1
cpscEventRev1 notification was sent.
Router#
```

Related Commands

Command	Description
snmp-server enable traps storm-control	Enables SNMP storm-control trap notifications.
snmp-server host	Specifies the recipient of an SNMP notification operation.

test snmp trap stpx

To test CISCO-STP-EXTENSIONS-MIB traps Simple Network Management Protocol (SNMP) traps and informs, use the **test snmp trap stpx**command in privileged EXEC mode.

test snmp trap stpx {**inconsistency**| **loop-inconsistency**| **root-inconsistency**}

Syntax Description

inconsistency	Tests SNMP stpxInconsistencyUpdate notifications.
loop-inconsistency	Tests SNMP stpxLoopInconsistencyUpdate notifications.
root-inconsistency	Tests SNMP stpxRootInconsistencyUpdate notifications.

Command Default

This command has no default settings.

Command Modes

Privileged EXEC mode

Command History

Release	Modification
12.2(33)SXI	This command was introduced on the Supervisor Engine 720 and Supervisor Engine 32.

Examples

This example shows the output of the SNMP stpxInconsistencyUpdate trap when it is not configured:

```
Router# test
 snmp trap stpx inconsistency
stpxInconsistencyUpdate notification is disabled.
Router#
```

This example shows the output of the SNMP stpxInconsistencyUpdate trap when it is configured:

```
Router# test
 snmp trap stpx inconsistency
stpxInconsistencyUpdate notification was sent.
Router#
```

test snmp trap syslog

To verify the reception of the system logging message Simple Network Management Protocol (SNMP) notifications by the SNMP manager in a simulated scenario, use the **test snmp trap syslog**command in privileged EXEC mode.

test snmp trap syslog

Syntax Description

This command has no arguments or keywords.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
12.2(33)SXI	This command was introduced.
12.2(33)SRE	This command was integrated into Cisco IOS Release 12.2(33)SRE.

Usage Guidelines

System logging messages are status notification messages that are generated by the routing device during operation. These messages are typically logged to a destination such as the terminal screen, or to a remote syslog host.

Examples

The following example shows how to replicate a syslog trap and its reception by the NMS:

```
Router# test snmp trap syslog
Generating SYSLOG-MIB Trap
00:07:25: SNMP: Queuing packet to 10.4.9.2
00:07:25: SNMP: V1 Trap, ent ciscoSyslogMIB.2, addr 192.16.12.8, gentrap 6, spectra
 clogHistoryEntry.2.1 = TEST
 clogHistoryEntry.3.1 = 5
 clogHistoryEntry.4.1 = 1.3.6.1.4.1.9.9.10.1
 clogHistoryEntry.5.1 =  Syslog test trap
 clogHistoryEntry.6.1 = 44596
00:07:25: SNMP: Queuing packet to 10.4.9.2
00:07:25: SNMP: V2 Trap, reqid 4, errstat 0, erridx 0
 sysUpTime.0 = 44596
 snmpTrapOID.0 = ciscoSyslogMIB.2.0.1
 clogHistoryEntry.2.1 = TEST
 clogHistoryEntry.3.1 = 5
 clogHistoryEntry.4.1 = 1.3.6.1.4.1.9.9.10.1
 clogHistoryEntry.5.1 =  Syslog test trap
 clogHistoryEntry.6.1 = 44596
```

Related Commands

Command	Description
debug snmp packet	Displays information about every SNMP packet sent or received by the router.

Command	Description
snmp-server enable traps	Enables all SNMP notification types that are available on your system.
snmp-server host	Specifies the recipient of an SNMP notification operation.

test snmp trap trustsec

To test CISCO-TRUSTSEC-MIB Simple Network Management Protocol (SNMP) notification (traps and informs), use the **test snmp trap trustsec** command in privileged EXEC mode.

test snmp trap trustsec {**authz-file-error**| **cache-file-error**| **keystore-file-error**| **keystore-sync-fail**| **random-number-fail**| **src-entropy-fail**}

Syntax Description

authz-file-error	Tests SNMP ctsAuthzCacheFileErrNotif notifications.
cache-file-error	Tests SNMP ctsCacheFileAccessErrNotif notifications.
keystore-file-error	Tests SNMP ctsSwKeystoreFileErrNotif notifications.
keystore-sync-fail	Tests SNMP ctsSwKeystoreSyncFailNotif notifications.
random-number-fail	Tests SNMP ctsSapRandomNumberFailNotif notifications.
src-entropy-fail	Tests SNMP ctsSrcEntropyFailNotif notifications.

Command Modes

Privileged EXEC (#).

Command History

Release	Modification
15.1(1)SY	This command was introduced.

Examples

This example shows the output of the test SNMP ctsAuthzCacheFileErrNotif trap when it is not configured:

```
Device# test snmp trap trustsec authz-file-error
ctsAuthzCacheFileErrNotif notification is disabled.
```

This example shows the output of the test SNMP ctsAuthzCacheFileErrNotif trap when it is configured:

```
Device# test snmp trap trustsec authz-file-error
ctsAuthzCacheFileErrNotif notification was sent.
```

Related Commands

Command	Description
snmp-server enable traps trustsec	Enables SNMP trustsec notification traps and informs.

test snmp trap trustsec-interface

To test CISCO-TRUSTSEC-INTERFACE-MIB Simple Network Management Protocol (SNMP) notifications (traps and informs), use the **test snmp trap trustsec-interface** command in privileged EXEC mode.

test snmp trap trustsec-interface {**authc-fail**| **authz-fail**| **sap-fail**| **supplicant-fail**| **unauthorized**}

Syntax Description

authc-fail	Tests SNMP ctsiIfAuthenticationFailNotif notifications.
authz-fail	Tests SNMP ctsiAuthorizationFailNotif notifications.
sap-fail	Tests SNMP ctsiIfSapNegotiationFailNotif notifications.
supplicant-fail	Tests SNMP ctsiIfAddSupplicantFailNotif notifications.
unauthorized	Tests SNMP ctsiIfUnauthorizedNotif notifications.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
15.1(1)SY	This command was introduced.

Examples

This example shows the output of the test SNMP ctsiIfAuthenticationFailNotif trap when it is not configured:

```
Device# test snmp trap trustsec-interface authc-fail
ctsiIfAuthenticationFailNotif notification is disabled.
```

This example shows the output of the test SNMP ctsiIfAuthenticationFailNotif trap when it is configured:

```
Device# test snmp trap trustsec-interface authc-fail
ctsiIfAuthenticationFailNotif notification was sent.
```

Related Commands

Command	Description
snmp-server enable traps trustsec-interface	Enables SNMP trustsec-interface notification traps and informs.

test snmp trap trustsec-policy

To test CISCO-TRUSTSEC-POLICY-MIB Simple Network Management Protocol (SNMP) notifications (traps and informs), use the **test snmp trap trustsec-policy** command in privileged EXEC mode.

test snmp trap trustsec-policy {**authz-sgacl-fail**| **peer-policy-updated**}

Syntax Description

authz-sgacl-fail	Tests SNMP ctspAuthorizationSgaclFailNotif notifications.
peer-policy-updated	Tests SNMP ctspPeerPolicyUpdatedNotif notifications.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
15.1(1)SY	This command was introduced.

Examples

This example shows the output of the test SNMP ctspAuthorizationSgaclFailNotif trap when it is not configured:

```
Device# test snmp trap trustsec-policy authz-sgacl-fail
ctspAuthorizationSgaclFailNotif notification is disabled.
```

This example shows the output of the test SNMP ctspAuthorizationSgaclFailNotif trap when it is configured:

```
Device# test snmp trap trustsec-policy authz-sgacl-fail
ctspAuthorizationSgaclFailNotif notification was sent.
```

Related Commands

Command	Description
snmp-server enable traps trustsec-policy	Enables SNMP trustsec-policy notification traps and informs.

test snmp trap trustsec-server

To test CISCO-TRUSTSEC-SERVER-MIB Simple Network Management Protocol (SNMP) notifications (traps and informs), use the **test snmp trap trustsec-server** command in privileged EXEC mode.

test snmp trap trustsec-server {**provision-secret**| **radius-server**}

Syntax Description

provision-secret	Tests SNMP ctsvNoProvisionSecretNotif notifications.
radius-server	Tests SNMP ctsvNoRadiusServerNotif notifications.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
15.1(1)SY	This command was introduced.

Examples

This example shows the output of the test SNMP ctsvNoProvisionSecretNotif trap when it is not configured:

```
Device# test snmp trap trustsec-server provision-secret
ctsvNoProvisionSecretNotif notification is disabled.
```

This example shows the output of the test SNMP ctsvNoProvisionSecretNotif trap when it is configured:

```
Device# test snmp trap trustsec-sxp-server provision-secret
ctsvNoProvisionSecretNotif notification was sent.
```

Related Commands

Command	Description
snmp-server enable traps trustsec-server	Enables SNMP trustsec-server notification traps and informs.

test snmp trap trustsec-sxp

To test CISCO-TRUSTSEC-SXP-MIB Simple Network Management Protocol (SNMP) notification (traps and informs), use the **test snmp trap trustsec-sxp** command in privileged EXEC mode.

test snmp trap trustsec-sxp {**binding-conflict**| **binding-err**| **binding-expn-fail**| **conn-config-err**| **conn-down**| **conn-srcaddr-err**| **conn-up**| **msg-parse-err**| **oper-nodeid-change**}

Syntax Description

binding-conflict	Tests SNMP ctsxSxpBindingConflictNotif notifications.
binding-err	Tests SNMP ctsxSxpBindingErrNotif notifications.
binding-expn-fail	Tests SNMP ctsxSxpBindingExpnFailNotif notifications.
conn-config-err	Tests SNMP ctsxSxpConnConfigErrNotif notifications.
conn-down	Tests SNMP ctsxSxpConnDownNotif notifications.
conn-srcaddr-err	Tests SNMP ctsxSxpConnSourceAddrErrNotif notifications.
conn-up	Tests SNMP ctsxSxpConnUpNotif notifications.
msg-parse-err	Tests SNMP ctsxSxpMsgParseErrNotif notifications.
oper-nodeid-change	Tests SNMP ctsxSxpOperNodeIdChangeNotif notifications.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
15.1(1)SY	This command was introduced.

Examples

This example shows the output of the test SNMP ctsxSxpBindingConflictNotif trap when it is not configured:

```
Device# test snmp trap trustsec-sxp binding-conflict
ctsxSxpBindingConflictNotif notification is disabled.
```

This example shows the output of the test SNMP ctsxSxpBindingConflictNotif trap when it is configured:

```
Device# test snmp trap trustsec-sxp binding-conflict
ctsxSxpBindingConflictNotif notification was sent.
```

Related Commands

Command	Description
snmp-server enable traps trustsec-sxp	Enables SNMP trustsec-sxp notification traps and informs.

test snmp trap udld

To test CISCO-UDLDP-MIB Simple Network Management Protocol (SNMP) notifications (traps and informs), use the **test snmp trap udld**command in privileged EXEC mode.

test snmp trap udld {**link-fail-rpt**| **status-change**}

Syntax Description

link-fail-rpt	Tests SNMP cudldpFastHelloLinkFailRptNotification notifications.
status-change	Tests SNMP cudldFastHelloStatusChangeNotification notifications.

Command Default

This command has no default setting.

Command Modes

Privileged EXEC mode

Command History

Release	Modification
12.2(33)SXI4	This command was introduced on the Supervisor Engine 720 and Supervisor Engine 32.

Examples

This example shows the output of the SNMP cudldpFastHelloLinkFailRptNotification notification when it is not configured:

```
Router# test
 snmp trap udld link-fail-rpt
cudldpFastHelloLinkFailRptNotification notification is disabled.
Router#
```

This example shows the output of the SNMP cudldpFastHelloLinkFailRptNotification notification when it is configured:

```
Router# test
 snmp trap udld link-fail-rpt
cudldpFastHelloLinkFailRptNotification notification was sent.
Router#
```

test snmp trap vswitch dual-active

To test whether the CISCO-VIRTUAL-SWITCH-MIB Simple Network Management Protocol (SNMP) notification (trap) can be generated in the dual-active state, use the **test snmp trap vswitch dual-active** command in privileged EXEC mode.

test snmp trap vswitch dual-active

Syntax Description

This command has no keywords or arguments.

Command Default

The CISCO-VIRTUAL-SWITCH-MIB SNMP notification is not sent.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
15.1(1)SY	This command was introduced.

Usage Guidelines

The **snmp-server enable traps vswitch dual-active** command enables the dual-active state change notification. When the VSS changes state to dual-active, the SNMP agent sends the cvsDualActiveDetectionNotif notification.

Enable the **snmp-server enable traps vswitch dual-active** command before running the **test snmp trap vswitch dual-active** command.

Examples

The following is sample output from the **test snmp trap vswitch dual-active** command when the SNMP cvsDualActiveDetectionNotif notification is enabled:

```
Device(config)# snmp-server enable traps vswitch dual-active
Device(config)# exit
Device# test snmp trap vswitch dual-active

cvsDualActiveDetectionNotif notification was sent.
```

The following is sample output from the **test snmp trap vswitch dual-active** command when the SNMP cvsDualActiveDetectionNotif notification is disabled:

```
Device(config)# no snmp-server enable traps vswitch dual-active
Device(config)# exit
Device# test snmp trap vswitch dual-active

cvsDualActiveDetectionNotif notification is disabled.
```

Related Commands

Command	Description
snmp-server enable traps vswitch dual-active	Enables the CISCO-VIRTUAL-SWITCH-MIB SNMP cvsDualActiveDetectionNotif notification.
test snmp trap vswitch vsl	Tests the CISCO-VIRTUAL-SWITCH-MIB SNMP notification (trap and inform).

test snmp trap vswitch vsl

To test CISCO-VIRTUAL-SWITCH-MIB Simple Network Management Protocol (SNMP) notifications (traps and informs), use the **test snmp trap vswitch vsl**command in privileged EXEC mode.

test snmp trap vswitch vsl

Syntax Description

This command has no keywords or arguments.

Command Default

This command has no default setting.

Command Modes

Privileged EXEC mode

Command History

Release	Modification
12.2(33)SXI	This command was introduced on the Supervisor Engine 720.

Examples

This example shows the output of the SNMP cvsVSLConnectionChangeNotif notification when it is not enabled:

```
Router# test
 snmp trap vswitch vsl
cvsVSLConnectionChangeNotif notification is disabled.
Router#
```

This example shows the output of the SNMP cvsVSLConnectionChangeNotif notification when it is enabled:

```
Router# test
 snmp trap vswitch vsl
cvsVSLConnectionChangeNotif notification was sent.
Router#
```

test snmp trap vtp

To test CISCO-VTP-MIB traps Simple Network Management Protocol (SNMP) traps and informs, use the **test snmp trap vtp**command in privileged EXEC mode.

test snmp trap vtp {**digest-error**| **mode-change**| **port-status**| **pruning-change**| **rev-error**| **server-disable**| **v1-detected**| **version-change**| **vlan-create**| **vlan-delete**}

Syntax Description

digest-error	Tests SNMP vtpConfigDigestError notifications.
mode-change	Tests SNMP vtpLocalModeChange notifications.
port-status	Tests SNMP vlanTrunkPortDynamicStatusChange notifications.
pruning-change	Tests SNMP vtpPruningStateOperChange notifications.
rev-error	Tests SNMP vtpConfigRevNumberError notifications.
server-disable	Tests SNMP vtpServerDisabled notifications.
v1-detected	Tests SNMP vtpVersionOneDeviceDetected notifications.
version-change	Tests SNMP vtpVersionInUseChanged notifications.
vlan-create	Tests SNMP vtpVlanCreated notifications.
vlan-delete	Tests SNMP vtpVlanDeleted notifications.

Command Default

This command has no default settings.

Command Modes

Privileged EXEC mode

Command History

Release	Modification
12.2(33)SXI	This command was introduced on the Supervisor Engine 720 and Supervisor Engine 32.

Examples

This example shows the output of the SNMP vtpConfigDigestError trap when it is not configured:

```
Router# test
 snmp trap vtp digest-error
vtpConfigDigestError notification is disabled.
Router#
```

This example shows the output of the SNMP vtpConfigDigestError trap when it is configured:

```
Router# test
 snmp trap vtp digest-error
vtpConfigDigestError notification was sent.
Router#
```

test snmp trap vtp pruning-change

To test the vtpPruningStateOperChange trap, use the **test snmp trap vtp pruning-change**EXEC command.

test snmp trap vtp pruning-change

Syntax Description

This command has no keywords or arguments.

Command Default

This command has no default settings.

Command Modes

EXEC mode

Command History

Release	Modification
12.2(33)SXI4	Support for this command was introduced on the Catalyst 6500 series.

Examples

This example shows that testing the vtpPruningStateOperChange cannot occur without first enabling SNMP VTP traps:

```
Router# test snmp trap vtp pruning-change
vtpPruningStateOperChange notification is disabled.
```

This example shows how to test the vtpPruningStateOperChange:

```
Router# test snmp trap vtp pruning-change
vtpPruningStateOperChange notification is sent.
```

Related Commands

Command	Description
snmp-server enable traps vtp	Enables SNMP VTP traps.

type (test existence)

To specify the type of existence trigger test to perform, use the **type** command in event trigger existence configuration mode. To disable the specified trigger test type, use the **no** form of this command.

type {**present**| **absent**| **changed**}

no type {**present**| **absent**| **changed**}

Syntax Description

present	Specifies whether the trigger conditions for the existence test are present.
absent	Specifies whether the trigger conditions for the existence test are absent.
changed	Specifies whether the trigger conditions for the existence test are changed.

Command Default

By default, both present and absent tests are performed.

Command Modes

Event trigger existence configuration (config-event-trigger-existence)

Command History

Release	Modification
12.4(20)T	This command was introduced.
12.2(33)SRE	This command was integrated into Cisco IOS Release 12.2(33)SRE.
12.2(50)SY	This command was integrated into Cisco IOS Release 12.2(50)SY.

Usage Guidelines

The existence trigger tests are performed based on the following parameters:

- Absent
- Present
- Changed

When the test type is not specified, both present and absent tests are performed.

Examples

The following example shows how to specify the existence trigger test as present:

```
Router(config)#snmp mib event trigger owner owner1 name triggerA
Router(config-event-trigger)# test existence
Router(config-event-trigger-existence)# type present
Router(config-event-trigger-existence)# end
```

Related Commands

Command	Description
test	Enables a trigger test.

url (bulkstat)

To specify the host to which bulk statistics files should be transferred, use the **url** command in Bulk Statistics Transfer configuration mode. To remove a previously configured destination host, use the **no** form of this command.

url {**primary**| **secondary**} *url*

no url {**primary**| **secondary**}

Syntax Description

primary	Specifies the URL to be used first for bulk statistics transfer attempts.
secondary	Specifies the URL to be used for bulk statistics transfer attempts if the transfer to the primary URL is not successful.
url	Destination URL address for the bulk statistics file transfer. Use FTP, RCP, or TFTP. The Cisco IOS File System (IFS) syntax for these URLs is as follows: • **ftp:** [[[//*username* [:*password*]@]*location*]/*directory*]/*filename* • **rcp:** [[[//*username*@]*location*]/*directory*]/*filename* • **tftp:** [[//*location*]/*directory*]/*filename* The *location* argument is typically an IP address.

Command Default

No host is specified.

Command Modes

Bulk Statistics Transfer configuration (config-bulk-tr)

Command History

Release	Modification
12.0(24)S	This command was introduced.
12.3(2)T	This command was integrated into Cisco IOS Release 12.3(2)T.
12.2(25)S	This command was integrated into Cisco IOS Release 12.2(25)S.
12.2(33)SRA	This command was integrated into Cisco IOS Release 12.2(33)SRA.
12.2(33)SXH	This command was integrated into Cisco IOS Release 12.2(33)SXH.

Release	Modification
12.2(33)SB	This command was integrated into Cisco IOS Release 12.2(33)SB.
Cisco IOS XE Release 2.1	This command was integrated into Cisco IOS Release XE 2.1.

Usage Guidelines

For bulk statistics transfer retry attempts, a single retry consists of an attempt to send first to the primary URL, and then to the secondary URL.

Examples

In the following example, an FTP server is used as the primary destination for the bulk statistics file. If a transfer to that address fails, an attempt is made to send the file to the TFTP server at 192.168.10.5. No retry command is specified, which means that only one attempt to each destination will be made.

```
Router(config)# snmp mib bulkstat transfer ifMibTesting
Router(config-bulk-tr)# schema carMibTesting1
Router(config-bulk-tr)# schema carMibTesting2
Router(config-bulk-tr)# format bulkBinary
Router(config-bulk-tr)# transfer-interval 60
Router(config-bulk-tr)# buffer-size 10000
Router(config-bulk-tr)# url primary ftp://user2:pswd@192.168.10.5/functionality/
Router(config-bulk-tr)# url secondary tftp://user2@192.168.10.8/tftpboot/
Router(config-bulk-tr)# buffer-size 2500000
Router(config-bulk-tr)# enable
Router(config-bulk-tr)# exit
```

Related Commands

Command	Description
retry (bulkstat)	Configures the number of retries that should be attempted for sending bulk statistics files.
snmp mib bulkstat transfer	Names a bulk statistics transfer configuration and enters Bulk Statistics Transfer configuration mode.

value (test boolean)

To set a value for the Boolean trigger test, use the **value** command in event trigger boolean configuration mode. To disable the configured settings, use the **no** form of this command.

value *integer-value*

no value

Syntax Description

integer-value	Numerical value to set for the Boolean test. The default is 0.

Command Default

The Boolean trigger test value is set to 0.

Command Modes

Event trigger boolean configuration (config-event-trigger-boolean)

Command History

Release	Modification
12.4(20)T	This command was introduced.
12.2(33)SRE	This command was integrated into Cisco IOS Release 12.2(33)SRE.
12.2(50)SY	This command was integrated into Cisco IOS Release 12.2(50)SY.

Usage Guidelines

The **value** command specifies the value to be set for the Boolean trigger test.

Examples

The following example shows how to set a value for the Boolean trigger test:

```
Router(config)# snmp mib event trigger owner owner1 name triggerA
Router(config-event-trigger)# test boolean
Router(config-event-trigger-boolean)# value 10
Router(config-event-trigger-boolean)# end
```

Related Commands

Command	Description
test	Enables a trigger test.

value type

To specify the type of expression to use during object sampling, use the **value type** command in expression configuration mode. To disable the specified value type, use the **no** form of this command.

value type [**counter32**| **unsigned32**| **timeticks**| **integer32**| **ipaddress**| **octetstring**| **objectid**| **counter64**]

no value type

Syntax Description

counter32	(Optional) Specifies a counter32 value. Counter32 specifies a value that represents a count. The value ranges from 0 to 4294967295.
unsigned32	(Optional) Specifies an unsigned integer value. Unsigned32 specifies a value that includes only non-negative integers. The value ranges from 0 to 4294967295.
timeticks	(Optional) Specifies a value based on timeticks. Timeticks represents a non-negative integer value that specifies the elapsed time between two events, in units of hundredth of a second. When objects in the MIB are defined using the subset of Abstract Syntax Notation One (ASN.1), the description of the object type identifies this reference period.
integer32	(Optional) Specifies an integer32 value. The Integer32 represents 32-bit signed integer values for the Simple Network Management Protocol (SNMP). The value range includes both negative and positive numbers.
ipaddress	(Optional) Specifies a value based on the IP address. The IP address is a string of four octets. The IP address value type is generally an IPv4 address. This value is encoded as four bytes in the network byte order.
octetstring	(Optional) Specifies a value based on octetstring. The octetstring specifies octets of binary or textual information. The octet string length ranges from 0 to 65535 octets.
objectid	(Optional) Specifies a value based on the object identifier of an object. Each object type in a MIB is identified by an object identifier value assigned by the administrator. The object identifier identifies the value type that has an assigned object identifier value.

counter64	(Optional) Specifies a counter64 value. Counter64, like counter32, specifies a value that represents a count. However, the counter64 value ranges from 0 to 18446744073709551615. This value type is used when a 32-bit counter rollover occurs in less than an hour.

Command Default

The default value type is counter32.

Command Modes

Expression configuration mode (config-expression)

Command History

Release	Modification
12.4(20)T	This command was introduced.
12.2(33)SRE	This command was integrated into Cisco IOS Release 12.2(33)SRE.
12.2(50)SY	This command was integrated into Cisco IOS Release 12.2(50)SY.

Usage Guidelines

The **value type** command specifies a value for expression evaluation.

Examples

The following example shows how to specify the counter32 value type:

```
Router(config)# snmp mib expression owner owner1 name ExpressionA
Router(config-expression)# value type counter32
Router(config-expression)# end
```

Related Commands

Command	Description
snmp mib expression owner	Specifies the owner for an expression.

wildcard (expression)

To specify whether an object used for evaluating an expression is to be wildcarded during an event configuration, use the **wildcard** command in expression configuration mode. To remove the wildcard object identifier, use the **no** form of this command.

wildcard

no wildcard

Syntax Description

This command has no arguments or keywords.

Command Default

This command is enabled by default.

Command Modes

Expression configuration (config-expression)

Command History

Release	Modification
12.4(20)T	This command was introduced.
12.2(50)SY	This command was integrated into Cisco IOS Release 12.2(50)SY.

Usage Guidelines

The **wildcard** command allows you to apply a single expression to multiple instances of the same MIB object. When you specify this choice and provide a partial object identifier, the application obtains the object values and discovers the instances of the object. By default, the objects are identified based on instances and are not wildcarded.

Examples

The following example shows how to specify the wildcard object identifier by using the **wildcard** command:

```
Router(config)# snmp mib expression owner owner1 name expression1
Router(config-expression)#object 2
Router(config-expression-object)# wildcard
Router(config-expression-object)# end
```

Related Commands

Command	Description
object id	Specifies the object identifier of an object associated with an event.
snmp mib expression owner	Specifies the owner of an expression.

write mib-data

To save MIB data to system memory (NVRAM) for MIB Data Persistence, use the **write mib-data**command in EXEC mode.

write mib-data

Syntax Description

This command has no arguments or keywords.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
15.0(1)M	This command was introduced in a release earlier than Cisco IOS Release 15.0(1)M.
12.2(33)SRC	This command was integrated into a release earlier than Cisco IOS Release 12.2(33)SRC.
12.2(33)SXI	This command was integrated into a release earlier than Cisco IOS Release 12.2(33)SXI.
Cisco IOS XE Release 2.1	This command was implemented on the Cisco ASR 1000 Series Aggregation Services Routers.

Usage Guidelines

The MIB Data Persistence feature allows the SNMP data of a MIB to be persistent across reloads; that is, the values of certain MIB objects are retained even if your networking device reboots.

To determine which MIBs support “MIB Persistence” in your release, use the **snmp mib persist** command in global configuration mode.

Any modified MIB data must be written to NVRAM memory using the **write mib-data** command. If the **write mib-data** command is not used, modified MIB data is not saved automatically, even if MIB Persistence is enabled. Executing the **write mib-data** command saves only the current MIB data; if the MIB object values are changed, you should reenter the **write mib-data** command to ensure that those values are persistent across reboots.

Examples

The following example shows the enabling of event MIB persistence, circuit MIB persistence, and saving the changes to set object values for these MIBs to NVRAM:

```
Router# configure terminal
Router(config)# snmp mib persist circuit
Router(config)# snmp mib persist event
Router(config)# end
Router# write mib-data
```

Related Commands

Command	Description
snmp mib persist	Enables MIB data persistence.