

Monitoring OAM Link-Fault Management Discovery Settings for an Interface

Purpose Display the results of the Ethernet OAM link-fault management discovery process for a particular interface, such as the hardware status of the interface, operational status of the interface, status of the established link discovery mode of the local and remote OAM entities, states of the multiplier and parser functions of the OAM sublayer for the local and remote OAM entities, and functionalities and configuration of the local and remote OAM entities.

Action To display information regarding the OAM discovery process for a specific interface:

```
host1#show ethernet oam lfm discovery GigabitEthernet 4/1
GigabitEthernet 4/1 is Up, Administrative status is Up
OAM status is Down
Local(0090.1A03.0063):
  Mode      : active
  Capabilities : link events
  Mux Action : Forwarding
  Parser Action : Forwarding
Remote(0090.690a.0202):
  Mode      : passive
  Capabilities : link events, loopback, variable retrieval
  Mux Action : Forwarding
  Parser Action : Forwarding
```

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

Table 1: show ethernet oam lfm discovery Output Fields

Field Name	Field Description
Interface type/name <i>interfaceSpecifier</i>	Status of the hardware on this interface: <ul style="list-style-type: none">■ Up—Hardware is operational■ Down—Hardware is not operational
Administrative status	Operational state that you configured for this interface: <ul style="list-style-type: none">■ Up—Interface is enabled■ Down—Interface is disabled
OAM status	Status of link-fault management functionality on the interface. The operational status of an interface does not depend only on the OAM status. Other factors, such as the administrative state of the interface, also impact the operational state <ul style="list-style-type: none">■ Up—Link-fault management feature is activated on the interface■ Down—Link-fault management feature is disabled on the interface, either because it was not activated or because it was turned off as a result of error conditions
Local (<i>address</i>)	MAC address of the interface of the local entity

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

Field Name	Field Description
Mode	<p>Discovery mode of the interface of the local OAM entity:</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
Capabilities	<p>Functions that the interface of the local entity can perform, such as link monitoring or responding to remote loopback requests. With this information a peer can determine what functions are supported and accessible; for example, loopback capability. All the configured settings on the local interface for OAM tasks are displayed in this field</p> <p>Displays one or more of the following values:</p> <ul style="list-style-type: none">■ unidirectional—Indicates the ability to operate a link in a unidirectional mode for diagnostic purposes■ loopback—Indicates whether remote loopback is supported or unsupported■ link events—Indicates whether interpreting link events is supported or unsupported on the remote peer■ variable retrieval—Indicates whether the local OAM entity supports receipt of performance MIB variables from its peer entity variable requests using Variable Request OAM PDUs
Mux Action	State of the multiplexer functions of the OAM sublayer for the local OAM entity. Device is forwarding non-OAM PDUs to the lower sublayer or discarding non-OAM PDUs
Parser Action	State of the parser functions of the OAM sublayer for the local OAM entity. Device is forwarding non-OAM PDUs to higher sublayer, looping back non-OAM PDUs to the lower sublayer, or discarding non-OAM PDUs
Remote (<i>address</i>)	MAC address of the interface of the remote peer
Mode	<p>Discovery mode of the interface of the remote peer:</p> <ul style="list-style-type: none">■ active—The interface discovers and monitors the entity on the other side of the link if that entity also supports IEEE 802.3ah OAM functionality.■ 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

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

Field Name	Field Description
Capabilities	<p>Functions that the interface of the remote peer can perform, such as link monitoring or responding to remote loopback requests. With this information a peer can determine what functions are supported and accessible; for example, loopback capability. All the configured settings on the local interface for OAM tasks are displayed in this field</p> <p>Displays one or more of the following values:</p> <ul style="list-style-type: none">■ unidirectional—Indicates the ability to operate a link in a unidirectional mode for diagnostic purposes■ loopback—Indicates whether remote loopback is supported or unsupported■ link events—Indicates whether interpreting link events is supported or unsupported on the remote peer■ variable retrieval—Indicates whether the local OAM entity supports receipt of performance MIB variables from its peer entity variable requests using Variable Request OAM PDUs
Mux Action	State of the multiplexer functions of the OAM sublayer for the remote peer. Device is forwarding non-OAM PDUs to the lower sublayer or discarding non-OAM PDUs
Parser Action	State of the parser functions of the OAM sublayer for the remote peer. Device is forwarding non-OAM PDUs to higher sublayer, looping back non-OAM PDUs to the lower sublayer, or discarding non-OAM PDUs

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

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