

Monitoring OAM Link-Fault Management Configuration for an Interface

Purpose Display the current Ethernet OAM link-fault management configuration for a particular interface, such as the discovery mode of the interface, the interval at which OAM PDUs are transmitted to the remote peer, the number of OAM PDUs that can be missed from the remote peer before a link-fault event is generated, actions that are taken when the high threshold for an error is exceeded or when an OAM PDU from a remote peer signifies a fault condition, link monitoring attributes, and remote loopback settings.

Action To display the runtime settings of link-monitoring and general OAM operations for a particular interface:

```
host1#show ethernet oam lfm status GigabitEthernet 4/0
GigabitEthernet 4/0
```

```
Mode: Passive
Transmit-interval: 1000 ms
Loss-threshold: 5 packets
Event Action: disable
High Threshold Action: disable
Remote-loopback: supported
```

```
Frame-seconds Error Monitor
Window: 30 (100 millisecond units)
Low threshold: 20 errored frames
High threshold: none
```

```
Remote-loopback:
Frames sent: 104437
Bytes sent: 16167885

Frames received: 104437
Bytes received: 16167885
```

Meaning Table 1 lists the **show ethernet oam lfm status** command output fields.

Table 1: show ethernet oam lfm status Output Fields

Field Name	Field Description
Interface type/name <i>interfaceSpecifier</i>	Name and type of the Ethernet interface, in the interface specifier format, for which link-fault management packet details are displayed

Table 1: show ethernet oam lfm status Output Fields (continued)

Field Name	Field Description
Mode	<p>Discovery mode of the interface:</p> <ul style="list-style-type: none">■ Active—The interface discovers and monitors the peer on the link if the peer also supports IEEE 802.3ah OAM functionality. An OAM entity in active mode initiates the discovery process by sending an Information OAM PDU to the multicast address of the slow protocol (0180.c200.0002) at a configured rate. The default discovery mode of the OAM client is active■ Passive—An OAM entity does not initiate the discovery process. You cannot perform link-fault management if you configure both the local client and the remote peer for passive mode operation
Transmit-interval	Number of milliseconds, after which Information OAM PDUs are sent from the local OAM entity to the remote peer to maintain the OAM association in an active state
Loss-threshold	Number of Information OAM PDUs that can be missed from the remote peer before a link fault event is triggered
Event Action	<p>Action to be performed on an interface when an Information OAM PDU is received from the remote peer by the local OAM entity to signal a fault condition at the remote entity. Possible values are:</p> <ul style="list-style-type: none">■ disable—Sets the OAM functionality to unconditionally attempt to influence the operational state of the interface to down■ failover—On GE-2 and GE-HDE line modules that are paired with GE-2 SFP I/O modules with physical link redundancy, causes the transition of the link from active to redundant
High Threshold Action	<p>Action that occurs when the high threshold for an error is exceeded:</p> <ul style="list-style-type: none">■ disable—Sets the OAM functionality to unconditionally attempt to influence the operational state of the interface to down. If the interface is a member link of a LAG bundle and at least one other viable link (redundant member or another active/up link) is present, OAM attempts to influence the operational state of the link to down. Otherwise, no action is taken■ failover—On GE-2 and GE-HDE line modules that are paired with GE-2 SFP I/O modules with physical link redundancy, causes the transition of the link from active to redundant
Remote-loopback	<p>Indicates whether the local interface is enabled for remote loopback functionality and whether it can respond to remote loopback requests from peers: supported or unsupported.</p> <p>An OAM entity can put its remote peer into loopback mode using the Loopback control OAM PDU. In loopback mode, every frame received is transmitted back on the same port (except for OAM PDUs, which are needed to maintain the OAM session) to the local entity</p>

Table 1: show ethernet oam lfm status Output Fields (continued)

Field Name	Field Description
Frame-seconds Error Monitor	Displays a detailed classification of frame seconds errors event TLVs since the OAM sublayer was reset
Window	Specified amount of time in milliseconds during which frame seconds error events are counted
Low threshold	Lowest value for frame second error events in number of frames, which when exceeded causes an Errored Frame Seconds Summary Event TLV to be sent to the peer
High threshold	Highest value for frame second error events in number of frames, which when exceeded causes an action to be triggered
Frame-errors Error Monitor	Displays a detailed classification of frame errors event TLVs since the OAM sublayer was reset
Window	Specified amount of time in hundred-millisecond units during which frame error events are counted
Low threshold	Lowest value for frame error events in number of frames, which when exceeded causes an Errored Frame Event TLV to be sent to the peer
High threshold	Highest value for frame error events in number of frames, which when exceeded causes an action to be triggered
Symbol-errors Error Monitor	Displays a detailed classification of symbol errors event TLVs since the OAM sublayer was reset
Window	Specified amount of time in seconds during which symbol error events are counted
Low threshold	Lowest value for frame second error events in number of error symbols, which when exceeded causes an Error Symbol Period TLV to be sent to the peer
High threshold	Highest value for symbol error events in number of error symbols, which when exceeded causes an action to be triggered
Remote-loopback	Displays details on the non-OAM PDUs that are sent and received when the interface is in remote loopback mode
Frames sent	Number of frames sent to the remote peer that are transmitted back or looped to the local interface
Bytes sent	Number of bytes sent to the remote peer that are transmitted back or looped to the local interface
Frames received	Number of frames received from the remote peer when the local entity is in loopback mode
Bytes received	Number of bytes received from the remote peer when the local entity is in loopback mode

- Related Topics**
- Configuring 802.3ah OAM Link-Fault Management
 - show ethernet oam lfm status

Published: 2010-04-07