EPON OAM Configuration Commands

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Chapter 1 OAM Configuration Commands

1.1 OAM Configuration Commands

1.1.1 ethernet oam timeout

Syntax

[**no**] **ethernet oam timeout** *value*

ethernet oam timeout *value*

It is used to set the timeout time of the OAM connection.

Parameter

Parameter	Parameter description
value	Timeout time of the OAM connection, which ranges between 2 and 30 and whose unit is second

Default value

The value of **timeout** is 10.

Command mode

Global configuration mode

Instruction

This command can be used to configure some optional parameters for establishing the OAM connection.

Example

The following example shows how to set the timeout time of connection to five seconds.

switch_config#ethernet oam timeout 5

1.1.2 ethernet oam log

Syntax

ethernet oam log {disable | enable}

It is used to enable or disable the EPON OAM log.

Parameter

None

Default value

enable

Command mode

Global configuration mode

Instruction

This command can be used to display or limit the EPON OAM log (including the OAM discovery state machine and the link monitor). It is recommended to enable this log.

Example

The following example shows how to set and limit the EPON OAM log.

switch_config# ethernet oam log disable

1.1.3 ethernet oam log discovery

Syntax

ethernet oam log discovery {disable | enable}

To display or restrain the discovery log of EPON OAM, run the previous command.

Parameter

None

Default value

enable

Command mode

Global configuration mode

Instruction

This command is used to restrain the discovery log of EPON OAM, however, it is recommended to enable this log.

Example

The following example shows how to display or restrain the discovery log of EPON OAM:

switch_config# ethernet oam log discovery disable

1.1.4 ethernet oam log link-monitor

Syntax

ethernet oam log link-monitor {disable | enable}

It is used to enable or disable the link monitor log of EPON OAM.

Parameter

None

Default value

enable

Command mode

Global configuration mode

Instruction

This command is used to restrain the link monitor log of EPON OAM, however, it is recommended to enable this log.

Example

The following example shows how to display or restrain the link monitor log of EPON OAM:

switch_config# ethernet oam log link-monitor disable

1.1.5 ethernet oam remote-loopback {start | stop | test}

Syntax

ethernet oam remote-loopback {start | stop | {test *frame-size pkt-num***}} interface intf-type** intf-id

To start or stop the remote OAM loopback, run the previous command.

Parameter

Parameter	Parameter description
frame-size	Stands for the size of a frame.
pkt-num	Stands for the number of the frames.
intf-id	Stands for an designated interface.

Default value

None

Command mode

Privileged mode

Remarks

The remote OAM loopback cannot be enabled on the physical interface that belongs to the aggregation interface.

Example

The following example shows how to positively start the remote OAM loopback on interface EPON 0/1:1.

switch#ethernet oam remote-loopback start interface EPON0/1:1

1.1.6 show ethernet oam statistics

Syntax

show ethernet oam statistics interface [intf-type intf-id]

To display the OAM statistics information on a designated interface or all interfaces, run the previous command.

Parameter

Parameter	Parameter description
intf-id	Displays the statistics information on the designated interface or on all protocol-up ports and enables the statistics information on the OAM interface.

Default value

None

Remarks

None

Example

The following example shows how to display the number of the OAM packets which are classified by packet types on interface EPON0/1:1.

```
switch#show ethernet oam statistics interface EPON0/1:1
Interface: E0/1:1
Counters:
---------
Information OAMPDU Tx                : 494
Information OAMPDU Rx                : 494
Unique Event Notification OAMPDU Tx  : 0
Unique Event Notification OAMPDU Rx  : 0
Duplicate Event Notification OAMPDU TX: 0
Duplicate Event Notification OAMPDU RX: 0
Loopback Control OAMPDU Tx           : 0
Loopback Control OAMPDU Rx           : 0
Variable Request OAMPDU Tx           : 0
Variable Request OAMPDU Rx           : 0
Variable Response OAMPDU Tx          : 0
Variable Response OAMPDU Rx          : 0
Organization Specific OAMPDU Tx      : 1
```

Organization Specific OAMPDU Rx : 1
Unsupported OAMPDU Tx : 0
Unsupported OAMPDU Rx : 0
Frames Lost due to OAM : 0

1.1.7 show ethernet oam configuration

Syntax

show ethernet oam configuration

The following example shows how to display global OAM configuration:

Parameter

None

Default value

None

Remarks

None

Example

The following example shows how to display global OAM configuration:

switch#show ethernet oam configuration
General

Link timeout : 10 seconds

1.1.8 show ethernet oam ctc version-negotiation-result

Syntax

show ethernet oam ctc version-negotiation-result interface [intf-type intf-id]

To display the negotiation result of Telecom OAM on all interfaces or a specific interface, run the previous command.

Parameter

Parameter	Parameter description
intf-id	Displays the negotiation result of Telecom OAM on a specific interface, otherwise displays all protocols are up and the

	negotiation result of Telecom OAM on the OAM interface.

Default value

None

Remarks

None

Example

The following example shows how to display the OAM Runtime information on interface E0/1:1.

switch# **show ethernet oam ctc version-negotiation-result** interface E0/1:1
Interface : E0/1:1
ctc_OAM_Ext_Status : 0x3
OUI : 11:11:11
ctc_OAM_Ext_version: 0x20

1.1.9 show ethernet oam loopback-test-result

Syntax

show ethernet oam loopback-test-result interface [intf-type intf-id]

It is used to display the result of OAM loopback testing of a designated port.

Parameter

Parameter	Parameter description
intf-id	Displays the loopback result of OAM on a specific interface, otherwise displays all protocols are up and the loopback result of OAM on the OAM interface.

Default value

None

Remarks

None

Example

The following example shows how to display the OAM loopback result on interface E0/1:1.

switch#ethernet oam remote-loopback start interface E0/1:1

switch #ethernet oam remote-loopback test 64 10 interface E0/1:1

switch # **show ethernet oam loopback-test-result** interface E0/1:1
Loopback test result:
Out of Seqance frames: 5
10 packets transmitted, 9 received, 10% packet loss
rtt min/avg/max = 0/0/0 ms
value = 0 = 0x0

1.1.10 show ethernet oam status

Syntax

show ethernet oam status [interface [intf-type intf-id]]

It is used to display the OAM status on all interfaces or a designated interface.

Parameter

Parameter	Parameter description
intf-id	Displays the OAM status on a designated interface, or displays all protocol-up ports and enables the OAM status on the OAM interface.

Default value

None

Remarks

None

Example

The following example shows how to display the OAM status on interface E0/1:1.

switch#show ethernet oam status
Interface: E0/1:1
oam_table:

Admin state: Enabled
Operational status: 108270576

Mode: 4662140
Maximum oam pdu: 1518
Configuration revision: 0
Function supported: 7

peer_table:

Status: 4662140
MAC address: 00:13:25:ff:ff:81
Vendor OUI: 00:13:25
Vendor info: 0
mode: Passive
Maximum oam pdu: 1518
Configuration revision: 1
Function supported: 7

loopback_table:

Status: