

OAM Remote Fault Detection Feature

Failures in Ethernet connectivity that are caused by slowly degrading quality are difficult to notice. JUNOS Software enables you to configure the OAM application to monitor the receive path of the link for quality and generate Event Notification PDUs to the remote peer. The following failure conditions can be communicated by the remote entity to its peer using the Flags field of an Information OAM PDU ([Unresolved xref](#)):

Link Fault

This event type signifies that a loss of signal is detected by the receiver; for example, the peer's laser is not operating correctly. A link fault is sent once per second in the Information OAM PDU. Link fault is applicable only when the physical sublayer is capable of independent transmit and receive operations. If you configure this option, the local OAM entity detects loss-of-signal conditions that occurred in the receive path of the link. The local entity influences the state of the link based on an Information OAM PDU with the Link Fault bit set in the Flags field that it receives from the remote peer.

Dying Gasp

This event type denotes that an unrecoverable condition, such as a power failure, has taken place. This type of condition is vendor specific. A notification about the condition might be sent immediately and continuously. If you configure this option, the local OAM entity detects unrecoverable error conditions that occurred in the receive path of the link. The local entity influences the state of the link based on an Information OAM PDU with the Dying Gasp bit set in the Flags field that it receives from the remote peer.

Critical Event

This event type indicates that an unspecified vendor-specific critical event has occurred. A critical event might be sent immediately and continuously. If you configure this option, the local OAM entity detects critical event error conditions that occurred in the receive path of the link. The local entity influences the state of the link based on an Information OAM PDU with the Critical Event bit set in the Flags field that it receives from the remote peer.

You can specify the action to be taken by the system when the configured link-fault event occurs, such as disabling the interface or failing over to the secondary port on GE-2 and GE-HDE line modules that are paired with GE-2 SFP I/O modules with physical link redundancy. You can also configure the OAM application to react to event notifications received from the peer.

If a link fault is detected, any Information OAM PDUs sent with the Link Fault bit set do not contain any TLV data. Any OAM PDU received with these flags set are processed with priority by the router. Other link events, such as Errored Symbol Period Event and Errored Frame Event, which result in threshold values being exceeded are notified using TLVs in Event Notification PDUs.

In JUNOS Software, you can configure the OAM application to monitor the receive path of the link for quality and generate Event Notification PDUs to the remote peer. You can also configure the OAM application to respond to event notifications received from the peer.

- Related Topics**
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 - OAM Messages
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 - Monitoring OAM Link-Fault Management Sessions on All Configured Interfaces
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 - show ethernet oam lfm summary

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