

Contents

PIM snooping commands.....	1
display pim-snooping neighbor	1
display pim-snooping router-port.....	2
display pim-snooping routing-table	3
display pim-snooping statistics	4
pim-snooping enable.....	5
pim-snooping graceful-restart join-aging-time	6
pim-snooping graceful-restart neighbor-aging-time	6
reset pim-snooping statistics	7

PIM snooping commands

display pim-snooping neighbor

Use **display pim-snooping neighbor** to display PIM snooping neighbor information.

Syntax

```
display pim-snooping neighbor [ vlan vlan-id ] [ slot slot-number ] [ verbose ]
```

Views

Any view

Predefined user roles

network-admin
network-operator

Parameters

vlan *vlan-id*: Specifies a VLAN in the range of 1 to 4094. If you do not specify a VLAN, this command displays PIM snooping neighbor information for all VLANs.

slot *slot-number*: Specifies an IRF member device by its member ID. If you do not specify this option, the command displays PIM snooping neighbor information on the master device.

verbose: Displays detailed information. If you do not specify this keyword, the command displays brief information.

Examples

```
# Display detailed PIM snooping neighbor information for VLAN 2.
```

```
<Sysname> display pim-snooping neighbor vlan 2 verbose  
Total 2 neighbors.
```

```
VLAN 2: Total 2 neighbors.
```

```
10.1.1.2  
  Slots (0 in total):  
  Ports (1 in total):  
    XGE1/0/1                (02:02:23)    LAN Prune Delay(T)  
10.1.1.3  
  Slots (0 in total):  
  Ports (1 in total):  
    XGE1/0/2                (00:32:43)
```

Table 1 Command output

Field	Description
Total 2 neighbors	Total number of PIM snooping neighbors.
VLAN 2: Total 2 neighbors	Total number of PIM snooping neighbors in VLAN 2.
10.1.1.2	IP address of the PIM snooping neighbor.
Ports (1 in total)	Ports that have PIM snooping neighbors, and the total number of the ports.
(02:02:23)	Remaining aging timer for a PIM snooping neighbor on the port. <ul style="list-style-type: none">For a global port, this field is always displayed.

Field	Description
	<ul style="list-style-type: none"> For a non-global port, this field is displayed if the port is on the master device. Otherwise, you must specify the slot slot-number option to display this field.
LAN Prune Delay	The PIM hello message sent by the PIM snooping neighbor has the LAN_Prune_Delay option.
(T)	The join message suppression feature has been disabled for the PIM snooping neighbor.

display pim-snooping router-port

Use **display pim-snooping router-port** to display PIM snooping router port information.

Syntax

```
display pim-snooping router-port [ vlan vlan-id ] [ slot slot-number ]
```

Views

Any view

Predefined user roles

network-admin
network-operator

Parameters

vlan *vlan-id*: Specifies a VLAN in the range of 1 to 4094. If you do not specify a VLAN, this command displays PIM snooping router port information for all VLANs.

slot *slot-number*: Specifies an IRF member device by its member ID. If you do not specify this option, the command displays PIM snooping router port information on the master device.

Examples

```
# Display PIM snooping router port information for VLAN 2.
```

```
<Sysname> display pim-snooping router-port vlan 2
```

```
VLAN 2:
```

```
Router slots (0 in total):
```

```
Router ports (2 in total):
```

```
  XGE1/0/1                (00:01:30)
```

```
  XGE1/0/2                (00:01:32)
```

Table 2 Command output

Field	Description
VLAN 2	VLAN ID.
Router ports (2 in total)	Router ports, and the total number of the router ports.
(00:01:30)	Remaining aging time for the router port. <ul style="list-style-type: none"> For a global port, this field is always displayed. For a non-global port, this field is displayed if the port is on the master device. Otherwise, you must specify the slot slot-number option to display this field.

display pim-snooping routing-table

Use **display pim-snooping routing-table** to display PIM snooping routing entries.

Syntax

```
display pim-snooping routing-table [ vlan vlan-id ] [ slot slot-number ] [ verbose ]
```

Views

Any view

Predefined user roles

network-admin
network-operator

Parameters

vlan *vlan-id*: Specifies a VLAN in the range of 1 to 4094. If you do not specify a VLAN, this command displays PIM snooping routing entries for all VLANs.

slot *slot-number*: Specifies an IRF member device by its member ID. If you do not specify this option, the command displays PIM snooping routing entries on the master device.

verbose: Displays detailed information. If you do not specify this keyword, the command displays brief information.

Examples

Display detailed information about PIM snooping routing entries for VLAN 2.

```
<Sysname> display pim-snooping routing-table vlan 2 verbose
```

```
Total 1 entries.
```

```
FSM Flag: NI-no info, J-join, PP-prune pending
```

```
VLAN 2: Total 1 entries.
```

```
(172.10.10.1, 225.1.1.1)
```

```
Upstream neighbor: 20.1.1.1
```

```
FSM information: dummy
```

```
Upstream Slots (0 in total):
```

```
Upstream Ports (1 in total):
```

```
XGE1/0/1
```

```
Downstream Slots (0 in total):
```

```
Downstream Ports (2 in total):
```

```
XGE1/0/2
```

```
Expires: 00:03:01, FSM: J
```

```
Downstream Neighbors (2 in total):
```

```
7.1.1.1
```

```
Expires: 00:59:19, FSM: J
```

```
7.1.1.11
```

```
Expires: 00:59:20, FSM: J
```

```
XGE1/0/3
```

```
Expires: 00:02:21, FSM: PP
```

Table 3 Command output

Field	Description
Total 1 entries	Total number of (S, G) entries and (*, G) entries.

Field	Description
FSM Flag: NI-no info, J-join, PP-prune pending	State machine flag of the downstream port: <ul style="list-style-type: none"> • NI—Initial state. • J—Join. • PP—Prune pending.
(172.10.10.1, 225.1.1.1)	(S, G) entry.
FSM information	Finite state machine information of the entry: <ul style="list-style-type: none"> • delete—The entry attributes have been deleted. • dummy—The entry is a new temporary entry. • no info—No entry exists.
Upstream neighbor	Upstream neighbor of the (S, G) or (*, G) entry.
Upstream Ports (1 in total)	Upstream ports, and the total number of the upstream ports. This field is displayed if the upstream neighbor is on the master device. Otherwise, you must specify the slot slot-number option to display this field.
Downstream Ports (2 in total)	Downstream port of the upstream neighbor, and the total number of the downstream ports.
Downstream Neighbors (2 in total)	Downstream neighbors of the downstream port, and the total number of the downstream neighbors.
Expires: 00:03:01, FSM: J	Remaining aging time for the downstream port or downstream neighbor, and the finite state machine information. <ul style="list-style-type: none"> • For a global port, this field is always displayed. • For a non-global port, this field is displayed if the port is on the master device. Otherwise, you must specify the slot slot-number option to display this field.

display pim-snooping statistics

Use **display pim-snooping statistics** to display statistics for the PIM messages learned through PIM snooping.

Syntax

```
display pim-snooping statistics
```

Views

Any view

Predefined user roles

network-admin

network-operator

Examples

Display statistics for the PIM messages learned through PIM snooping.

```
<Sysname> display pim-snooping statistics
Received PIMv2 hello: 100
Received PIMv2 join/prune: 100
Received PIMv2 error: 0
Received PIMv2 messages in total: 200
Received PIMv1 messages in total: 0
```

Table 4 Command output

Field	Description
Received PIMv2 hello	Number of received PIMv2 hello messages.
Received PIMv2 join/prune	Number of received PIMv2 join/prune messages.
Received PIMv2 error	Number of received PIMv2 messages with errors.
Received PIMv2 messages in total	Total number of received PIMv2 messages.
Received PIMv1 messages in total	Total number of received PIMv1 messages.

Related commands

reset pim-snooping statistics

pim-snooping enable

Use **pim-snooping enable** to enable PIM snooping for a VLAN.

Use **undo pim-snooping enable** to disable PIM snooping for a VLAN.

Syntax

pim-snooping enable
undo pim-snooping enable

Default

PIM snooping is disabled in a VLAN.

Views

VLAN view

Predefined user roles

network-admin

Usage guidelines

You must enable IGMP snooping globally and for a VLAN before you execute this command the VLAN.

PIM snooping does not take effect on sub-VLANs of a multicast VLAN.

Examples

Enable IGMP snooping globally, and enable IGMP snooping and PIM snooping for VLAN 2.

```
<Sysname> system-view
[Sysname] igmp-snooping
[Sysname-igmp-snooping] quit
[Sysname] vlan 2
[Sysname-vlan2] igmp-snooping enable
[Sysname-vlan2] pim-snooping enable
```

Related commands

- **igmp-snooping**
- **igmp-snooping enable**

pim-snooping graceful-restart join-aging-time

Use **pim-snooping graceful-restart join-aging-time** to set the aging time for PIM snooping global downstream ports and global router ports on the new master device in IRF master election.

Use **undo pim-snooping graceful-restart join-aging-time** to restore the default.

Syntax

```
pim-snooping graceful-restart join-aging-time interval  
undo pim-snooping graceful-restart join-aging-time
```

Default

The default setting is 210 seconds.

Views

VLAN view

Predefined user roles

network-admin

Parameters

interval: Specifies an aging time in the range of 210 to 18000 seconds.

Usage guidelines

A global downstream port or a global router port is a Layer 2 aggregate interface that acts as a downstream port or router port.

You must enable PIM snooping for a VLAN before you execute this command for the VLAN.

Examples

In VLAN 2, set the aging time for PIM snooping global downstream ports and global router ports to 600 seconds on the new master device in IRF master election.

```
<Sysname> system-view  
[Sysname] igmp-snooping  
[Sysname-igmp-snooping] quit  
[Sysname] vlan 2  
[Sysname-vlan2] igmp-snooping enable  
[Sysname-vlan2] pim-snooping enable  
[Sysname-vlan2] pim-snooping graceful-restart join-aging-time 600
```

Related commands

pim-snooping enable

pim-snooping graceful-restart neighbor-aging-time

Use **pim-snooping graceful-restart neighbor-aging-time** to set the aging time for PIM snooping global neighbor ports on the new master device in IRF master election.

Use **undo pim-snooping graceful-restart neighbor-aging-time** to restore the default.

Syntax

```
pim-snooping graceful-restart neighbor-aging-time interval  
undo pim-snooping graceful-restart neighbor-aging-time
```

Default

The default setting is 105 seconds.

Views

VLAN view

Predefined user roles

network-admin

Parameters

interval: Specifies an aging time in the range of 105 to 18000 seconds.

Usage guidelines

A global neighbor port is a Layer 2 aggregate interface that acts as a neighbor port.

You must enable PIM snooping for a VLAN before you execute this command for the VLAN.

Examples

In VLAN 2, set the aging time for PIM snooping global neighbor ports to 300 seconds on the new master device in IRF master election.

```
<Sysname> system-view
[Sysname] igmp-snooping
[Sysname-igmp-snooping] quit
[Sysname] vlan 2
[Sysname-vlan2] igmp-snooping enable
[Sysname-vlan2] pim-snooping enable
[Sysname-vlan2] pim-snooping graceful-restart neighbor-aging-time 300
```

Related commands

pim-snooping enable

reset pim-snooping statistics

Use **reset pim-snooping statistics** to clear statistics for the PIM messages learned through PIM snooping.

Syntax

reset pim-snooping statistics

Views

User view

Predefined user roles

network-admin

Examples

Clear statistics for the PIM messages learned through PIM snooping.

```
<Sysname> reset pim-snooping statistics
```

Related commands

display pim-snooping statistics