H3C S12500&S9500E V100R002 Trap Message

Abstract: This document describes the TRAP messages supported by S12500 and S9500E series switches.

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Preface

Audience

This document describes all Trap messages which are supported by S12500 V100R002B01.

This publication is designed for the installer and user with a working knowledge of the Comware V5 system software. Users of this publication might also include network administrators and other people responsible for setting up and maintaining these switches.

Organization

The major sections of this document are as follows:

Chapter	Title	Description
1	Public Traps	Describe all trap messages in public MIB modules supported by S12500 V100R002B01.
2	Pirvate Traps	Describe all trap messages in private MIB modules supported by S12500 V100R002B01.

Public Traps

1. linkUp

Description:
A linkDown trap signifies that the SNMPv2 entity, acting in an agent role, has detected that the ifOperStatus object for one of its communication links left the down state and transitioned into some other state (but not into the notPresent state). This other state is indicated by the included value of ifOperStatus.

Object Name	Object Type	ObjectValueScope
ifIndex	INTEGER	Its value ranges between 1 and the value of ifNumber.
ifAdminStatus	INTEGER	up(1), down(2), testing(3)
ifOperStatus	INTEGER	up(1), down(2), testing(3)

Trigger Action:
Change the status of protocol on an interface
Recommended Action:
shutdown or undo shutdown

2. linkDown

Description:
A linkDown trap signifies that the SNMPv2 entity, acting in an agent role, has detected that the ifOperStatus object for one of its communication links is about to enter the down state from some other state (but not from the notPresent state). This other state is indicated by the included value of ifOperStatus.

Object Name	Object Type	ObjectValueScope
ifIndex	INTEGER	Its value ranges between 1 and the value of ifNumber.
ifAdminStatus	INTEGER	up(1), down(2), testing(3)
ifOperStatus	INTEGER	up(1), down(2), testing(3)

Trigger Action:
Change the status of protocol on an interface
Recommended Action:
shutdown or undo shutdown

3. coldStart

Description:
A coldStart trap signifies that the SNMPv2 entity, acting in an agent role, is reinitializing itself and that its configuration may have been altered.

Object Name	Object Type	ObjectValueScope
N/A	N/A	N/A

Trigger Action:
reinitializing SNMPv2 entity and its configuration may have been altered

Recommended Action:
No action is required.

4. warmStart

Description:
A warmStart trap signifies that the SNMPv2 entity, acting in an agent role, is reinitializing itself such that its configuration is unaltered.

Object Name	Object Type	ObjectValueScope
N/A	N/A	N/A

Trigger Action:
reinitializing SNMPv2 entity and its configuration is unaltered

Recommended Action:
No action is required

5. authenticationFailure

Description:
An authenticationFailure trap signifies that the SNMPv2 entity, acting in an agent role, has received a protocol message that is not properly authenticated. While all implementations of the SNMPv2 must be capable of generating this trap, the snmpEnableAuthenTraps object indicates whether this trap will be generated.

Object Name	Object Type	ObjectValueScope
N/A	N/A	N/A

Trigger Action:

Received a protocol message that is not properly authenticated

Recommended Action:

No action is required.

6. risingAlarm

Description:

The SNMP trap that is generated when an alarm entry crosses its rising threshold and generates an event that is configured for sending SNMP traps.

Object Name	Object Type	ObjectValueScope
alarmIndex	INTEGER	1..65535
alarmVariable	OBJECT IDENTIFIER	
alarmSampleType	INTEGER	absoluteValue(1), deltaValue(2)
alarmValue	Integer32	
alarmRisingThreshold	Integer32	

Trigger Action:

An alarm entry crosses its rising threshold

Recommended Action:

No action is required.

7. fallingAlarm

Description:

The SNMP trap that is generated when an alarm entry crosses its falling threshold and generates an event that is configured for sending SNMP traps.

Object Name	Object Type	ObjectValueScope
alarmIndex	INTEGER	1..65535
alarmVariable	OBJECT IDENTIFIER	
alarmSampleType	INTEGER	absoluteValue(1), deltaValue(2)
alarmValue	Integer32	
alarmFallingThreshold	Integer32	

Trigger Action:

An alarm entry crosses its falling threshold

Recommended Action:

No action is required.

8. entConfigChange

Description:

An entConfigChange notification is generated when the value of entLastChangeTime changes. It can be utilized by an NMS to trigger logical/physical entity table maintenance polls.

An agent should not generate more than one entConfigChange 'notification-event' in a given time interval (five seconds is the suggested default). A 'notification-event' is the transmission of a single trap or inform PDU to a list of notification destinations.

If additional configuration changes occur within the throttling period, then notification-events for these changes should be suppressed by the agent until the current throttling period expires. At the end of a throttling period, one notification-event should be generated if any configuration changes occurred since the start of the throttling period. In such a case, another throttling period is started right away.

An NMS should periodically check the value of entLastChangeTime to detect any missed entConfigChange notification-events, e.g., due to throttling or transmission loss.

Object Name	Object Type	ObjectValueScope
N/A	N/A	N/A

Trigger Action:

Change the value of entLastChangeTime

Recommended Action:

No action is required.

9. bgpEstablished

Description:

The BGP Established event is generated when the BGP FSM enters the ESTABLISHED state.

Object Name	Object Type	ObjectValueScope
bgpPeerLastError	OCTET STRING	SIZE (2)
ifAdminStatus	INTEGER	idle(1),connect(2),active(3),opensent(4), openconfirm(5),established(6)

Trigger Action:

BGP FSM enters the ESTABLISHED status.

Recommended Action:

No action is required.

10. bgpBackwardTransition

Description:
The BGPBackwardTransition Event is generated when the BGP FSM moves from a higher numbered state to a lower numbered state.

Object Name	Object Type	ObjectValueScope
bgpPeerLastError	OCTET STRING	SIZE (2)
ifAdminStatus	INTEGER	idle(1),connect(2),active(3),opensent(4), openconfirm(5),established(6)

Trigger Action:
BGP FSM moves from a higher numbered state to a lower numbered state.
Recommended Action:
No action is required.

11. ospfIfStateChange

Description:
An ospfIfStateChange trap signifies that there has been a change in the state of a non-virtual OSPF interface. This trap should be generated when the interface state regresses (e.g., goes from Dr to Down) or progresses to a terminal state (i.e., Point-to-Point, DR Other, Dr, or Backup).

Object Name	Object Type	ObjectValueScope
ospfRouterId	RouterID	IpAddress
ospfIfIpAddress	IpAddress	
ospfAddressLessIf	Integer32	
ospfIfState	INTEGER	down (1), loopback (2), waiting (3), pointToPoint (4), designatedRouter (5), backupDesignatedRouter (6), otherDesignatedRouter (7)

Trigger Action:
the interface state regresses (e.g., goes from Dr to Down) or progresses to a terminal state (i.e., Point-to-Point, DR Other, Dr, or Backup)
Recommended Action:

No action is required.

12. ospfVirtIfStateChange

Description:
An ospfIfStateChange trap signifies that there has been a change in the state of an OSPF virtual interface. This trap should be generated when the inter-face state regresses (e.g., goes from Point-to-Point to Down) or progresses to a terminal state (i.e., Point-to-Point).

Object Name	Object Type	ObjectValueScope
ospfRouterId	RouterID	IpAddress
ospfVirtIfAreaId	AreaID	IpAddress
ospfVirtIfNeighbor	RouterID	IpAddress
ospfVirtIfState	INTEGER	down (1), pointToPoint (4),

Trigger Action:
the interface state regresses (e.g., goes from Point-to-Point to Down) or progresses to a terminal state (i.e., Point-to-Point).

Recommended Action:
No action is required.

13. ospfNbrStateChange

Description:
An ospfNbrStateChange trap signifies that there has been a change in the state of a non-virtual OSPF neighbor. This trap should be generated when the neighbor state regresses(e.g., goes from Attempt or Full to 1-Way or Down) or progresses to a terminal state (e.g.,2-Way or Full). When an neighbor transitions from or to Full on non-broadcast multi-access and broadcast networks, the trap should be gen-erated by the designated router. A designated router transitioning to Down will be noted by ospfIfStateChange.

Object Name	Object Type	ObjectValueScope
ospfRouterId	RouterID	IpAddress
ospfNbrIpAddr	IpAddress	
ospfNbrAddressLessIndex	InterfaceIndex	Integer32
ospfNbrRtrId	RouterID	IpAddress
ospfNbrState	INTEGER	down(1), attempt(2), init(3), twoWay(4),

Object Name	Object Type	ObjectValueScope
		exchangeStart(5), exchange(6), loading(7), full (8)

Trigger Action:

the neighbor state regresses (e.g., goes from Attempt or Full to 1-Way or Down) or progresses to a terminal state (e.g., 2-Way or Full). When an neighbor transitions from or to Full on non-broadcast multi-access and broadcast networks, the trap should be generated by the designated router.

Recommended Action:

No action is required.

14. ospfVirtNbrStateChange

Description:

An ospfIfStateChange trap signifies that there has been a change in the state of an OSPF vir-tual neighbor. This trap should be generated when the neighbor state regresses (e.g., goes from Attempt or Full to 1-Way or Down) or progresses to a terminal state (e.g., Full).

Object Name	Object Type	ObjectValueScope
ospfRouterId	RouterID	IpAddress
ospfVirtNbrArea	AreaID	IpAddress
ospfVirtNbrRtrId	RouterID	IpAddress
ospfVirtNbrState	INTEGER	down(1),attempt(2),init(3),twoWay(4), exchangeStart(5), exchange(6),loading(7), full (8)

Trigger Action:

the neighbor state regresses (e.g., goes from Attempt or Full to 1-Way or Down) or progresses to a terminal state (e.g., Full).

Recommended Action:

No action is required.

15. ospfIfConfigError

Description:

An ospfIfConfigError trap signifies that a packet has been received on a non-virtual in-terface from a router whose configuration parameters conflict with this router's confi- guration parameters. Note

that the event op-tionMismatch should cause a trap only if it prevents an adjacency from forming.

Object Name	Object Type	ObjectValueScope
ospfRouterId	RouterID	IpAddress
ospfIfIpAddress	IpAddress	
ospfAddressLessIf	Integer32	
ospfPacketSrc	IpAddress	
ospfConfigErrorType		badVersion (1), areaMismatch (2), unknownNbmaNbr (3), unknownVirtualNbr (4), authTypeMismatch (5), authFailure (6), netMaskMismatch (7), helloIntervalMismatch (8), deadIntervalMismatch (9), optionMismatch (10)
ospfPacketType	INTEGER	hello (1), dbDescript (2), lsReq (3), lsUpdate (4), lsAck (5)

Trigger Action:

a packet has been received on a non-virtual interface from a router whose configuration parameters conflict with this router's configuration parameters. Note that the event optionMismatch should cause a trap only if it prevents an adjacency from forming.

Recommended Action:

No action is required.

16. ospfVirtIfConfigError

Description:

An ospfConfigError trap signifies that a pack-et has been received on a virtual interface from a router whose configuration parameters conflict with this router’s configuration parameters. Note that the event optionMismatch should cause a trap only if it prevents an ad-jacency from forming.

Object Name	Object Type	ObjectValueScope
ospfRouterId	RouterID	IpAddress
ospfVirtIfAreaId	AreaID	IpAddress
ospfVirtIfNeighbor	RouterID	IpAddress
ospfConfigErrorType	INTEGER	badVersion (1),

Object Name	Object Type	ObjectValueScope
		areaMismatch (2), unknownNbmaNbr (3), unknownVirtualNbr (4), authTypeMismatch (5), authFailure (6), netMaskMismatch (7), helloIntervalMismatch (8), deadIntervalMismatch (9), optionMismatch (10)
ospfPacketType	INTEGER	hello (1), dbDescript (2), lsReq (3), lsUpdate (4), lsAck (5)

Trigger Action:

a packet has been received on a virtual interface from a router whose configuration parameters conflict with this router's configuration parameters. Note that the event optionMismatch should cause a trap only if it prevents an adjacency from forming.

Recommended Action:

No action is required.

17. ospfIfAuthFailure

Description:

An ospfIfAuthFailure trap signifies that a packet has been received on a non-virtual in-terface from a router whose authentication key or authentication type conflicts with this router's authentication key or authentication type.

Object Name	Object Type	ObjectValueScope
ospfRouterId	RouterID	IpAddress
ospfIfIpAddress	IpAddress	
ospfAddressLessIf	Integer32	
ospfPacketSrc	IpAddress	
ospfConfigErrorType	INTEGER	badVersion (1), areaMismatch (2), unknownNbmaNbr (3), unknownVirtualNbr (4), authTypeMismatch (5), authFailure (6),

Object Name	Object Type	ObjectValueScope
		netMaskMismatch (7), helloIntervalMismatch (8), deadIntervalMismatch (9), optionMismatch (10)
ospfPacketType	INTEGER	hello (1), dbDescript (2), lsReq (3), lsUpdate (4), lsAck (5)

Trigger Action:

a packet has been received on a non-virtual interface from a router whose authentication key or authentication type conflicts with this router's authentication key or authentication type.

Recommended Action:

No action is required.

18. ospfVirtIfAuthFailure

Description:

An ospfVirtIfAuthFailure trap signifies that a packet has been received on a virtual interface from a router whose authentication key or au-thentication type conflicts with this router's authentication key or authentication type.

Object Name	Object Type	ObjectValueScope
ospfRouterId	RouterID	IpAddress
ospfVirtIfAreaId	AreaID	IpAddress
ospfVirtIfNeighbor	RouterID	IpAddress
ospfConfigErrorType	INTEGER	badVersion (1), areaMismatch (2), unknownNbmaNbr (3), unknownVirtualNbr (4), authTypeMismatch (5), authFailure (6), netMaskMismatch (7), helloIntervalMismatch (8), deadIntervalMismatch (9), optionMismatch (10)
ospfPacketType	INTEGER	hello (1), dbDescript (2), lsReq (3), lsUpdate (4), lsAck (5)

Trigger Action:

a packet has been received on a virtual interface from a router whose authentication key or authentication type conflicts with this router's

authentication key or authentication type.

Recommended Action:

No action is required.

19. ospfIfRxBadPacket

Description:

An ospfIfRxBadPacket trap signifies that an OSPF packet has been received on a non-virtual interface that cannot be parsed.

Object Name	Object Type	ObjectValueScope
ospfRouterId	RouterID	IpAddress
ospfIfIpAddress	IpAddress	IpAddress
ospfAddressLessIf	Integer32	
ospfPacketSrc	IpAddress	IpAddress
ospfPacketType	INTEGER	hello (1), dbDescript (2), lsReq (3), lsUpdate (4), lsAck (5)

Trigger Action:

an OSPF packet has been received on a non-virtual interface that cannot be parsed.

Recommended Action:

No action is required.

20. ospfVirtIfRxBadPacket

Description:

An ospfRxBadPacket trap signifies that an OSPF packet has been received on a virtual interface that cannot be parsed.

Object Name	Object Type	ObjectValueScope
ospfRouterId	RouterID	IpAddress
ospfVirtIfAreaId	AreaID	IpAddress
ospfVirtIfNeighbor	RouterID	IpAddress
ospfPacketType	INTEGER	hello (1), dbDescript (2), lsReq (3), lsUpdate (4), lsAck (5)

Trigger Action:

an OSPF packet has been received on a virtual interface that cannot be parsed.

Recommended Action:

No action is required.

21. ospfTxRetransmit

Description:

An ospfTxRetransmit trap signifies than an OSPF packet has been retransmitted on a non-virtual interface. All packets that may be re-transmitted are associated with an LSDB entry. The LS type, LS ID, and Router ID are used to identify the LSDB entry.

Object Name	Object Type	ObjectValueScope
ospfRouterId	RouterID	IpAddress
ospfIfIpAddress	IpAddress	
ospfAddressLessIf	Integer32	
ospfNbrRtrId	RouterID	IpAddress
ospfPacketType	INTEGER	hello (1), dbDescript (2), lsReq (3), lsUpdate (4), lsAck (5)
ospfLsdbType	INTEGER	routerLink (1), networkLink (2), summaryLink (3), asSummaryLink (4), asExternalLink (5), multicastLink (6), nssaExternalLink (7)
ospfLsdbLsid	IpAddress	
ospfLsdbRouterId	RouterID	IpAddress

Trigger Action:

an OSPF packet has been retransmitted on a non-virtual interface.

Recommended Action:

No action is required.

22. ospfVirtIfTxRetransmit

Description:

An ospfTxRetransmit trap signifies than an OSPF packet has been retransmitted on a virtual interface. All packets that may be retransmit-ted are associated with an LSDB entry. The LS type, LS ID, and Router ID are used to identify the LSDB entry.

Object Name	Object Type	ObjectValueScope
ospfRouterId	AreaID	IpAddress

Object Name	Object Type	ObjectValueScope
ospfVirtIfAreaId	AreaID	IpAddress
ospfVirtIfNeighbor	RouterID	IpAddress
ospfPacketType	INTEGER	hello (1), dbDescript (2), lsReq (3), lsUpdate (4), lsAck (5)
ospfLsdbType	INTEGER	routerLink (1), networkLink (2), summaryLink (3), asSummaryLink (4), asExternalLink (5), multicastLink (6), nssaExternalLink (7)
ospfLsdbLsid	IpAddress	
ospfLsdbRouterId	RouterID	IpAddress

Trigger Action:

an OSPF packet has been retransmitted on a virtual interface.

Recommended Action:

No action is required.

23. ospfOriginateLsa

Description:

An ospfOriginateLsa trap signifies that a new LSA has been originated by this router.

Object Name	Objectt type	ObjectValueScope
ospfRouterId	IpAddress	
ospfLsdbAreaId	IpAddress	
ospfLsdbType	INTEGER	routerLink(1), networkLink(2), summaryLink(3), asSummaryLink(4), asExternalLink(5), multicastLink(6), nssaExternalLink(7)
ospfLsdbLsid	IpAddress	
ospfLsdbRouterId	IpAddress	

Trigger Action:

This trap should not be invoked for simple refreshes of LSAs (which happens every 30 minutes), but instead will only be invoked when an LSA is (re)originated due to a topology change.

Recommended Action:

No action is required.

24. ospfMaxAgeLsa

Description:

An ospfMaxAgeLsa trap signifies that one of the LSA in the router's link-state database has aged to MaxAge.

Object Name	Objectt type	ObjectValueScope
ospfRouterId	IpAddress	
ospfLsdbAreaId	IpAddress	
ospfLsdbType	INTEGER	routerLink(1), networkLink(2), summaryLink(3), asSummaryLink(4), asExternalLink(5), multicastLink(6), nssaExternalLink(7)
ospfLsdbLsid	IpAddress	
ospfLsdbRouterId	IpAddress	

Trigger Action:

One of the LSA in the router's link-state database has aged to MaxAge.

Recommended Action:

No action is required.

25. ospfLsdbOverflow

Description:

An ospfLsdbOverflow trap signifies that the number of LSAs in the router's link-state database has exceeded ospfExtLsdbLimit.

Object Name	Objectt type	ObjectValueScope
ospfRouterId	IpAddress	
ospfExtLsdbLimit	Integer32	The vlaue range is -1 and from 1 to 1000000.

Trigger Action:

The number of LSAs in the router's link-state database has exceeded ospfExtLsdbLimit.

Recommended Action:

No action is required.

26. ospfLsdbApproachingOverflow

Description:

An ospfLsdbApproachingOverflow trap signifies that the number of LSAs in the router's linkstate database has exceeded ninety percent of ospfExtLsdbLimit.

Object Name	Objectt type	ObjectValueScope
ospfRouterId	IpAddress	
ospfExtLsdbLimit	Integer32	The vlaue range is -1 and from 1 to 1000000.

Trigger Action:

The number of LSAs in the router's linkstate database has exceeded ninety percent of ospfExtLsdbLimit.

Recommended Action:

No action is required.

27. pingProbeFailed

Description:

Generated when a probe failure is detected when the corresponding pingCtlTrapGeneration object is set to probeFailure(0) subject to the value of pingCtlTrapProbeFailureFilter. The object pingCtlTrapProbeFailureFilter can be used to specify the number of successive probe failures that are required before this notification can be generated.

Object Name	Object Type	ObjectValueScope
pingCtlTargetAddressType	InetAddressType	unknown(0), ipv4(1), ipv6(2), dns(16)
pingCtlTargetAddress	InetAddress	OCTET STRING (SIZE (0..255))
pingResultsOperStatus	INTEGER	enabled(1), disabled(2)
pingResultsIpTargetAddressType	InetAddressType	unknown(0), ipv4(1), ipv6(2), dns(16)
pingResultsIpTargetAddress	InetAddress	OCTET STRING (SIZE (0..255))
pingResultsMinRtt	Unsigned32	
pingResultsMaxRtt	Unsigned32	
pingResultsAverageRtt	Unsigned32	
pingResultsProbeResponses	Unsigned32	
pingResultsSentProbes	Unsigned32	
pingResultsRttSumOfSquares	Unsigned32	
pingResultsLastGoodProbe	DateAndTime	

Trigger Action:

a probe failure is detected

Recommended Action:

No action is required.

28. pingTestFailed

Description:

Generated when a ping test is determined to have failed when the corresponding pingCtlTrapGeneration object is set to testFailure(1). In this instance pingCtlTrapTestFailureFilter should specify the number of probes in a test required to have failed in order to consider the test as failed.

Object Name	Object Type	ObjectValueScope
pingCtlTargetAddressType	InetAddressType	unknown(0), ipv4(1), ipv6(2), dns(16)
pingCtlTargetAddress	InetAddress	OCTET STRING (SIZE (0..255))
pingResultsOperStatus	INTEGER	enabled(1), disabled(2)
pingResultsIpTargetAddressType	InetAddressType	unknown(0), ipv4(1), ipv6(2), dns(16)
pingResultsIpTargetAddress	InetAddress	OCTET STRING (SIZE (0..255))
pingResultsMinRtt	Unsigned32	
pingResultsMaxRtt	Unsigned32	
pingResultsAverageRtt	Unsigned32	
pingResultsProbeResponses	Unsigned32	
pingResultsSentProbes	Unsigned32	
pingResultsRttSumOfSquares	Unsigned32	
pingResultsLastGoodProbe	DateAndTime	

Trigger Action:

the corresponding pingCtlTrapGeneration object is set to testFailure(1)

Recommended Action:

No action is required.

29. pingTestCompleted

Description:
Generated at the completion of a ping test when the corresponding pingCtlTrapGeneration object is set to testCompletion(4).

Object Name	Object Type	ObjectValueScope
pingCtlTargetAddressType	InetAddressType	unknown(0), ipv4(1), ipv6(2), dns(16)
pingCtlTargetAddress	InetAddress	OCTET STRING (SIZE (0..255))
pingResultsOperStatus	INTEGER	enabled(1), disabled(2)
pingResultsIpTargetAddressType	InetAddressType	unknown(0), ipv4(1), ipv6(2), dns(16)
pingResultsIpTargetAddress	InetAddress	OCTET STRING (SIZE (0..255))
pingResultsMinRtt	Unsigned32	
pingResultsMaxRtt	Unsigned32	
pingResultsAverageRtt	Unsigned32	
pingResultsProbeResponses	Unsigned32	
pingResultsSentProbes	Unsigned32	
pingResultsRttSumOfSquares	Unsigned32	
pingResultsLastGoodProbe	DateAndTime	

Trigger Action:
the corresponding pingCtlTrapGeneration object is set to testCompletion

Recommended Action:
No action is required.

30. vrrpTrapNewMaster

Description:
The newMaster trap indicates that the sending agent has transitioned to 'Master' state.

Object Name	Object Type	ObjectValueScope
vrrpOperMasterIpAddr	IP Address	IpAddress

Trigger Action:
The agent transitioned to 'Master'

Recommended Action:
No action is required.

31. vrrpTrapAuthFailure

Description:
A vrrpAuthFailure trap signifies that a packet has been received from a router whose authentication key or authentication type conflicts with this router's authentication key or authentication type. Implementation of this trap is optional.

Object Name	Object Type	ObjectValueScope
vrrpTrapPacketSrc	IP Address	
vrrpTrapAuthErrorType	INTEGER	invalidAuthType(1) authTypeMismatch(2) authFailure(3)

Trigger Action:
received a packet whose authentication key or authentication type conflicts with this router's authentication key or authentication type

Recommended Action:
No action is required.

32. pethPsePortOnOffNotification

Description:
This Notification indicates if Pse Port is delivering or not power to the PD. This Notification SHOULD be sent on every status change except in the searching mode.At least 500 msec must elapse between notifications being emitted by the same object instance.

Object Name	Object Type	ObjectValueScope
pethPsePortDetectionStatus	INTEGER	1: disabled(1) 2: searching(2) 3: deliveringPower(3) 4: fault(4) 5: test(5) 6: otherFault(6)

Trigger Action:
Pse Port is delivering or not power to the PD

Recommended Action:

No action is required .

33. pethMainPowerUsageOnNotification

Description:

This Notification indicate PSE Threshold usage indication is on, the usage power is above the threshold. At least 500 msec must elapse between notifications being emitted by the same object instance.

Object Name	Object Type	ObjectValueScope
pethMainPseConsumptionPower	Gauge32	Measured usage power expressed in Watts

Trigger Action:

the usage power is above the threshold.

Recommended Action:

No action is required

34. pethMainPowerUsageOffNotification

Description:

This Notification indicates PSE Threshold usage indication off, the usage power is below the threshold. At least 500 msec must elapse between notifications being
emitted by the same object instance.

Object Name	Object Type	ObjectValueScope
pethMainPseConsumptionPower	Gauge32	Measured usage power expressed in Watts

Trigger Action:

the usage power is below the threshold.

Recommended Action:

No action is required .

35. lldpRemTablesChange

Description:

A lldpRemTablesChange notification is sent when the value of lldpStatsRemTableLastChangeTime changes. It can be utilized by an NMS to

trigger LLDP remote systems table maintenance polls.

Note that transmission of lldpRemTablesChange notifications are throttled by the agent, as specified by the 'lldpNotificationInterval' object."

Object Name	Object Type	ObjectValueScope
lldpStatsRemTablesInserts	ZeroBasedCounter32	Its value ranges between 0 and 4294967295
lldpStatsRemTablesDeletes	ZeroBasedCounter32	Its value ranges between 0 and 4294967295
lldpStatsRemTablesDrops	ZeroBasedCounter32	Its value ranges between 0 and 4294967295
lldpStatsRemTablesAgeouts	ZeroBasedCounter32	Its value ranges between 0 and 4294967295

Trigger Action:

The remote system information is inserted, deleted, dropped or aged out.

Recommended Action:

The network management should confirm whether the net topology has been changed expectably.

36. ipv6IfStateChange

Description:

An ipv6IfStateChange notification signifies that there has been a change in the state of an ipv6 interface. This notification should be generated when the interface's operational status transitions to or from the up (1) state.

Object Name	Object Type	ObjectValueScope
ifIndex	INTEGER	Its value ranges between 1 and the value of ifNumber.
ipv6IfDescr	OCTET STRING	Interface name
ipv6IfOperStatus	INTEGER	up(1), down(2)

Trigger Action:

The reasons why the IPv6 Up alarm is generated are as follows:

- The interface is configured to be UP on the command line.
- Hardware failure in the interface is recovered.
- Failure of interface on the peer is recovered.
- Protocols have detected conditions that allow the interface to be UP.

The reasons why the IPv6 Down alarm is generated are as follows:

- The interface is configured to be DOWN on the command line. For example, the command of shutdown is executed on the interface.
- Hardware of the interface failed. For example, a network line is disconnected.
- Interface on the peer failed.
- Protocols cause the port to be DOWN. For example, there is loopback

or broadcast storm on the interface.

Recommended Action:

There is no suggestion to recovery IPv6 Up alarm.

According to the reasons of IPv6 Down alarm generation, the suggestions to recovery are as follows:

- If the interface is configured to be DOWN on the command line, it can be recovered by configuring the command of undo shutdown on the interface;
- If the hardware of the interface has a failure, replace the hardware;
- If the interface on the peer has a failure, troubleshoot on that interface;
- If it is protocols that cause the interface to be DOWN, troubleshoot in the network. For example, remove loopback.

37. dot3OamThresholdEvent

Description:

A dot3OamThresholdEvent notification is sent when a local or remote threshold crossing event is detected. A local threshold crossing event is detected by the local entity, while a remote threshold crossing event is detected by the reception of an Ethernet OAM Event Notification OAMPDU that indicates a threshold event.

Object Name	Object Type	ObjectValueScope
dot3OamEventLogTimestamp	TimeStamp	As per MIB
dot3OamEventLogOui	EightOTwoOui	As per MIB
dot3OamEventLogType	Unsigned32	As per MIB
dot3OamEventLogLocation	INTEGER	As per MIB
dot3OamEventLogWindowHi	Unsigned32	As per MIB
dot3OamEventLogWindowLo	Unsigned32	As per MIB
dot3OamEventLogThresholdHi	Unsigned32	As per MIB
dot3OamEventLogThresholdLo	Unsigned32	As per MIB
dot3OamEventLogValue	CounterBasedGauge64	As per MIB
dot3OamEventLogRunningTotal	CounterBasedGauge64	As per MIB
dot3OamEventLogEventTotal	Unsigned32	As per MIB

Trigger Action:

A dot3OamThresholdEvent notification is sent when a local or remote threshold crossing event is detected.

Recommended Action:

No action is required.

38. dot3OamNonThresholdEvent

Description:

A dot3OamNonThresholdEvent notification is sent when a local or remote non-threshold crossing event is detected. A local event is detected by the local entity, while a remote event is detected by the reception of an Ethernet OAM Event. Notification OAMPDU that indicates a non-threshold crossing event.

Object Name	Object Type	ObjectValueScope
dot3OamEventLogTimestamp	TimeStamp	As per MIB
dot3OamEventLogOui	EightOTwoOui	As per MIB
dot3OamEventLogType	Unsigned32	As per MIB
dot3OamEventLogLocation	INTEGER	As per MIB
dot3OamEventLogEventTotal	Unsigned32	As per MIB

Trigger Action:

A dot3OamNonThresholdEvent notification is sent when a local or remote non-threshold crossing event is detected.

Recommended Action:

No action is required.

Private Traps

1. mplsXCUp

Description:

This notification is generated when a mplsXCOperStatus object for one of the configured cross-connect entries is about to leave the down state and transition into some other state (but not into the notPresent state). This other state is indicated by the included value of mplsXCOperStatus.

Object Name	Object Type	ObjectValueScope
mplsXCIndex	Integer32	[1,2147483647]
mplsInSegmentIfIndex	InterfaceIndexOrZero	
mplsInSegmentLabel	MplsLabel	Unsigned32 (0..4294967295)
mplsOutSegmentIndex	Integer32	[0,2147483647]

Object Name	Object Type	ObjectValueScope
mplsXCAdminStatus	INTEGER	up(1), down(2), testing(3)
mplsXCOperStatus	INTEGER	up(1), down(2), testing(3), unknown(4), dormant(5), notPresent(6), lowerLayerDown(7)

Trigger Action:

a mplsXCOperStatus object for one of the configured cross-connect entries is about to leave the down state and transition into some other state (but not into the notPresent state).

Recommended Action:

No action is required.

2. mplsXCDown

Description:

This notification is generated when a mplsXCOperStatus object for one of the configured cross-connect entries is about to enter the down state from some other state (but not from the notPresent state). This other state is indicated by the included value of mplsXCOperStatus.

Object Name	Object Type	ObjectValueScope
mplsXCIndex	Integer32	[1,2147483647]
mplsInSegmentIfIndex	InterfaceIndexOrZero	
mplsInSegmentLabel	MplsLabel	Unsigned32 (0..4294967295)
mplsOutSegmentIndex	Integer32	[0,2147483647]
mplsXCAdminStatus	INTEGER	up(1), down(2), testing(3)
mplsXCOperStatus	INTEGER	up(1), down(2), testing(3), unknown(4), dormant(5), notPresent(6), lowerLayerDown(7)

Trigger Action:

a mplsXCOperStatus object for one of the configured cross-connect entries is about to enter the down state from some other state (but not from the notPresent state).

Recommended Action:

No action is required.

3. hwMplsLdpSessionUpEventFailure

Description:

Generation of this trap occurs when the value of 'hwMplsLdpSessionState' enters the 'operational(5)' state.

Object Name	Object Type	ObjectValueScope
hwMplsLdpSessionID	MplsLdpIdentifier	OCTET STRING (SIZE (6))
hwMplsLdpSessionState	INTEGER	nonexistent(1), initialized(2), openrec(3), opensent(4), operational(5)

Trigger Action:

the value of 'hwMplsLdpSessionState' enters the 'operational(5)' state.

Recommended Action:

No action is required.

4. hwMplsLdpSessionDownEventFailure

Description:

Generation of this trap occurs when the value of 'hwMplsLdpSessionState' leaves the 'operational(5)' state.

Object Name	Object Type	ObjectValueScope
hwMplsLdpSessionID	MplsLdpIdentifier	OCTET STRING (SIZE (6))
hwMplsLdpSessionState	INTEGER	nonexistent(1), initialized(2), openrec(3), opensent(4), operational(5)

Trigger Action:

the value of 'hwMplsLdpSessionState' leaves the 'operational(5)' state.

Recommended Action:

No action is required.

5. supplicantproxycheck

Description:

N/A.

Object Name	Object Type	ObjectValueScope
proxycheckVlanId	INTEGER	[1,4094]
proxycheckPortName	STRING	Like: Ethernet1/0/1
proxycheckMacAddr	MacAddress	
proxycheckIpaddr	IpAddress	
proxycheckUsrName	OCTET STRING	

Trigger Action:

A client pc has 2 network card installed, then excute 802.1X authentication with h3c client software. And the h3c NAS must configure supplicant proxy-check trap.

Recommended Action:

Execute 802.1x authentications.

6. h3cCfgOperateCompletion

Description:

When create h3cCfgOperateTable successfully, a notification may be generated.

Object Name	Object Type	ObjectValueScope
h3cCfgOperateType	ConfigOperationType	INTEGER { running2Startup(1), startup2Running(2), running2Net(3), net2Running(4), net2Startup(5), startup2Net(6) }
h3cCfgOperateTime	TimeTicks	
h3cCfgOperateState	INTEGER	{ opInProgress(1), opSuccess(2), opInvalidOperation(3), opInvalidProtocol(4), opInvalidSourceName(5),

Object Name	Object Type	ObjectValueScope
		opInvalidDestName(6), opInvalidServerAddress(7), opDeviceBusy(8), opDeviceOpenError(9), opDeviceError(10), opDeviceNotProgrammable(11), opDeviceFull(12), opFileOpenError(13), opFileTransferError(14), opFileChecksumError(15), opNoMemory(16), opAuthFail(17), opTimeOut(18), opUnknownFailure(19) }
h3cCfgOperateEndTime	TimeTicks	

Trigger Action:

When creating h3cCfgOperateTable successfully, the trap may be generated.

Recommended Action:

Please wait until the operation done.

7. h3cCfgManEventlog

Description:

The object calculates the checksum on the current config per 10 minutes and even if it is different from the saved config but if a trap has been sent with the same checksum then don't send again until the checksum is different.

Object Name	Object Type	ObjectValueScope
h3cCfgLogSrcCmd	INTEGER	cmdLine(1), snmp(2), other(3)
h3cCfgLogSrcData	INTEGER	erase(1), runningData(2), commandSource(3), startupData(4), local(5), netFtp(6), hotPlugging(7)
h3cCfgLogDesData	INTEGER	unkown(1), runningData(2), commandSource(3),

Object Name	Object Type	ObjectValueScope
		startupData(4), local(5), etkFtp(6), hotPlugging(7)

Trigger Action:

Every 10 minutes, the checksum of the current configuration will be compared with 10 minutes before, if the result is different, the trap will be sent.

Recommended Action:

Check the current configuration, save the current configuration if it is necessary.

8. h3cSysClockChangedNotification

Description:

A clock changed notification is generated when the current local date and time for the system has been manually changed.The value of h3cSysLocalClock reflects new date and time.

Object Name	Object Type	ObjectValueScope
h3cSysLocalClock	OCTET STRING	

Trigger Action:

The current local date and time for the system has been manually changed.

Recommended Action:

All of the reload schedule are canceled.

9. h3cSysReloadNotification

Description:

A h3cSysReloadNotification will be sent before the corresponding entity is rebooted. It will also be sent if the entity fails to reboot because the clock has changed.

Object Name	Object Type	ObjectValueScope
h3cSysReloadImage	Integer32	(0..2147483647)
h3cSysReloadCfgFile	Integer32	(0..2147483647)
h3cSysReloadReason	DisplayString	(SIZE (0..255))
h3cSysReloadScheduleTime	DateAndTime	(SIZE(8))
h3cSysReloadAction	INTEGER	reloadUnavailable(1),

Object Name	Object Type	ObjectValueScope
		reloadOnSchedule(2), reloadAtOnce(3), reloadCancel(4)

Trigger Action:

It will be sent before the corresponding entity is rebooted, or the entity fails to reboot because the clock has changed.

Recommended Action:

Check the status of reload schedule and the current time.

10. h3cFlhOperNotification

Description:

A h3cFlhOperNotification is sent at the completion of a flash copy operation if h3cFlhOperEndNotification is true.

Object Name	Object Type	ObjectValueScope
h3cFlhOperIndex	INTEGER	1: 1..2147483647
h3cFlhOperStatus	H3cFlashOperationStatus	opInProgress(1), opSuccess(2), opInvalid(3), opInvalidProtocol(4), opInvalidSourceName(5), opInvalidDestName(6), opInvalidServerAddress(7), opDeviceBusy(8), opDeviceOpenError(9), opDeviceError(10), opDeviceNotProgrammable(11), opDeviceFull(12), opFileOpenError(13), opFileTransferError(14), opFileChecksumError(15), opNoMemory(16), opAuthFail(17), opTimeout(18), opUnknownFailure(19), opDeleteFileOpenError(20), opDeleteInvalidDevice(21), opDeleteInvalidFunction(22),opDeleteOperationError(23),opDeleteInvalidFileName(24),

Object Name	Object Type	ObjectValueScope
		opDeleteDeviceBusy(25), opDeleteParaError(26), opDeleteInvalidPath(27)

Trigger Action:

the completion of a flash copy operation if h3cFlhOperEndNotification is true

Recommended Action:

No action is required.

11. fanfailure

Description:

The fan of device is failure. It means that if the fan on device fails to work well, the trap will be sent.

Object Name	Object Type	ObjectValueScope
hwDevMFanNum	INTEGER	Integer32

Trigger Action:

Remove a fan from its slot

Recommended Action:

Insert a fan which works well into its slot.

12. hwFanNormal

Description:

If the status of fan changes to normal from abnormal, this trap will be generated.

Object Name	Object Type	ObjectValueScope
hwDevMFanNum	INTEGER	Integer32

Trigger Action:

Insert a fan into its slot

Recommended Action:

No action is required.

13. hwRequestLoading

Description:

The board is being loaded.

Object Name	Object Type	ObjectValueScope
hwLswFrameIndex	INTEGER	Integer32
hwLswSlotIndex	INTEGER	INTEGER

Trigger Action:

Insert an IO board into its slot

Recommended Action:

No action is required.

14. hwLoadFailure

Description:

It is failed to load a board on device.

Object Name	Object Type	ObjectValueScope
hwLswFrameIndex	INTEGER	Integer32
hwLswSlotIndex	INTEGER	INTEGER

Trigger Action:

Insert an IO board to its slot and there is not proper app for it in master board

Recommended Action:

Check whether the app file is proper in master board

15. hwLoadFinished

Description:

The device has finished loading a board.

Object Name	Object Type	ObjectValueScope
hwLswFrameIndex	INTEGER	Integer32
hwLswSlotIndex	INTEGER	INTEGER

Trigger Action:

Insert an IO board to its slot and wait for a while

Recommended Action:

No action is required

16. hwRebootSendTrap

Description:
When users restart the device with command 'reboot', this trap will be sent two seconds before the device reboots.

Object Name	Object Type	ObjectValueScope
N/A	N/A	N/A

Trigger Action:
Users restart the device with command 'reboot'
Recommended Action:
No action is required

17. hwAggSpeedChangedNotification

Description:
This event will be triggered whenever an aggregation changes its speed

Object Name	Object Type	ObjectValueScope
hwAggLinkNumber	Integer32	(1..728)

Trigger Action:
An aggregation changes its speed
Recommended Action:
No action is required

18. hwAggPortInactiveNotification

Description:
This event will be triggered whenever any port in aggrerator is made inactive

Object Name	Object Type	ObjectValueScope
hwAggLinkNumber	Integer32	(1..728)

Trigger Action:
Any port in aggrerator is made inactive
Recommended Action:
No action is required

19. hwAggPortInactiveNotification2

Description:

This event will be triggered whenever the port in aggrerator is made inactive.

Object Name	Object Type	ObjectValueScope
hwAggLinkNumber	INTEGER	Integer32
hwAggPortIndex	Gauge32	Gauge32

Trigger Action:

When the port in aggrerator is made inactive.

Recommended Action:

No action is required

20. hwAggPortActiveNotification

Description:

This event will be triggered whenever the port in aggrerator is made active.

Object Name	Object Type	ObjectValueScope
hwAggLinkNumber	INTEGER	Integer32
hwAggPortIndex	Gauge32	Gauge32

Trigger Action:

When the port in aggrerator is made active.

Recommended Action:

No action is required

21. h3cSysStartUpNotification

Description:

a h3cSysStartUpNotification trap will be sent when the system starts up with 'main' image file failed, a trap will be sent to indicate which type the current image file (I.e backup or secure)is.

Object Name	Object Type	ObjectValueScope
h3cSysImageType	INTEGER	main(1), backup(2), none(3), secure(4), main-backup(5),

Object Name	Object Type	ObjectValueScope
		main-secure(6), backup-secure(7), main-backup-secure(8)

Trigger Action:

It will be sent when the system starts up with 'main' image file failed.

Recommended Action:

Check the ‘main’ image file.

22. h3cIsisDatabaseOverload

Description:

This notification is generated when the system enters or leaves the Overload state. The number of times this has be generated and cleared is kept track of by h3cIsisSysStatLSPDbaseOloads.

Object Name	Object Type	ObjectValueScope
h3cIsisSysInstance	Integer	[1..65535]
h3cIsisSysLevelIndex	Integer	level1IS(1), level2IS(2)
h3cIsisSysLevelOverloadState	Integer	IS_SET(1), IS_CLEAR(0)

Trigger Action:

the system enters or leaves the Overload state

Recommended Action:

No action is required.

23. h3cIsisManualAddressDrops

Description:

This notification is generated when one of the manual areaAddresses assigned to this system is ignored when computing routes. The object h3cIsisManAreaAddrExistState describes the area that has been dropped. The number of times this event has been generated is counted by h3cIsisSysManAddrDropFromAreas.

This notification is edge triggered, and should not be regenerated until an address that was used in the previous computation has been dropped.

Object Name	Object Type	ObjectValueScope
h3cIsisSysInstance	Integer	[1..65535]
h3cIsisSysLevelIndex	Integer	level1IS(1), level2IS(2)

Object Name	Object Type	ObjectValueScope
h3cIsisManAreaAddrExistState	Integer	

Trigger Action:
This notification is generated when one of the manual areaAddresses assigned to this system is ignored when computing routes.

Recommended Action:

No action is required.

24. h3cIsisCorruptedLSPDetected

Description:
This notification is generated when we find that an LSP that was stored in memory has become corrupted. The number of times this has been generated is counted by h3cIsisSysCorrLSPs.
We forward an LSP ID. We may have independent knowledge of the ID, but in some implementations there is a chance that the ID itself will be corrupted.

Object Name	Object Type	ObjectValueScope
h3cIsisSysInstance	Integer	[1..65535]
h3cIsisSysLevelIndex	Integer	level1IS(1), level2IS(2)
h3cIsisPduLspId	OCTET STRING	8 octets

Trigger Action:
This notification is generated when we find that an LSP that was stored in memory has become corrupted. The number of times this has been generated is counted by h3cIsisSysCorrLSPs.

Recommended Action:

No action is required.

25. h3cIsisAttemptToExceedMaxSequence

Description:
When the sequence number on an LSP we generate wraps the 32 bit sequence counter, we purge and wait to re-announce this information. This notification describes that event. Since these should not be generated rapidly, we generate an event each time this happens.
While the first 6 bytes of the LSPID are ours, the other two contain useful information

Object Name	Object Type	ObjectValueScope

Object Name	Object Type	ObjectValueScope
h3cIsisSysInstance	Integer	[1..65535]
h3cIsisSysLevelIndex	Integer	level1IS(1), level2IS(2)
h3cIsisPduLspId	OCTET STRING	8 octets

Trigger Action:
When the sequence number on an LSP we generate wraps the 32 bit sequence counter, we purge and wait to re-announce this information.

Recommended Action:

No action is required.

26. h3cIsisIDLenMismatch

Description:
This notification is generated when the system enters or leaves the Overload state. The number of times this has be generated and cleared is kept track of by h3cIsisSysStatLSPDbaseOloads. This should be an edge-triggered notification. We should not send a second notification about PDUs received from what seem to be the same source. This decision is up to the agent to make, and may be based on the circuit or on some MAC level information.

Object Name	Object Type	ObjectValueScope
h3cIsisSysInstance	Integer	[1..65535]
h3cIsisSysLevelIndex	Integer	level1IS(1), level2IS(2)
h3cIsisPduFieldLen	Gauge	
h3cIsisCircIfIndex	Integer	
h3cIsisPduFragment	OCTET STRING	

Trigger Action:
A notification sent when we receive a PDU with a different value of the System ID Length. This notification includes the an index to identify the circuit where we saw the PDU and the header of the PDU which may help a network manager identify the source of the confusion

Recommended Action:

No action is required.

27. h3cIsisMaxAreaAddressesMismatch

Description:
This should be an edge-triggered notification. We should not send a second notification about PDUs received from what seem to be the same source.

Object Name	Object Type	ObjectValueScope
h3cIsisSysInstance	Integer	[1..65535]
h3cIsisSysLevelIndex	Integer	level1IS(1), level2IS(2)
h3cIsisPduMaxAreaAddress	Gauge	
h3cIsisCircIfIndex	Integer	
h3cIsisPduFragment	OCTET STRING	

Trigger Action:
A notification sent when we receive a PDU with a different value of the Maximum Area Addresses. This notification includes the header of the packet, which may help a network manager identify the source of the confusion.

Recommended Action:
No action is required.

28. h3cIsisOwnLSPPurge

Description:
A notification sent when we receive a PDU with our systemID and zero age . This notification includes the circuit Index and router ID from the LSP, if available, which may help a network manager identify the source of the confusion.

Object Name	Object Type	ObjectValueScope
h3cIsisSysInstance	Integer	[1..65535]
h3cIsisSysLevelIndex	Integer	level1IS(1), level2IS(2)
h3cIsisCircIfIndex	Integer	
h3cIsisPduLspId	OCTET STRING	8 octets
h3cIsisPduRemoteRouterID	Gauge	

Trigger Action:
A notification sent when we receive a PDU with our systemID and zero age.

Recommended Action:
No action is required.

29. h3cIsisSequenceNumberSkip

Description:
When we receive an LSP with out System ID and different contents, we may need to reissue the LSP with a higher sequence number.

We send this notification if we need to increase the sequence number by more than one. If two Intermediate Systems are configured with the same System ID, this notification will fire.

Object Name	Object Type	ObjectValueScope
h3cIsisSysInstance	Integer	[1..65535]
h3cIsisSysLevelIndex	Integer	level1IS(1), level2IS(2)
h3cIsisCircIfIndex	Integer	
h3cIsisPduLspId	OCTET STRING	8 octets

Trigger Action:

When we receive an LSP with out System ID and different contents, we may need to reissue the LSP with a higher sequence number.

Recommended Action:

No action is required.

30. h3cIsisAuthenticationTypeFailure

Description:

A notification sent when we receive a PDU with the wrong authentication type field. This notification includes the header of the packet, which may help a network manager identify the source of the confusion.

This should be an edge-triggered notification. We should not send a second notification about PDUs received from what seem to be the same source.

Object Name	Object Type	ObjectValueScope
h3cIsisSysInstance	Integer	[1..65535]
h3cIsisSysLevelIndex	Integer	level1IS(1), level2IS(2)
h3cIsisCircIfIndex	Integer	
h3cIsisPduFragment	OCTET STRING	

Trigger Action:

A notification sent when we receive a PDU with the wrong authentication type field.

Recommended Action:

No action is required.

31. h3cIsisAuthenticationFailure

Description:

A notification sent when we receive a PDU with incorrect authentication information field. This notification includes the header of the packet, which may help a network manager identify the source of the confusion.
This should be an edge-triggered notification. We should not send a second notification about PDUs received from what seem to be the same source.

Object Name	Object Type	ObjectValueScope
h3cIsisSysInstance	Integer	[1..65535]
h3cIsisSysLevelIndex	Integer	level1IS(1), level2IS(2)
h3cIsisCircIfIndex	Integer	
h3cIsisPduFragment	OCTET STRING	

Trigger Action:
A notification sent when we receive a PDU with incorrect authentication information field.

Recommended Action:

No action is required.

32. h3cIsisVersionSkew

Description:
A notification sent when we receive a Hello PDU from an IS running a different version of the protocol. This notification includes the header of the packet, which may help a network manager identify the source of the confusion.
This should be an edge-triggered notification. We should not send a second notification about PDUs received from what seem to be the same source. This decision is up to the agent to make, and may be based on the circuit or on some MAC level information.

Object Name	Object Type	ObjectValueScope
h3cIsisSysInstance	Integer	[1..65535]
h3cIsisSysLevelIndex	Integer	level1IS(1), level2IS(2)
h3cIsisCircIfIndex	Integer	
h3cIsisPduProtocolVersion	Gauge	
h3cIsisPduFragment	OCTET STRING	

Trigger Action:
A notification sent when we receive a Hello PDU from an IS running a different version of the protocol.

Recommended Action:

No action is required.

33. h3cIsisAreaMismatch

Description:
A notification sent when we receive a Hello PDU from an IS which does not share any area address. This notification includes the header of the packet, which may help a network manager identify the source of the confusion.
This should be an edge-triggered notification. We should not send a second notification about PDUs received from what seem to be the same source. This decision is up to the agent to make, and may be based on the circuit or on some MAC level information.

Object Name	Object Type	ObjectValueScope
h3cIsisSysInstance	Integer	[1..65535]
h3cIsisSysLevelIndex	Integer	level1IS(1), level2IS(2)
h3cIsisCircIfIndex	Integer	
h3cIsisPduFragment	OCTET STRING	

Trigger Action:
A notification sent when we receive a Hello PDU from an IS which does not share any area address.

Recommended Action:
No action is required.

34. h3cIsisRejectedAdjacency

Description:
A notification sent when we receive a Hello PDU from an IS, but do not establish an adjacency for some reason.
This should be an edge-triggered notification. We should not send a second notification about PDUs received from the same source.

Object Name	Object Type	ObjectValueScope
h3cIsisSysInstance	Integer	[1..65535]
h3cIsisSysLevelIndex	Integer	level1IS(1), level2IS(2)
h3cIsisCircIfIndex	Integer	
h3cIsisPduFragment	OCTET STRING	

Trigger Action:
A notification sent when we receive a Hello PDU from an IS, but do not establish an adjacency for some reason.

Recommended Action:
No action is required.

35. h3cIsisLSPTooLargeToPropagate

Description:
A notification sent when we attempt to propagate an LSP which is larger than the dataLinkBlockSize for the circuit.
This should be an edge-triggered notification. We should not send a second notification about PDUs received from the same source.

Object Name	Object Type	ObjectValueScope
h3cIsisSysInstance	Integer	[1..65535]
h3cIsisSysLevelIndex	Integer	level1IS(1), level2IS(2)
h3cIsisCircIfIndex	Integer	
h3cIsisPduLspSize	Integer	[0..2147483647]
h3cIsisPduLspId	OCTET STRING	8 octets

Trigger Action:
A notification sent when we attempt to propagate an LSP which is larger than the dataLinkBlockSize for the circuit.

Recommended Action:

No action is required.

36. h3cIsisOrigLSPBuffSizeMismatch

Description:
A notification sent when a Level 1 LSP or Level 2 LSP is received which is larger than the local value for h3cIsisOriginatingBufferSize, or when an LSP is received containing the h3cIsisOriginatingBufferSize option and the value in the PDU option field does not match the local value for h3cIsisOriginatingBufferSize. We pass up the size from the option field or the size of the LSP that exceeds our configuration.
This should be an edge-triggered notification. We should not send a second notification about PDUs received from the same source.

Object Name	Object Type	ObjectValueScope
h3cIsisSysInstance	Integer	[1..65535]
h3cIsisSysLevelIndex	Integer	level1IS(1), level2IS(2)
h3cIsisCircIfIndex	Integer	
h3cIsisPduLspId	OCTET STRING	8 octets
h3cIsisPduOriginatingBufferSize	Gauge	[0..16000]

Trigger Action:

A Level 1 LSP or Level 2 LSP is received which is larger than the local value for h3cIsisOriginatingBufferSize, or when an LSP is received containing the h3cIsisOriginatingBufferSize option and the value in the PDU option field does not match the local value for h3cIsisOriginatingBufferSize.

Recommended Action:

No action is required.

37. h3cIsisProtocolsSupportedMismatch

Description:

A notification sent when a non-pseudonode segment 0 LSP is received that has no matching protocols supported.

This may be because the system does not generate the field, or because there are no common elements. The list of protocols supported should be included in the notification: it may be empty if the TLV is not supported, or if the TLV is empty.

This should be an edge-triggered notification. We should not send a second notification about PDUs received from the same source.

Object Name	Object Type	ObjectValueScope
h3cIsisSysInstance	Integer	[1..65535]
h3cIsisSysLevelIndex	Integer	level1IS(1), level2IS(2)
h3cIsisCircIfIndex	Integer	
h3cIsisPduProtocolsSupported	Octets	[0..255]
h3cIsisPduLspId	OCTET STRING	8 octets
h3cIsisPduFragment	OCTET STRING	

Trigger Action:

a non-pseudonode segment 0 LSP is received that has no matching protocols supported.

Recommended Action:

No action is required.

38. h3cIsisAdjacencyChange

Description:

A notification sent when an adjacency changes state, entering or leaving state up.

The first 6 bytes of the h3cIsisPduLspId are the SystemID of the adjacent IS.

The h3cIsisAdjState is the new state of the adjacency.

Object Name	Object Type	ObjectValueScope
h3cIsisSysInstance	Integer	[1..65535]
h3cIsisSysLevelIndex	Integer	level1IS(1), level2IS(2)
h3cIsisCircIfIndex	Integer	
h3cIsisPduLspId	OCTET STRING	8 octets
h3cIsisAdjState	Integer	down(1) 2: initializing(2) 3: up(3) 4: failed(4)

Trigger Action:

an adjacency changes state, entering or leaving state up.

Recommended Action:

No action is required.

39. powerfailure

Description:

If the power supply of the device failed. As a power supply is just being intserted into the device or a power supply unit on the device is failed, this trap will be ganerated.

Object Name	Object Type	ObjectValueScope
hwDevMPowerNum	INTEGER	Integer32

Trigger Action:

There is something wrong with the power

Recommended Action:

No action is required

40. hwPowerNormal

Description:

If the status of power supply changes to normal, this trap will be ganerated.

Object Name	Object Type	ObjectValueScope
hwDevMPowerNum	INTEGER	Integer32

Trigger Action:

Insert a power to its slot

Recommended Action:

No action is required

41. hwPowerRemoved

Description:
The power supply has been moved. It means that somebody pulls out the power supply. If the this occur, the trap will be sent.

Object Name	Object Type	ObjectValueScope
hwDevMPowerNum	INTEGER	Integer32

Trigger Action:

Remove a power from its slot

Recommended Action:

No action is required

42. hwPowerInserted

Description:

A power supply unit has been interted to the device.

Object Name	Object Type	ObjectValueScope
hwLswFrameIndex	INTEGER	Integer32

Trigger Action:

Insert a power into its slot

Recommended Action:

No action is required

43. hwBoardRemoved

Description:
The board has been removed from the device, then the trap will be generated.

Object Name	Object Type	ObjectValueScope
hwLswFrameIndex	INTEGER	Integer32
hwLswSlotIndex	INTEGER	Integer32

Trigger Action:

Remove a slave of IO board from its slot

Recommended Action:

No action is required

44. hwBoardInserted

Description:

The board has been inserteded into device.

Object Name	Object Type	ObjectValueScope
hwLswFrameIndex	INTEGER	Integer32
hwLswSlotIndex	INTEGER	Integer32

Trigger Action:

Insert a slave of IO board to a slot

Recommended Action:

No action is required

45. hwBoardFailure

Description:

The board is failed to work.

Object Name	Object Type	ObjectValueScope
hwLswFrameIndex	INTEGER	Integer32
hwLswSlotIndex	INTEGER	Integer32

Trigger Action:

There is something wrong with a slave or IO board

Recommended Action:

No action is required

46. hwBoardNormal

Description:

The status of board changes to normal.

Object Name	Object Type	ObjectValueScope
hwLswFrameIndex	INTEGER	Integer32
hwLswSlotIndex	INTEGER	Integer32

Trigger Action:

Insert a slave or IO board and wait a while

Recommended Action:

No action is required

47. hwBoardTemperatureLower

Description:

The temperature of the board is lower than the normal value.

Object Name	Object Type	ObjectValueScope
hwLswFrameIndex	INTEGER	Integer32
hwLswSlotIndex	INTEGER	INTEGER

Trigger Action:

A board's temperature goes under the low limit

Recommended Action:

No action is required

48. hwBoardTemperatureFromLowerToNormal

Description:

The temperature of the board raises to a normal value.

Object Name	Object Type	ObjectValueScope
hwLswFrameIndex	INTEGER	Integer32
hwLswSlotIndex	INTEGER	INTEGER

Trigger Action:

A board's temperature goes into the range between the up and low limit from low status.

Recommended Action:

No action is required

49. hwBoardTemperatureHigher

Description:

The temperature of the board is higher than normal value.

Object Name	Object Type	ObjectValueScope
hwLswFrameIndex	INTEGER	Integer32

Object Name	Object Type	ObjectValueScope
hwLswSlotIndex	INTEGER	INTEGER

Trigger Action:

A board's temperature goes over the up limit

Recommended Action:

No action is required

50. hwBoardTemperatureFormHigherToNormal

Description:

The temperature of the board down to a normal value.

Object Name	Object Type	ObjectValueScope
hwLswFrameIndex	INTEGER	Integer32
hwLswSlotIndex	INTEGER	INTEGER

Trigger Action:

A board's temperature goes into the range between the up and low limit from high status.

Recommended Action:

No action is required.

51. hwBridgeLostRootPrimary

Description:

The SNMP trap that is generated when the bridge is no longer the root bridge of the instance. Another switch with higher priority has already been the root bridge of the instance.

Object Name	Object Type	ObjectValueScope
hwdot1sInstanceID	INTEGER	(0..64)

Trigger Action:

The bridge is no longer the root bridge of the instance

Recommended Action:

No action is required

52. hwPortMstiRootGuarded

Description:

The SNMP trap that is generated when a root-guard port receives a superior message on the relevant instance.

Object Name	Object Type	ObjectValueScope
hwdot1sInstanceID	INTEGER	(0..64)
hwdot1sMstiPortIndex	INTEGER	

Trigger Action:

a root-guard port receives a superior message on the relevant instance

Recommended Action:

No action is required

53. hwPortMstiBpduGuarded

Description:

The SNMP trap that is generated when an edged port of the BPDU-guard switch receives BPDU packets.

Object Name	Object Type	ObjectValueScope
dot1dStpPort	INTEGER	(1..65535)

Trigger Action:

an edged port of the BPDU-guard switch receives BPDU packets

Recommended Action:

No action is required

54. hwPortMstiLoopGuarded

Description:

The SNMP trap that is generated when an Alternate-Port or Root-Port is aged out.

Object Name	Object Type	ObjectValueScope
hwdot1sInstanceID	INTEGER	(0..64)
hwdot1sMstiPortIndex	INTEGER	

Trigger Action:

an Alternate-Port or Root-Port is aged out.

Recommended Action:

No action is required

55. h3cRrppRingRecover

Description:

Trap message is generated by master-node on the ring when the ring recovers from fault..

Object Name	Object Type	ObjectValueScope
h3cRrppDomainID	Integer32	Range form 1 to 16
h3cRrppRingID	Integer32	Range form 1 to 64

Trigger Action:

the ring recovers from fault.

Recommended Action:

No action is required

56. h3cRrppRingFail

Description:

Trap message is generated by master-node on the ring when the ring fails

Object Name	Object Type	ObjectValueScope
h3cRrppDomainID	Integer32	Range form 1 to 16
h3cRrppRingID	Integer32	Range form 1 to 64

Trigger Action:

the ring fails

Recommended Action:

No action is required

57. h3cRrppMultiMaster

Description:

Trap message is generated by master-node when it detects there are more than one master-node on the ring.

Object Name	Object Type	ObjectValueScope
h3cRrppDomainID	Integer32	Range form 1 to 16
h3cRrppRingID	Integer32	Range form 1 to 64

Trigger Action:

master-node detects there are more than one master-node on the ring.

Recommended Action:

No action is required

58. h3cRrppMajorFault

Description:

Trap message is generated by edge-node or assistant-edge-node when it detects major fault.

Object Name	Object Type	ObjectValueScope
h3cRrppDomainID	Integer32	Range form 1 to 16
h3cRrppRingID	Integer32	Range form 1 to 64

Trigger Action:

edge-node or assistant-edge-node detects major fault.

Recommended Action:

shut down links between edge-node and assistant-edge-node on major-ring.

59. hwSlaveSwitchOver

Description:

An hwSlaveSwitchOver trap signifies that the action of standby mpu switching to master has completed.

Object Name	Object Type	ObjectValueScope
NA	NA	NA

Trigger Action:

standby mpu has been completed switching to master.

Recommended Action:

No action is required

60. h3cRadiusAuthServerDownTrap

Description:

This trap is generated when the Authentication Radius server doesn't respond client's requests for specified times.

Object Name	Object Type	ObjectValueScope
radiusAuthServerAddress	IpAddress	The IP address of the RADIUS authentication server.
radiusAuthClientServerPortNumber	Integer32	Range from 0 to 65535

Trigger Action:

the Authentication Radius server doesn't respond client's requests for specified times.

Recommended Action:

Check the status of the radius sever and the validity of the user

61. h3cRadiusAccServerDownTrap

Description:

This trap is generated when the Accounting Radius server doesn't respond client's requests for specified times.

Object Name	Object Type	ObjectValueScope
radiusAccServerAddress	IpAddress	The IP address of the RADIUS accounting server.
radiusAccClientServerPortNumber	Integer32	Range from 0 to 65535

Trigger Action:

the Accounting Radius server doesn't respond client's requests for specified times.

Recommended Action:

Check the status of the radius sever and the validity of the user

62. h3cEntityExtCpuUsageThresholdNotfication

Description:

The CPU usage of the module is higher than the value of h3cEntityExtCpuUsageThreshold. Only support Module Leve1.

We send the notification every 5 seconds until the CPU usage of the module goes down below the upper limit.

Object Name	Object Type	ObjectValueScope
h3cEntityExtPhysicalIndex	INTEGER	Integer32
h3cEntityExtCpuUsage	INTEGER	Integer32
h3cEntityExtCpuUsageThreshold	INTEGER	Integer32
h3cEntityExtAdminStatus	INTEGER	Integer32
h3cEntityExtAlarmLight	INTEGER	Integer32

Trigger Action:

An entity's CPU usage goes over the upper limit

Recommended Action:

No action is required

63. h3cEntityExtMemUsageThresholdNotification

Description:

The memory usage of the module is higher than the value of h3cEntityExtMemUsageThreshold. Only support Module Leve1.

We send the notification every 5 seconds until the memory usage of the module goes down below the upper limit.

Object Name	Object Type	ObjectValueScope
h3cEntityExtPhysicalIndex	INTEGER	Integer32
h3cEntityExtMemUsage	INTEGER	Integer32
h3cEntityExtMemUsageThreshold	INTEGER	Integer32
h3cEntityExtMemSize	INTEGER	Integer32
h3cEntityExtAdminStatus	INTEGER	Integer32
h3cEntityExtAlarmLight	INTEGER	Integer32

Trigger Action:

An entity's memory usage goes over the upper limit

Recommended Action:

No action is required

64. h3cEntityExtSFPAlarmOn

Description:

The trap is generated when the SFP module fails or runs abnormally for some particular reason.

Object Name	Object Type	ObjectValueScope
h3cEntityExtPhysicalIndex	INTEGER	Integer32
hh3cEntityExtErrorStatus	INTEGER	Integer32
h3cEntityExtAdminStatus	INTEGER	Integer32
h3cEntityExtAlarmLight	INTEGER	Integer32

Trigger Action:

The SFP module fails or runs abnormally for some particular reason.

Recommended Action:

Check the module and repair it.

65. h3cEntityExtSFPAlarmOff

Description:

The trap is generated when the SFP module restores to normal status.

Object Name	Object Type	ObjectValueScope
h3cEntityExtPhysicalIndex	INTEGER	Integer32
hh3cEntityExtErrorStatus	INTEGER	Integer32
h3cEntityExtAdminStatus	INTEGER	Integer32
h3cEntityExtAlarmLight	INTEGER	Integer32

Trigger Action:

The SFP module restores to normal status.

Recommended Action:

No action is required.

66. h3cEntityExtSFPPhony

Description:

This module is NOT sold by H3C. H3C therefore shall NOT guarantee the normal function of the device or assume the maintenance responsibility thereof.

The trap is generated periodically after a phony module has been found.

Object Name	Object Type	ObjectValueScope
h3cEntityExtPhysicalIndex	INTEGER	Integer32
entPhysicalName	SnmpAdminString	SIZE (0..255)
h3cEntityExtAdminStatus	INTEGER	Integer32
h3cEntityExtAlarmLight	INTEGER	Integer32

Trigger Action:

The SFP module is not sold by H3C.

Recommended Action:

Check the module and replace it.

67. h3cEntityInsert

Description:

The trap is generated when a removeable entity inserting to device.

Object Name	Object Type	ObjectValueScope
entPhysicalDescr	SnmpAdminString	None

Trigger Action:

When a removeable entity inserts to device.

Recommended Action:

No action is required.

68. h3cEntityRemove

Description:

The trap is generated when a removeable entity removing from device.

Object Name	Object Type	ObjectValueScope
entPhysicalDescr	SnmpAdminString	None

Trigger Action:

When a removeable entity removes from device.

Recommended Action:

No action is required.

69. h3cEntityExtForcedPowerOff

Description:

The trap indicates the entity is forced to power off.

Object Name	Object Type	ObjectValueScope
h3cEntityExtPhysicalIndex	INTEGER	Integer32
entPhysicalName	SnmpAdminString	SIZE (0..255)
h3cEntityExtAdminStatus	INTEGER	Integer32
h3cEntityExtAlarmLight	INTEGER	Integer32

Trigger Action:

User forces to power off the entity，or system occurs some fault.

Recommended Action:

No action is required.

70. h3cEntityExtForcedPowerOn

Description:

The trap indicates the entity is forced to power on.

Object Name	Object Type	ObjectValueScope
h3cEntityExtPhysicalIndex	INTEGER	Integer32
entPhysicalName	SnmpAdminString	SIZE (0..255)
h3cEntityExtAdminStatus	INTEGER	Integer32
h3cEntityExtAlarmLight	INTEGER	Integer32

Trigger Action:

User forces to power on the entity.

Recommended Action:

No action is required.

71. h3cEntityExtFaultAlarmOn

Description:

The trap indicates a fault occures on the specified entity.

Object Name	Object Type	ObjectValueScope

Object Name	Object Type	ObjectValueScope
h3cEntityExtPhysicalIndex	INTEGER	Integer32
entPhysicalName	SnmpAdminString	SIZE (0..255)
h3cEntityExtAdminStatus	INTEGER	Integer32
h3cEntityExtAlarmLight	INTEGER	Integer32

Trigger Action:

A fault occures on the specified entity.

Recommended Action:

Check the entity and repair it.

72. h3cEntityExtFaultAlarmOff

Description:

The trap indicates a fault disappears on the specified entity.

Object Name	Object Type	ObjectValueScope
h3cEntityExtPhysicalIndex	INTEGER	Integer32
entPhysicalName	SnmpAdminString	SIZE (0..255)
h3cEntityExtAdminStatus	INTEGER	Integer32
h3cEntityExtAlarmLight	INTEGER	Integer32

Trigger Action:

A fault disappears on the specified entity.

Recommended Action:

No action is required.

73. h3cEntityExtTemperatureLower

Description:

The trap indicates the temperature of a specified entity is under the lower threshold. In this condition, user should check the status and the environment of the entity, sometimes it goes wrong for some reason.

Object Name	Object Type	ObjectValueScope

Object Name	Object Type	ObjectValueScope
h3cEntityExtPhysicalIndex	INTEGER	Integer32
entPhysicalName	OCTET STRING	SIZE (0..255)
h3cEntityExtTemperature	INTEGER	Integer32
h3cEntityExtLowerTemperatureThreshold	INTEGER	Integer32
h3cEntityExtAdminStatus	INTEGER	Integer32

Trigger Action:

A sensor's temperature goes into the range under the h3cEntityExtLowerTemperatureThreshold.

Recommended Action:

No action is required.

74. h3cEntityExtTemperatureTooUp

Description:

The trap indicates the temperature of a specified entity exceeded the shutdown threshold. In this condition, user should check the status and the environment of the entity, sometimes it goes wrong for some reason.

Object Name	Object Type	ObjectValueScope
h3cEntityExtPhysicalIndex	INTEGER	Integer32
entPhysicalName	OCTET STRING	SIZE (0..255)
h3cEntityExtTemperature	INTEGER	Integer32
h3cEntityExtShutdownTemperatureThreshold	INTEGER	Integer32
h3cEntityExtAdminStatus	INTEGER	Integer32

Trigger Action:

A sensor's temperature goes into the range above the h3cEntityExtShutdownTemperatureThreshold.

Recommended Action:

Check the Temperature of the entity.

75. h3cEntityExtTemperatureNormal

Description:

The trap indicates the temperature of a specified entity recover from abnormal

status.

Object Name	Object Type	ObjectValueScope
h3cEntityExtPhysicalIndex	INTEGER	Integer32
entPhysicalName	OCTET STRING	SIZE (0..255)
h3cEntityExtTemperature	INTEGER	Integer32
h3cEntityExtLowerTemperatureThreshold	INTEGER	Integer32
h3cEntityExtTemperatureThreshold	INTEGER	Integer32
h3cEntityExtAdminStatus	INTEGER	Integer32

Trigger Action:

A sensor's temperature goes into the range between the h3cEntityExtLowerTemperatureThreshold and h3cEntityExtTemperatureThreshold.

Recommended Action:

No action is required.

76. h3cEntityExternalAlarmOccur

Description:

The trap is generaged when the monitored device connected to the specified entity fails.

Object Name	Object Type	ObjectValueScope
h3cEntityExtPhysicalIndex	INTEGER	INTEGER
entPhysicalName	OCTET STRING	SnmpAdminString

Trigger Action:

The monitored device connected to the specified entity fails.

Recommended Action:

Check the monitored device connected to the specified entity.

77. h3cEntityExternalAlarmRecover

Description:

The trap is generated when the failed device connected to the specified entity retruns to normal.

Object Name	Object Type	ObjectValueScope

Object Name	Object Type	ObjectValueScope
h3cEntityExtPhysicalIndex	INTEGER	INTEGER
entPhysicalName	OCTET STRING	SnmpAdminString

Trigger Action:

The failed device connected to the specified entity returns to normal..

Recommended Action:

No action is required.

78. hwPortMstiStateForwarding

Description:

The SNMP trap that is generated when a port turns into forwarding state from other state.

Object Name	Object Type	ObjectValueScope
hwdot1sInstanceID	INTEGER	(0..64)
hwdot1sMstiPortIndex	INTEGER	INTEGER((32 bit))

Trigger Action:

STP's state machine is recalculated.

Recommended Action:

Please check whether there has link fault int the network after the network topoloy is stable.

79. hwPortMstiStateDiscarding

Description:

The SNMP trap that is generated when a port turns into discarding state from forwarding state.

Object Name	Object Type	ObjectValueScope
hwdot1sInstanceID	INTEGER	(0..64)
hwdot1sMstiPortIndex	INTEGER	INTEGER((32 bit))

Trigger Action:

STP's state machine is recalculated.

Recommended Action:

Please check whether there has link fault int the network after the network topoloy is stable.

80. h3cSecureAddressLearned

Description:

This trap is sent when a new station has been learned. The port on which the address was received is the first object, and the MAC address of the learned station is in the second object.

Object Name	Object Type	ObjectValueScope
ifIndex	Integer	[1.. 2147483647]
h3cSecureAddrMAC	MacAddress	MacAddress

Trigger Action:

Port-security has learned a new security MAC.

Recommended Action:

No action is required

81. h3cSecureViolation

Description:

This trap is sent whenever a security violation has occurred. The port on which the violation occured is the first object, and the MAC address of the offending station is in the second object. ifAdminStatus indicates if the port has been disabled because of the violation. The implementation may not send violation traps from the same port at intervals of less than 5 seconds.

Object Name	Object Type	ObjectValueScope
ifIndex	Integer	[1.. 2147483647]
h3cSecureAddrMAC	MacAddress	MacAddress
ifAdminStatus	Integer	1: up(1) 2: down(2) 3: testing(3)

Trigger Action:

This trap is sent whenever a security violation has occurred.

Recommended Action:

Check for unauthorited or un authenticated access according the interface and MAC information.

82. h3cSecureLoginFailure

Description:

This trap is sent whenever a user network access authentication has failed. The port on which the violation occured is the first object, and the MAC address of the offending station is in the second object. The dot1xAuthSessionUserName is the identity supplied during the user authentication.

Object Name	Object Type	ObjectValueScope
ifIndex	Integer	[1.. 2147483647]
h3cSecureAddrMAC	MacAddress	MacAddress
dot1xAuthSessionUserName	SnmpAdminString	[0..255]

Trigger Action:

This trap is sent whenever a user network access authentication has failed.

Recommended Action:

No action is required.

83. h3cSecureLogon

Description:

This trap is sent when a new session is started for an authorised port user. The port on which the violation occured is the first object, and the MAC address of the offending station is in the second object.

The dot1xAuthSessionUserName is the identity supplied during the user authentication. The dot1xAuthSessionAuthenticMethod indicates how the user was authorised. The h3cSecurePortVlanMembershipList object identifies the VLAN membership assigned to the port on session activation.

Object Name	Object Type	ObjectValueScope
ifIndex	Integer	[1.. 2147483647]
h3cSecureAddrMAC	MacAddress	MacAddress
dot1xAuthSessionUserName	SnmpAdminString	[0..255]
dot1xAuthSessionAuthenticMethod	Interger	1: remoteAuthServer(1) 2: localAuthServer(2)
h3cSecurePortVlanMembershipList	DisplayString	[0..255]

Trigger Action:

An authorized user has passed authentication and logged on.

Recommended Action:

No action is required.

84. h3cSecureLogoff

Description:

This trap is sent when a user session is terminated.

The port on which the violation occured is the first object, and the MAC address of the offending station is in the second object. The dot1xAuthSessionUserName is the identity supplied during the user authentication. The dot1xAuthSessionTerminateCause indicates the reason why the session was terminated.

The h3cSecurePortVlanMembershipList object identifies the VLAN membership assigned to the port on session termination.

Object Name	Object Type	ObjectValueScope
ifIndex	Integer	[1.. 2147483647]
h3cSecureAddrMAC	MacAddress	MacAddress
dot1xAuthSessionUserName	SnmpAdminString	[0..255]
dot1xAuthSessionTerminateCause	Integer	1: supplicantLogoff(1) 2: portFailure(2) 3: supplicantRestart(3) 4: reauthFailed(4) 5: authControlForceUnauth(5) 6: portReInit(6) 7: portAdminDisabled(7) 8: notTerminatedYet(999)
h3cSecurePortVlanMembershipList	DisplayString	[0..255]

Trigger Action:

A user session was terminated whether normally or abnormally.

Recommended Action:

No action is required.

85. h3cSecureRalmLoginFailure

Description:

This trap is sent whenever a user network access authentication has failed.

The port on which the violation occured is the first object, and the MAC address of the offending station is in the second object. The authentication

mode indicates how the user was authorised. The h3cSecureRalmAuthUsername is the identity supplied during the user authentication.

Object Name	Object Type	ObjectValueScope
ifIndex	Integer	[1.. 2147483647]
h3cSecureAddrMAC	MacAddress	MacAddress
h3cSecureRalmAuthMode	Integer	1: papUsernameAsMacAddress(1) 2: papUsernameFixed(2)
h3cSecureRalmAuthUsername	DisplayString	[1..80]

Trigger Action:

A mac address related authentication was failure.

Recommended Action:

No action is required.

86. h3cSecureRalmLogon

Description:

This trap is sent when a new session is started for an authorised port user. The port on which the violation occured is the first object, and the MAC address of the offending station is in the second object. The authentication mode indicates how the user was authorised. The h3cSecureRalmAuthUsername is the identity supplied during the user authentication. The h3cSecurePortVlanMembershipList object identifies the VLAN membership assigned to the port on session activation.

Object Name	Object Type	ObjectValueScope
ifIndex	Integer	[1.. 2147483647]
h3cSecureAddrMAC	MacAddress	MacAddress
h3cSecureRalmAuthMode	Integer	1: papUsernameAsMacAddress(1) 2: papUsernameFixed(2)
h3cSecureRalmAuthUsername	DisplayString	[1..80]
h3cSecurePortVlanMembershipList	DisplayString	[0..255]

Trigger Action:

An authorized user has paased the authentication and started a new session.

Recommended Action:

No action is required.

87. h3cSecureRalmLogoff

Description:

This trap is sent when a new session is started for an authorised port user. The port on which the violation occured is the first object, and the MAC address of the offending station is in the second object. The authentication mode indicates how the user was authorised. The h3cSecureRalmAuthUsername is the identity supplied during the user authentication. The h3cSecurePortVlanMembershipList object identifies the VLAN membership assigned to the port on session activation.

Object Name	Object Type	ObjectValueScope
ifIndex	Integer	[1.. 2147483647]
h3cSecureAddrMAC	MacAddress	MacAddress
h3cSecureRalmAuthMode	Integer	1: papUsernameAsMacAddress(1) 2: papUsernameFixed(2)
h3cSecureRalmAuthUsername	DisplayString	[1..80]
h3cSecurePortVlanMembershipList	DisplayString	[0..255]

Trigger Action:

An previously logged on user has terminated its sesion and logged off.

Recommended Action:

No action is required.

88. h3cMacTabFullTrap

Description:

Send this trap when the MAC table is filled. The interval between two traps generated should be longer than h3cMacTabTrapInterval.

Object Name	Object Type	ObjectValueScope
h3cMacTabLen	Integer32	

Trigger Action:

MAC table is filled.

Recommended Action:

No action is required

89. h3cMacTabAlmostFullTrap

Description:

Send this trap when the MAC table is almost full. The interval between two traps generated should be longer than h3cMacTabTrapInterval.

Object Name	Object Type	ObjectValueScope
NA	NA	NA

Trigger Action:

MAC table is almost full.

Recommended Action:

No action is required

90. h3cArpTabFullTrap

Description:

Send this trap when the ARP table is filled. The interval between two traps generated should be longer than h3cArpTabTrapInterval.

Object Name	Object Type	ObjectValueScope
h3cArpTabLen	Integer32	

Trigger Action:

ARP table is filled.

Recommended Action:

No action is required

91. h3cDetailRtTabFullTrap

Description:

Send this trap when the detail routing table is filled. The interval between two traps generated should be longer than h3cRtTabTrapInterval.

Object Name	Object Type	ObjectValueScope
h3cRtTabLen	Integer32	
h3cDetailRtProType	INTEGER	other(1), local(2), rip(3), isis(4), ospf(5), bgp(6)

Trigger Action:

The routing detail table is filled.

Recommended Action:

No action is required

92. h3cMulticastTabFullTrap

Description:

Send this trap when the multicast table is filled. The interval between two traps generated should be longer than h3cMulticastTabTrapInterval.

Object Name	Object Type	ObjectValueScope
h3cMulticastTabLen	Integer32	
h3cMulticastTabType	INTEGER	Lay2(1), lay3(2)

Trigger Action:

The multicast table of layer 2 or layer 3 is filled.

Recommended Action:

No action is required

93. h3cNdTabFullTrap

Description:

Send this trap when the ND table is filled. The interval between two traps generated should be longer than h3cNdTabTrapInterval.

Object Name	Object Type	ObjectValueScope
h3cNdTabLen	Integer32	

Trigger Action:

ND table is filled

Recommended Action:

No action is required

94. pririsingAlarm

Description:

The SNMP trap that is generated when an alarm entry crosses its rising threshold and generates an event that is configured for sending SNMP traps.

Object Name	Object Type	ObjectValueScope

Object Name	Object Type	ObjectValueScope
prialarmIndex	INTEGER	1..65535
prialarmVariable	OBJECT IDENTIFIER	
prialarmSampleType	INTEGER	absoluteValue(1), deltaValue(2),speedValue(3)
prialarmValue	Integer32	
prialarmRisingThreshold	Integer32	

Trigger Action:

When the monitored sample value exceeds or is equal to the rising threshold, this trap will be generated.

Recommended Action:

No action is required.

95. prifallingAlarm

Description:

The SNMP trap that is generated when an alarm entry crosses its falling threshold and generates an event that is configured for sending SNMP traps.

Object Name	Object Type	ObjectValueScope
prialarmIndex	INTEGER	1..65535
prialarmVariable	OBJECT IDENTIFIER	
prialarmSampleType	INTEGER	absoluteValue(1), deltaValue(2),speedValue(3)
prialarmValue	Integer32	
prialarmFallingThreshold	Integer32	

Trigger Action:

When the monitored sample value is below or equal to the falling threshold, this trap will be generated.

Recommended Action:

No action is required.

96. hwMasterPowerNormal

Description:

Send this trap when master power supply changes to normal.

Object Name	Object Type	ObjectValueScope
hwDevMPowerNum	Integer32	between the first Index and the max index

Trigger Action:

Insert the master power into its slot.

Recommended Action:

No action is required.

97. hwSlavePowerNormal

Description:

Send this trap when slave power supply changes to normal.

Object Name	Object Type	ObjectValueScope
hwDevMPowerNum	Integer32	between the first Index and the max index

Trigger Action:

Insert the slave power into its slot.

Recommended Action:

No action is required

98. h3cDLDPUnidirectionalPort

Description:

It will send a SNMP trap when the state of a port has changed to unidirectional-link .

Object Name	Object Type	ObjectValueScope
ifIndex	INTEGER	Its value ranges between 1 and the value of ifNumber.

Trigger Action:

One port has changed to unidirectional-link .

Recommended Action:

Shutdown the port and check the unidirectional-link.

99. h3cCBQoSIfPolicyChanged

Description:

The notification represents that the status of the policy applied on the interface changed.

Object Name	Object Type	ObjectValueScope
h3cCBQoSIfApplyPolicyIfIndex	Integer32	As per MIB
h3cCBQoSIfApplyPolicyDirection	Integer	As per MIB

Trigger Action:

The trap occurs whenever the policy applied on the interface is refreshed.

Recommended Action:

No action is required.

100. h3cCBQoSVlanPolicyChanged

Description:

The notification represents that the status of the policy applied on the VLAN changed.

Object Name	Object Type	ObjectValueScope
h3cCBQoSVlanApplyPolicyVlanid	Integer32	As per MIB
h3cCBQoSVlanApplyPolicyDirection	Integer	As per MIB

Trigger Action:

The trap occurs whenever the policy applied on the VLAN is refreshed.

Recommended Action:

No action is required.

101. h3cMACInformationChangedTrap

Description:

The notification represents that the changed MAC information in device.

Object Name	Object Type	ObjectValueScope
h3cMACInfoTrapIndex	Unsigned32	As per MIB
h3cMACInfoTrapCount	Unsigned32	As per MIB
h3cMACInfoTrapMsg	OCTET STRING	As per MIB

Trigger Action:

The trap occurs whenerver MAC address table is changed.

Recommended Action:

No action is required.

102. h3cStackPortLinkStatusChange

Description:

The notification indicates that the link status of the stack port has changed.

Object Name	Object Type	ObjectValueScope
h3cStackMemberID	Integer32	As per MIB
h3cStackPortIndex	Integer32	As per MIB
h3cStackPortStatus	INTEGER	As per MIB

Trigger Action:

Link status of the stack port has changed.

Recommended Action:

No action is required.

103. h3cStackTopologyChange

Description:

The notification indicates that the topology type of the stack has changed.

Object Name	Object Type	ObjectValueScope
h3cStackTopology	INTEGER	1 or 2.

Trigger Action:

Topology type of the stack has changed.

Recommended Action:

No action is required.

104. h3cLogIn

Description:

This notification is generated when a user logs in.

Object Name	Object Type	ObjectValueScope
h3cTerminalUserName	DisplayString	As per MIB
h3cTerminalSource	DisplayString	As per MIB

Trigger Action:

A user logs in.

Recommended Action:

No action is required.

105. h3cLogOut

Description:

This notification is generated when a user logs out.

Object Name	Object Type	ObjectValueScope
h3cTerminalUserName	DisplayString	As per MIB
h3cTerminalSource	DisplayString	As per MIB

Trigger Action:

A user logs out.

Recommended Action:

No action is required.

106. h3cLogInAuthenFailure

Description:

This notification is generated when a user fails to log in because of authentication.

Object Name	Object Type	ObjectValueScope
h3cTerminalUserName	DisplayString	As per MIB
h3cTerminalSource	DisplayString	As per MIB
h3cTerminalUserAuthFailureReason	INTEGER	As per MIB

Trigger Action:

A user fails to log in because of authentication.

Recommended Action:

Check users authorization.

107. h3cIpAddrChangeNotify

Description:

This notification will be is generated when the IP address of active management interface is changed. The change maybe originated from NMS, DHCP server or management administrator.

The management interfaces means interfaces that assigned by administrator, maybe used to manage device, but maybe not active for lose linking or has no IP address (IPv4 or IPv6).

The active management interface means an active interface that has IP address can be used for network management.

The purpose of this notification is announcing useful management IP address changed. So it is triggered by significative IP address change.

Suppose that two management interfaces on a device, initial that all these two interfaces are down have no IP address, Interface-A and Interface-B. Configure Interface-A as the first monitored interface, and Interface-B as the second. Significative IP address change in following cases:

1. If Interface-A is assigned an IP address primarily, and it is linking up. Then Interface-B will be ignored. A notification will be triggered, appending IP address of Interface-A .

2. If Interface-B is assigned an IP address primarily, and it is linking up. Then Interface-A will be ignored. A notification will be triggered, appending IP address of Interface-B.

3. If IP address of that interface, which had its IP address announced to NMS, is changed since last notification triggered, then an other notification will be sent to NMS.

5. If Interface-A was assigned an IP address primarily, and it was linked up. But for some unknown, it is down or loses IP address, and Interface-B is assigned an IP address which is different with that announced to NMS before, then a notification will be triggered, using the new IP address that Interface-B assigned.

6. A notification using new IP address that Interface-A assigned will be triggered, if 5 is occurred on Interface-B.

Object Name	Object Type	ObjectValueScope
h3cNMIpAddressType	InetAddressType	unknown(0), ipv4(1), ipv6(2), ipv4z(3), ipv6z(4), dns(16)
h3cNMIpAddress	InetAddress	0..255
h3cNMCustomBuildInfo	OCTET STRING	0..64
h3cNMSerialNum	OCTET STRING	0..64

Trigger Action:

This notification will be is generated when the IP address of active management interface is changed.

Recommended Action:

NMS should uses the new IP address to manage device.

108. h3cPeriodicalTrap

Description:

This trap is generated is no trap occurs during the interval specified by h3cPeriodicalTrapInterval.

Object Name	Object Type	ObjectValueScope
None	None	None

Trigger Action:

No trap occurs during the interval specified by h3cPeriodicalTrapInterval.

Recommended Action:

No action is required

109. h3cLpbkdtTrapLoopbacked

Description:

This notification is generated when the interface is looped.

Object Name	Object Type	ObjectValueScope
ifIndex	Integer32	Its value ranges between 1 and the value of ifNumber.
ifDescr	Octet string	The string is no more than 80 characters.

Trigger Action:
The trap occurs whenever the interface is looped.
Recommended Action:
No action is required.

110. h3cLpbkdtTrapRecovered

Description:
This notification is generated when the loops of the interface are eliminated.

Object Name	Object Type	ObjectValueScope
ifIndex	Integer32	Its value ranges between 1 and the value of ifNumber.
ifDescr	Octet string	The string is no more than 80 characters.

Trigger Action:
The trap occurs whenever the loops on the interface are eliminated.
Recommended Action:
No action is required.

111. h3cLpbkdtTrapPerVlanLoopbacked

Description:
Trap message is generated when the interface is looped in the VLAN.

Object Name	Object Type	ObjectValueScope
ifIndex	Integer32	Its value ranges between 1 and the value of ifNumber.
ifDescr	OCTET STRING	The string is no more than 80 characters.
h3cLpbkdtVlanIndex	Integer32	As per MIB

Trigger Action:
The trap occurs whenever the interface is looped in the VLAN.

Recommended Action:
No action is required.

112. h3cLpbkdtTrapPerVlanRecovered

Description:
Trap message is generated when the loop on the interface is eliminated in the VLAN.

Object Name	Object Type	ObjectValueScope
ifIndex	Integer32	Its value ranges between 1 and the value of ifNumber.
ifDescr	OCTET STRING	The string is no more than 80 characters.
h3cLpbkdtVlanIndex	Integer32	As per MIB

Trigger Action:
The trap occurs whenever the loop on the interface is eliminated in the VLAN.
Recommended Action:
No action is required.

113. h3cDDosAttackStart

Description:
This trap is sent when a DDos attack on specific IP is detected.

Object Name	Object Type	ObjectValueScope

Object Name	Object Type	ObjectValueScope
h3cDDosAttackTargetIP	IpAddress	
h3cDDosAttackType	INTEGER	land(1) smurf(2) fraggle(3) winnuke(4) synflood(5) icmpflood(6) udpflood(7) icmpredirect(8) icmpunreachable(9) tracert(11) tcpflag(12) pingofdeath(13) teardrop(14) ipfragment(15) largeicmp(18) sourceroute(19) routerecord(20) fragflood(24) scan(27) appstreamalarm(29) sessionstreamalarm(30) tcpabnormal(32) ipfragabnormal(33) tftpabnormal(34) dnsabnormal(35) httpabnormal(36) telnetabnormal(37) ftpabnormal(38) smtpabnormal(39) pop3abnormal(40) snmpabnormal(41) ackabnormal(42) cc(43) otherabnormal(1024)
h3cDDosAttackPolicy	Octet string	The string length is 0~80.
h3cDDosAttackThreshold	Integer32	
h3cDDosAttackSpeed	Integer32	

Trigger Action:

A DDos attack on specific IP is detected.

Recommended Action:

Divert the target traffic to GUARD to be cleaned.

114. h3cDDosAttackEnd

Description:
This trap is sent when a DDos attack end.

Object Name	Object Type	ObjectValueScope
h3cDDosAttackTargetIP	IpAddress	

Trigger Action:
A DDos attack on specific IP has disappeared.
Recommended Action:
Stop diverting.

115. h3cPortalServerLost

Description:

Object Name	Object Type	ObjectValueScope
h3cPortalServerName	OCTET STRING	1..32

Trigger Action:
When portal server has been enabled and lost the connection to the device and the portal-server-down trap switch is on.

Recommended Action:
Repair the connection between the device and the portal server, and keep the HTTP service on portal server work well.