

Contents

L2PT commands	1
display l2protocol statistics.....	1
l2protocol tunnel dot1q.....	2
l2protocol tunnel-dmac.....	3
reset l2protocol statistics.....	4

L2PT commands

display l2protocol statistics

Use **display l2protocol statistics** to display Layer 2 Protocol Tunneling (L2PT) statistics.

Syntax

```
display l2protocol statistics [ interface interface-type interface-number ]
```

Views

Any view

Predefined user roles

network-admin
network-operator

Parameters

interface *interface-type interface-number*. Specifies a Layer 2 Ethernet or aggregate interface by its type and number. If you do not specify this option, the command displays L2PT statistics for all Layer 2 Ethernet and aggregate interfaces.

Examples

Display L2PT statistics for all Layer 2 Ethernet and aggregate interfaces.

```
<Sysname> display l2protocol statistics
```

```
L2PT statistics information on interface Bridge-Aggregation1:
```

Protocol	Encapsulated	Decapsulated	Forwarded	Dropped
CDP	0	0	0	0
DLDP	0	3	0	0
EOAM	0	2	0	0
GVRP	8	4	9	2
LACP	0	0	0	0
LLDP	0	3	0	0
MVRP	0	0	0	0
PAGP	0	1	0	0
PVST	0	0	0	0
STP	5	5	5	0
Tunnel	N/A	N/A	100	10
VTP	0	6	0	0
UDLD	0	0	0	0

```
L2PT statistics information on interface Ten-GigabitEthernet1/0/1:
```

Protocol	Encapsulated	Decapsulated	Forwarded	Dropped
CDP	0	0	0	0
DLDP	2	3	3	0
EOAM	5	2	9	0
GVRP	8	4	9	2
LACP	0	0	0	0
LLDP	3	3	3	3
MVRP	0	0	0	0

PAGP	5	1	7	3
PVST	0	0	0	0
STP	5	5	5	0
Tunnel	N/A	N/A	100	10
VTP	0	6	0	0
UDLD	0	0	0	0

Table 1 Command output

Field	Description
Encapsulated	Number of encapsulated packets. The number increases by 1 when the interface receives and encapsulates a protocol packet from a customer network. For protocol Tunnel , which represents tunneled packets, this field displays N/A .
Decapsulated	Number of decapsulated packets. The number increases by 1 when the interface receives and decapsulates a tunneled packet from the service provider network. For protocol Tunnel , which represents tunneled packets, this field displays N/A .
Forwarded	Number of forwarded packets. The number increases by 1 when the interface receives a protocol packet and forwards it. The number increases by 1 for protocol Tunnel when the interface receives a tunneled packet and forwards it. If no interface of the PE is connected to customer networks, the number does not increase.
Dropped	Number of dropped packets. The number increases by 1 when the interface receives a protocol packet and drops it. Protocol packets dropped by hardware are not counted. The number increases by 1 for protocol Tunnel when the interface receives a tunneled packet and drops it.

I2protocol tunnel dot1q

Use **I2protocol tunnel dot1q** to enable L2PT for a protocol.

Use **undo I2protocol tunnel dot1q** to disable L2PT for a protocol.

Syntax

In Layer 2 Ethernet interface view:

```
I2protocol { cdp | dldp | eoam | gvrp | lacp | lldp | mvrp | pagp | pvst | stp | udld | vtp } tunnel dot1q
```

```
undo I2protocol { cdp | dldp | eoam | gvrp | lacp | lldp | mvrp | pagp | pvst | stp | udld | vtp } tunnel dot1q
```

In Layer 2 aggregate interface view:

```
I2protocol { gvrp | mvrp | pvst | stp | vtp } tunnel dot1q
```

```
undo I2protocol { gvrp | mvrp | pvst | stp | vtp } tunnel dot1q
```

Default

L2PT is disabled for all protocols.

Views

Layer 2 Ethernet interface view

Layer 2 aggregate interface view

Predefined user roles

network-admin

Parameters

cdp: Specifies CDP.

dldp: Specifies DLDP.

eoam: Specifies EOAM.

gvrp: Specifies GVRP.

lACP: Specifies LACP.

lldp: Specifies LLDP. L2PT for LLDP supports LLDP packets from only nearest bridge agents.

mvrp: Specifies MVRP.

pagp: Specifies PAgP.

pvst: Specifies PVST.

stp: Specifies STP.

udld: Specifies UDLD.

vtp: Specifies VTP.

Usage guidelines

Before you enable L2PT for a protocol on a port, perform the following tasks:

- Enable the protocol on the CE, and disable the protocol on the port.
- Enable L2PT only on customer-facing PE ports. If you enable L2PT on ports connected to the service provider network, L2PT determines that the ports are connected to a customer network.

Do not enable L2PT on a port that is going to join a service loopback group. All configuration is removed after the port joins the group.

You can enable L2PT on member ports of a Layer 2 aggregation group, but the configuration does not take effect.

Examples

Disable STP and enable L2PT for STP on Ten-GigabitEthernet 1/0/1.

```
<Sysname> system-view
[Sysname] interface ten-gigabitethernet 1/0/1
[Sysname-Ten-GigabitEthernet1/0/1] undo stp enable
[Sysname-Ten-GigabitEthernet1/0/1] l2protocol stp tunnel dot1q
```

Disable STP and enable L2PT for STP on Bridge-Aggregation 1.

```
<Sysname> system-view
[Sysname] interface bridge-aggregation 1
[Sysname-Bridge-Aggregation1] undo stp enable
[Sysname-Bridge-Aggregation1] l2protocol stp tunnel dot1q
```

l2protocol tunnel-dmac

Use **l2protocol tunnel-dmac** to set the destination multicast MAC address for tunneled packets.

Use **undo l2protocol tunnel-dmac** to restore the default.

Syntax

l2protocol tunnel-dmac *mac-address*

undo l2protocol tunnel-dmac

Default

The tunneled packets use 010f-e200-0003 as the destination multicast MAC address.

Views

System view

Predefined user roles

network-admin

Parameters

mac-address: Specifies a destination multicast MAC address. The available addresses are 0100-0ccd-cdd0, 0100-0ccd-cdd1, 0100-0ccd-cdd2, and 010f-e200-0003.

Examples

Set the destination multicast MAC address to 0100-0ccd-cdd0 for tunneled packets.

```
<Sysname> system-view
```

```
[Sysname] l2protocol tunnel-dmac 0100-0ccd-cdd0
```

reset l2protocol statistics

Use **reset l2protocol statistics** to clear L2PT statistics.

Syntax

reset l2protocol statistics [**interface** *interface-type interface-number*]

Views

User view

Predefined user roles

network-admin

Parameters

interface *interface-type interface-number*: Specifies a Layer 2 Ethernet or aggregate interface by its type and number. If you do not specify this option, the command clears L2PT statistics on all Layer 2 Ethernet and aggregate interfaces.

Examples

Clear L2PT statistics on all Layer 2 Ethernet and aggregate interfaces.

```
<Sysname> reset l2protocol statistics
```