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# MLD snooping commands

## display ipv6 l2-multicast fast-forwarding cache

Use `display ipv6 l2-multicast fast-forwarding cache` to display Layer 2 IPv6 multicast fast forwarding entries.

### Syntax

```
display ipv6 l2-multicast fast-forwarding cache [ vlan vlan-id ]  
[ ipv6-source-address | ipv6-group-address ] * [ slot slot-number ]
```

### Views

Any view

### Predefined user roles

network-admin  
network-operator

### Parameters

**vlan** *vlan-id*: Specifies a VLAN by its VLAN ID in the range of 1 to 4094.

*ipv6-source-address*: Specifies an IPv6 multicast source address. If you do not specify an IPv6 multicast source, this command displays Layer 2 IPv6 multicast forwarding entries for all IPv6 multicast sources.

*ipv6-group-address*: Specifies an IPv6 multicast group address. The value range for this argument is FFxy::/16 (excluding FFx1::/16 and FFx2::/16), where "x" and "y" represent any hexadecimal numbers in the range of 0 to F. If you do not specify an IPv6 multicast group, this command displays Layer 2 IPv6 multicast forwarding entries for all IPv6 multicast groups.

**slot** *slot-number*: Specifies an IRF member device by its member ID. If you do not specify a member device, this command displays Layer 2 IPv6 multicast fast forwarding entries for the master device.

### Examples

# Display Layer 2 IPv6 multicast fast forwarding entries.

```
<Sysname> display ipv6 l2-multicast fast-forwarding cache  
Total 1 entries, 1 matched
```

```
(1::6, FF1E::2)  
Status      : Enable          VLAN          : 1  
Source port : 9876           Destination port: 5432  
Protocol    : 17             Flag          : 0x2  
Ingress port: GigabitEthernet1/0/2  
List of 1 egress ports:  
GigabitEthernet1/0/3  
Status: Enable          Flag: 0x10
```

**Table 1 Command output**

Field	Description
Total 1 entries, 1 matched	Total number of (S, G) entries in the Layer 2 IPv6 multicast fast forwarding table, and the total number of matching entries.

Field	Description
(1::6, FF1E::2)	(S, G) entry in the Layer 2 IPv6 multicast fast forwarding table.
Protocol	Protocol number.
VLAN	VLAN ID.
Flag	<p>Flag for the (S, G) entry or the outgoing port.</p> <p>This field displays one flag or the sum of multiple flags. In this example, the value 0x2 means that the entry has only one flag 0x2.</p> <p>The following flags are available for an entry:</p> <ul style="list-style-type: none"> <li>• <b>0x1</b>—The entry is created because of packets passed through between cards.</li> <li>• <b>0x2</b>—The entry is added by multicast forwarding.</li> </ul> <p>The following flags are available for an outgoing interface:</p> <ul style="list-style-type: none"> <li>• <b>0x1</b>—The port is added to the entry because of packets passed through between cards.</li> <li>• <b>0x2</b>—The port is added to an existing entry.</li> <li>• <b>0x10</b>—The port is associated with the entry.</li> <li>• <b>0x20</b>—The port is to be deleted.</li> </ul>
Status	<p>Status of the (S, G) entry or the outgoing port:</p> <ul style="list-style-type: none"> <li>• <b>Enabled</b>—Available.</li> <li>• <b>Disabled</b>—Unavailable.</li> </ul>
Ingress port	Incoming port of the (S, G) entry.
List of 1 egress ports	List of outgoing ports of the (S, G) entry.

## Related commands

```
reset ipv6 l2-multicast fast-forwarding cache all
```

## display ipv6 l2-multicast ip

Use `display ipv6 l2-multicast ip` to display information about Layer 2 IPv6 multicast groups.

### Syntax

```
display ipv6 l2-multicast ip [ group ipv6-group-address | source
ipv6-source-address ] * [ vlan vlan-id ] [ slot slot-number ]
```

### Views

Any view

### Predefined user roles

network-admin  
network-operator

### Parameters

**group** *ipv6-group-address*: Specifies an IPv6 multicast group by its IPv6 address. If you do not specify an IPv6 multicast group, this command displays information about all Layer 2 IPv6 multicast groups.

**source** *ipv6-source-address*: Specifies an IPv6 multicast source by its IPv6 address. If you do not specify an IPv6 multicast source, this command displays information about Layer 2 IPv6 multicast groups for all IPv6 multicast sources.

**vlan** *vlan-id*: Specifies a VLAN by its VLAN ID in the range of 1 to 4094. If you do not specify a VLAN, this command displays information about Layer 2 IPv6 multicast groups for all VLANs.

**slot** *slot-number*: Specifies an IRF member device by its member ID. If you do not specify a member device, this command displays information about Layer 2 IP multicast groups for the master device.

## Examples

# Display information about Layer 2 IPv6 multicast groups for VLAN 2.

```
<Sysname> display ipv6 l2-multicast ip vlan 2
Total 1 entries.

VLAN 2: Total 1 entries.
 (::, FF1E::101)
 Attribute: static, success
 Host ports (1 in total):
   GE1/0/1 (S, SUC)
```

**Table 2 Command output**

Field	Description
Total 1 entries	Total number of Layer 2 IPv6 multicast groups.
VLAN 2: Total 1 entries	Total number of Layer 2 IPv6 multicast groups in VLAN 2.
(::, FF1E::101)	(S, G) entry, where a double colon (::) in the S position means all IPv6 multicast sources.
Attribute	Entry attribute: <ul style="list-style-type: none"> <li>• <b>dynamic</b>—The entry is created by a dynamic protocol.</li> <li>• <b>static</b>—The entry is created by a static protocol.</li> <li>• <b>pim</b>—The entry is created by IPv6 PIM.</li> <li>• <b>kernel</b>—The entry is obtained from the kernel.</li> <li>• <b>success</b>—Processing has succeeded.</li> <li>• <b>fail</b>—Processing has failed.</li> </ul>
Host ports (1 in total)	Member ports and total number of member ports.
(S, SUC)	Port attribute: <ul style="list-style-type: none"> <li>• <b>D</b>—Dynamic port.</li> <li>• <b>S</b>—Static port.</li> <li>• <b>P</b>—IPv6 PIM port.</li> <li>• <b>K</b>—Port obtained from the kernel.</li> <li>• <b>R</b>—Port learned from (*, *) entries.</li> <li>• <b>W</b>—Port learned from (*, G) entries.</li> <li>• <b>SUC</b>—Processing has succeeded.</li> <li>• <b>F</b>—Processing has failed.</li> </ul>

## display ipv6 l2-multicast ip forwarding

Use **display ipv6 l2-multicast ip forwarding** to display Layer 2 IPv6 multicast IP forwarding entries.

### Syntax

```
display ipv6 l2-multicast ip forwarding [ group ipv6-group-address | source ipv6-source-address ] * [ vlan vlan-id ] [ slot slot-number ]
```

## Views

Any view

## Predefined user roles

network-admin

network-operator

## Parameters

**group** *ipv6-group-address*: Specifies an IPv6 multicast group by its IPv6 address. If you do not specify an IPv6 multicast group, this command displays Layer 2 IPv6 multicast IP forwarding entries for all IPv6 multicast groups.

**source** *ipv6-source-address*: Specifies an IPv6 multicast source by its IPv6 address. If you do not specify an IPv6 multicast source, this command displays Layer 2 IPv6 multicast IP forwarding entries for all IPv6 multicast sources.

**vlan** *vlan-id*: Specifies a VLAN by its VLAN ID in the range of 1 to 4094. If you do not specify a VLAN, this command displays Layer 2 IPv6 multicast IP forwarding entries for all VLANs.

**slot** *slot-number*: Specifies an IRF member device by its member ID. If you do not specify a member device, this command displays Layer 2 IPv6 multicast IP forwarding entries for the master device.

## Examples

# Display Layer 2 IPv6 multicast IP forwarding entries for VLAN 2.

```
<Sysname> display ipv6 l2-multicast ip forwarding vlan 2
```

```
Total 1 entries.
```

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

```
(::, FF1E::101)
```

```
Host ports (3 in total):
```

```
GigabitEthernet1/0/1
```

```
GigabitEthernet1/0/2
```

```
GigabitEthernet1/0/3
```

**Table 3 Command output**

Field	Description
Total 1 entries	Total number of Layer 2 IPv6 multicast IP forwarding entries.
VLAN 2: Total 1 entries	Total number of Layer 2 IPv6 multicast IP forwarding entries in VLAN 2.
(::, FF1E::101)	(S, G) entry, where a double colon (::) in the S position means all IPv6 multicast sources.
Host ports (3 in total)	Member ports and total number of member ports.

## display ipv6 l2-multicast mac

Use **display ipv6 l2-multicast mac** to display information about Layer 2 IPv6 multicast MAC multicast groups.

## Syntax

```
display ipv6 l2-multicast mac [ mac-address ] [ vlan vlan-id ] [ slot slot-number ]
```

## Views

Any view

## Predefined user roles

network-admin

network-operator

## Parameters

*mac-address*: Specifies an IPv6 multicast MAC address. If you do not specify an IPv6 multicast MAC address, this command displays information about all Layer 2 IPv6 multicast MAC multicast groups.

**vlan** *vlan-id*: Specifies a VLAN by its VLAN ID in the range of 1 to 4094. If you do not specify a VLAN, this command displays information about Layer 2 IPv6 multicast MAC multicast groups for all VLANs.

**slot** *slot-number*: Specifies an IRF member device by its member ID. If you do not specify a member device, this command displays information about Layer 2 IPv6 multicast MAC multicast groups for the master device.

## Examples

# Display information about Layer 2 IPv6 multicast MAC multicast groups for VLAN 2.

```
<Sysname> display ipv6 l2-multicast mac vlan 2  
Total 1 entries.
```

```
VLAN 2: Total 1 entries.  
MAC group address: 3333-0000-0101  
Attribute: success  
Host ports (1 in total):  
GE1/0/1
```

**Table 4 Command output**

Field	Description
Total 1 entries	Total number of Layer 2 IPv6 MAC multicast groups.
VLAN 2: Total 1 entries	Total number of Layer 2 IPv6 MAC multicast groups in VLAN 2.
MAC group address	IPv6 address of the Layer 2 IPv6 MAC multicast group.
Attribute	Entry attribute: <ul style="list-style-type: none"><li>• <b>success</b>—Processing has succeeded.</li><li>• <b>fail</b>—Processing has failed.</li></ul>
Host ports (1 in total)	Member ports and total number of member ports.

## display ipv6 l2-multicast mac forwarding

Use **display ipv6 l2-multicast mac forwarding** to display Layer 2 IPv6 multicast MAC forwarding entries.

## Syntax

```
display ipv6 l2-multicast mac forwarding [ mac-address ] [ vlan vlan-id ]  
[ slot slot-number ]
```

## Views

Any view

## Predefined user roles

network-admin  
network-operator

## Parameters

**mac-address**: Specifies an IPv6 MAC multicast group by its IPv6 MAC address. If you do not specify an IPv6 MAC multicast group, this command displays Layer 2 IPv6 multicast MAC forwarding entries for all IPv6 MAC multicast groups.

**vlan** *vlan-id*: Specifies a VLAN by its VLAN ID in the range of 1 to 4094. If you do not specify a VLAN, this command displays Layer 2 IPv6 multicast MAC forwarding entries for all VLANs.

**slot** *slot-number*: Specifies an IRF member device by its member ID. If you do not specify a member device, this command displays Layer 2 IPv6 multicast MAC forwarding entries for the master device.

## Examples

# Display Layer 2 IPv6 multicast MAC forwarding entries for VLAN 2.

```
<Sysname> display ipv6 l2-multicast mac forwarding vlan 2  
Total 1 entries.
```

```
VLAN 2: Total 1 entries.  
MAC group address: 3333-0000-0101  
Host ports (3 in total):  
GigabitEthernet1/0/1  
GigabitEthernet1/0/2  
GigabitEthernet1/0/3
```

**Table 5 Command output**

Field	Description
Total 1 MAC entries	Total number of Layer 2 IPv6 multicast MAC forwarding entries.
VLAN 2: Total 1 entries	Total number of Layer 2 IPv6 multicast MAC forwarding entries in VLAN 2.
MAC group address	Address of the IPv6 MAC multicast group.
Host ports (3 in total)	Member ports, and the total number of member ports.

## display mld-snooping

Use **display mld-snooping** to display MLD snooping status.

## Syntax

```
display mld-snooping [ global | vlan vlan-id ]
```

## Views

Any view

## Predefined user roles

network-admin

network-operator

## Parameters

**global1**: Displays the global MLD snooping status.

**vlan *vlan-id***: Specifies a VLAN by its VLAN ID in the range of 1 to 4094.

## Usage guidelines

If you do not specify any parameters, this command displays the global MLD snooping status and the MLD snooping status in all VLANs.

## Examples

# Display the global MLD snooping status and the MLD snooping status for all VLANs.

```
<Sysname> display mld-snooping
MLD snooping information: Global
  Global-enable: Enabled
  Host-aging-time: 260s
  Router-aging-time: 260s
  Max-response-time: 10s
  Last-listener-query-interval: 1s
  Report-aggregation: Enabled
  Host-tracking: Disabled
  Dot1p-priority: --

MLD snooping information: VLAN 1
  MLD snooping: Enabled
  Drop-unknown: Disabled
  Version: 1
  Host-aging-time: 260s
  Router-aging-time: 260s
  Max-response-time: 10s
  Last-listener-query-interval: 1s
  Querier: Enabled (IP: FE80::2FF:FFFF:FE00:1, Expires: 00:02:05)
  Querier-election: Enabled
  Query-interval: 125s
  General-query source IP: FE80::2FF:FFFF:FE00:1
  Special-query source IP: FE80::2FF:FFFF:FE00:1
  Report source IP: FE80::2FF:FFFF:FE00:2
  Done source IP: FE80::2FF:FFFF:FE00:3
  Host-tracking: Disabled
  Dot1p-priority: 2
  Proxy: Disabled

MLD snooping information: VLAN 10
  MLD snooping: Enabled
  Drop-unknown: Enabled
  Version: 1
  Host-aging-time: 260s
  Router-aging-time: 260s
  Max-response-time: 10s
  Last-listener-query-interval: 1s
```

```

Querier: Enabled (IP: FE80::2FF:FFFF:FE00:1, Expires: 00:02:05)
Querier-election: Enabled
Query-interval: 125s
General-query source IP: FE80::2FF:FFFF:FE00:1
Special-query source IP: FE80::2FF:FFFF:FE00:1
Report source IP: FE80::2FF:FFFF:FE00:2
Done source IP: FE80::2FF:FFFF:FE00:3
Host-tracking: Disabled
Dot1p-priority: --
Proxy: Disabled

```

**Table 6 Command output**

Field	Description
Global-enable	Global MLD snooping status: <ul style="list-style-type: none"> <li>• Enabled.</li> <li>• Disabled.</li> </ul>
MLD snooping	MLD snooping status in a VLAN: <ul style="list-style-type: none"> <li>• <b>Enabled.</b></li> <li>• <b>Disabled.</b></li> <li>• <b>Globally enabled.</b></li> <li>• <b>Inactive</b>—MLD snooping configuration does not take effect.</li> </ul>
Drop-unknown	Status of dropping unknown IPv6 multicast data: <ul style="list-style-type: none"> <li>• Enabled.</li> <li>• Disabled.</li> </ul>
Version	MLD snooping version.
Host-aging-time	Aging timer for the dynamic member port.
Router-aging-time	Aging timer for the dynamic router port.
Max-response-time	Maximum time for responding to MLD general queries.
Last-listener-query-interval	Interval for sending MLD multicast-address-specific queries.
Report-aggregation	Status of MLD report suppression: <ul style="list-style-type: none"> <li>• Enabled.</li> <li>• Disabled.</li> </ul>
Dot1p-priority	802.1p priority for MLD messages. This field displays two hyphens (--) if the 802.1p priority is not configured.
Querier	Status of MLD snooping querier: <ul style="list-style-type: none"> <li>• Enabled.</li> <li>• Disabled.</li> </ul>
(IP: FE80::2FF:FFFF:FE00:1, Expires: 00:02:05)	MLD snooping querier information: <ul style="list-style-type: none"> <li>• <b>IP</b>—IP address of the MLD snooping querier.</li> <li>• <b>Expire</b>—Remaining aging time for the MLD snooping querier.</li> </ul> This field is not displayed if MLD snooping querier election is disabled.
Querier-election	Status of IGMP snooping querier election: <ul style="list-style-type: none"> <li>• Enabled.</li> <li>• Disabled.</li> </ul>
Query-interval	Interval for sending MLD general queries.

Field	Description
General-query source IP	Source IPv6 address of MLD general queries.
Special-query source IP	Source IPv6 address of MLD multicast-address-specific queries.
Report source IP	Source IPv6 address of MLD reports.
Done source IP	Source IPv6 address of MLD done messages.
Host-tracking	Status of host tracking: <ul style="list-style-type: none"> <li>• Enabled.</li> <li>• Disabled.</li> <li>• Globally enabled.</li> </ul>
Proxy	Status of MLD snooping proxying: <ul style="list-style-type: none"> <li>• Enabled.</li> <li>• Disabled.</li> </ul>

## display mld-snooping group

Use **display mld-snooping group** to display information about dynamic MLD snooping group entries.

### Syntax

```
display mld-snooping group [ ipv6-group-address | ipv6-source-address ] *
[ vlan vlan-id ] [ interface interface-type interface-number | [ verbose ]
[ slot slot-number ] ]
```

### Views

Any view

### Predefined user roles

network-admin

network-operator

### Parameters

*ipv6-group-address*: Specifies an IPv6 multicast group address. The value range for this argument is FFxy::/16 (excluding FFx1::/16 and FFx2::/16), where "x" and "y" represent any hexadecimal numbers in the range of 0 to F. If you do not specify an IPv6 multicast group, this command displays information about all dynamic MLD snooping group entries.

*ipv6-source-address*: Specifies an IPv6 multicast source by its IPv6 address. If you do not specify an IPv6 multicast source, this command displays information about dynamic MLD snooping group entries for all IPv6 multicast sources.

**vlan** *vlan-id*: Specifies a VLAN by its VLAN ID in the range of 1 to 4094. If you do not specify a VLAN, this command displays information about dynamic MLD snooping group entries for all VLANs.

**interface** *interface-type interface-number*: Specifies an interface by its type and number. If you do not specify an interface, this command displays brief information about dynamic MLD snooping group entries for all interfaces.

**verbose**: Displays detailed information about dynamic MLD snooping group entries. If you do not specify this keyword, the command displays brief information about dynamic MLD snooping group entries.

**slot slot-number:** Specifies an IRF member device by its member ID. If you do not specify a member device, this command displays information about dynamic MLD snooping group entries for the master device.

## Examples

# Display brief information about dynamic MLD snooping group entries for GigabitEthernet 1/0/1.

```
<Sysname> display mld-snooping group interface gigabitethernet 1/0/1
Total 1 entries.
```

```
GE1/0/1:
```

```
VLAN 2: Total 1 entries.
 (::,FF1E::101)                (00:03:23)
```

# Display detailed information about dynamic MLD snooping group entries for VLAN 2.

```
<Sysname> display mld-snooping group vlan 2 verbose
Total 1 entries.
```

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

```
(::,FF1E::101)
Attribute: local port
FSM information: dummy
Host slots (0 in total):
Host ports (1 in total):
GE1/0/2                (00:03:23)
```

**Table 7 Command output**

Field	Description
Total 1 entries	Total number of dynamic MLD snooping group entries.
VLAN 2: Total 1 entries	Total number of dynamic MLD snooping group entries in VLAN 2.
(::, FF1E::101)	(S, G) entry, where a double colon (::) in the S position means all IPv6 multicast sources.
Attribute	Entry attribute: <ul style="list-style-type: none"> <li><b>global port</b>—The entry has a global port.</li> <li><b>local port</b>—The entry has a port that resides on the member device for which the information is displayed.</li> <li><b>slot</b>—The entry has ports that reside on other member devices, but not on the member device for which the information is displayed.</li> </ul>
FSM information	Finite state machine information of the entry: <ul style="list-style-type: none"> <li><b>delete</b>—The entry attributes have been deleted.</li> <li><b>dummy</b>—The entry is a new temporary entry.</li> <li><b>no info</b>—The entry does not exist.</li> </ul>
Host slots (0 in total)	Member IDs and total number of the member devices that have member ports, except for the specified member device or the master device when no member device is specified.
Host ports (1 in total)	Member ports and total number of member ports.
(00:03:23)	Remaining aging time for the dynamic member port. This field is always displayed for a global port (such as Layer 2 aggregate interfaces). For a non-global port, this field is displayed when one of the following conditions exists:

Field	Description
	<ul style="list-style-type: none"> <li>The port is on the specified member device.</li> <li>The port is on the master device and no member device is specified.</li> </ul>

## Related commands

`reset mld-snooping group`

## display mld-snooping host-tracking

Use `display mld-snooping host-tracking` to display host tracking information.

### Syntax

```
display mld-snooping host-tracking vlan vlan-id group ipv6-group-address
[ source ipv6-source-address ] [ slot slot-number ]
```

### Views

Any view

### Predefined user roles

network-admin

network-operator

### Parameters

**vlan** *vlan-id*: Specifies a VLAN by its VLAN ID in the range of 1 to 4094.

**group** *ipv6-group-address*: Specifies an IPv6 multicast group by its IPv6 address. The value range for the *ipv6-group-address* argument is FFxy::/16, where "x" and "y" represent any hexadecimal numbers in the range of 0 to F.

**source** *ipv6-source-address*: Specifies an IPv6 multicast source by its IPv6 address. If you do not specify an IPv6 multicast source, this command displays host tracking information for all IPv6 multicast sources.

**slot** *slot-number*: Specifies an IRF member device by its member ID. If you do not specify a member device, this command displays host tracking information for the master device.

### Examples

# Display tracking information for hosts that have joined IPv6 multicast group FF1E::2 in VLAN 2.

```
<Sysname> display mld-snooping host-tracking vlan 2 group FF1E::2
```

```
VLAN 2
```

```
(1::6, FF1E::2)
```

```
Port: GE1/0/1
```

Host	Uptime	Expires
1::2	00:02:20	00:00:40
1::3	00:02:21	00:00:39

**Table 8 Command output**

Field	Description
VLAN	VLAN ID.
(1::6, FF1E::2)	(S, G) entry, where 0::0 in the S position means any IPv6 multicast sources.
Port	Member port.

Field	Description
Host	IPv6 address of the host.
Uptime	Length of time elapsed since the host joined the IPv6 multicast group.
Expires	Remaining timeout time for the host. The host timeout time is the same as the aging timer of the port. The timer is reset when the port receives an MLD report from the host. This field displays <b>timeout</b> if the host times out.

### Related commands

`host-tracking` (MLD-snooping view)

`mld-snooping enable`

`mld-snooping host-tracking`

## display mld-snooping router-port

Use `display mld-snooping router-port` to display dynamic router port information.

### Syntax

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

### Views

Any view

### Predefined user roles

network-admin

network-operator

### Parameters

**verbose**: Displays detailed information about dynamic router ports. If you do not specify this keyword, the command displays brief information about dynamic router ports.

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

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

### Examples

# Display brief information about dynamic router ports for VLAN 2.

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

```
VLAN 2:
```

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

```
GE1/0/1 (00:01:30)
```

```
GE1/0/2 (00:00:23)
```

**Table 9 Command output**

Field	Description
VLAN 2	VLAN ID.
Router slots (0 in total)	Member IDs and total number of the member devices that have dynamic

Field	Description
	router ports, except for the specified member device or the master device when no member device is specified.
Router ports (2 in total)	Dynamic router ports and total number of dynamic router ports.
(00:01:30)	<p>Remaining aging time for the dynamic router port.</p> <p>This field is always displayed for a global port (including Layer 2 aggregate interfaces).</p> <p>For a non-global port, this field is displayed when one of the following conditions exists:</p> <ul style="list-style-type: none"> <li>• The port is on the specified member device.</li> <li>• The port is on the master device and no member device is specified.</li> </ul>

## Related commands

```
reset mld-snooping router-port
```

## display mld-snooping static-group

Use `display mld-snooping static-group` to display information about static MLD snooping group entries.

### Syntax

```
display mld-snooping static-group [ ipv6-group-address |
ipv6-source-address ] * [ vlan vlan-id ] [ verbose ] [ slot slot-number ]
```

### Views

Any view

### Predefined user roles

network-admin  
network-operator

### Parameters

*ipv6-group-address*: Specifies an IPv6 multicast group by its IPv6 address. The value range for this argument is FFxy::/16 (excluding FFx1::/16 and FFx2::/16), where "x" and "y" represent any hexadecimal numbers in the range of 0 to F. If you do not specify an IPv6 multicast group, this command displays information about static MLD snooping group entries for all IPv6 multicast groups.

*ipv6-source-address*: Specifies an IPv6 multicast source by its IPv6 address. If you do not specify an IPv6 multicast source, this command displays information about static MLD snooping group entries for all IPv6 multicast sources.

**vlan** *vlan-id*: Specifies a VLAN by its VLAN ID in the range of 1 to 4094. If you do not specify a VLAN, this command displays information about static MLD snooping group entries for all VLANs.

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

**slot** *slot-number*: Specifies an IRF member device by its member ID. If you do not specify a member device, this command displays information about static MLD snooping group entries for the master device.

### Examples

```
# Display detailed information about static MLD snooping group entries for VLAN 2.
```

```
<Sysname> display mld-snooping static-group vlan 2 verbose
```

Total 1 entries.

VLAN 2: Total 1 entries.

```
(::,FF1E::101)
Attribute: local port
FSM information: dummy
Host slots (0 in total):
Host ports (1 in total):
    GE1/0/2
```

**Table 10 Command output**

Field	Description
Total 1 entries	Total number of static MLD snooping group entries.
VLAN 2: Total 1 entries	Total number of static MLD snooping group entries in VLAN 2.
(::, FF1E::101)	(S, G) entry, where a double colon (::) in the S position means all IPv6 multicast sources.
Attribute	Entry attribute: <ul style="list-style-type: none"><li>• <b>global port</b>—The entry has a global port.</li><li>• <b>local port</b>—The entry has a port that resides on the member device for which the information is displayed.</li><li>• <b>slot</b>—The entry has ports that reside on other member devices, but not on the member device for which the information is displayed.</li></ul>
FSM information	Finite state machine information of the entry: <ul style="list-style-type: none"><li>• <b>delete</b>—The entry attributes have been deleted.</li><li>• <b>dummy</b>—The entry is a new temporary entry.</li><li>• <b>no info</b>—The entry does not exist.</li></ul>
Host slots (0 in total)	Member IDs and total number of the member devices that have member ports, except for the specified member device or the master device when no member device is specified.
Host ports (1 in total)	Member ports and total number of member ports.

## display mld-snooping static-router-port

Use `display mld-snooping static-router-port` to display static router port information.

### Syntax

```
display mld-snooping static-router-port [ vlan vlan-id ] [ verbose ] [ slot slot-number ]
```

### Views

Any view

### Predefined user roles

network-admin

network-operator

### Parameters

`vlan vlan-id`: Specifies a VLAN by its VLAN ID in the range of 1 to 4094.

**verbose:** Displays detailed information about static router ports. If you do not specify this keyword, the command displays brief information about static router ports.

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

## Examples

# Display brief information about static router ports for VLAN 2.

```
<Sysname> display mld-snooping static-router-port vlan 2
VLAN 2:
  Router ports (2 in total):
    GE1/0/1
    GE1/0/2
```

# Display detailed information about static router ports for VLAN 2.

```
<Sysname> display mld-snooping static-router-port vlan 2 verbose
VLAN 2:
  Router slots (0 in total):
  Router ports (2 in total):
    GE1/0/1
    GE1/0/2
```

**Table 11 Command output**

Field	Description
VLAN 2	VLAN ID.
Router slots (0 in total)	Member IDs and total number of the member devices that have static router ports, except for the specified member device or the master device when no member device is specified.
Router ports (2 in total)	Static router ports and total number of static router ports.

## display mld-snooping statistics

Use **display mld-snooping statistics** to display statistics for the MLD messages and IPv6 PIM hello messages learned through MLD snooping.

### Syntax

```
display mld-snooping statistics
```

### Views

Any view

### Predefined user roles

network-admin  
network-operator

### Examples

# Display statistics for the MLD messages and IPv6 PIM hello messages learned through MLD snooping.

```
<Sysname> display mld-snooping statistics
Received MLD general queries: 0
Received MLDv1 specific queries: 0
```

```

Received MLDv1 reports: 0
Received MLD dones: 0
Sent MLDv1 specific queries: 0
Received MLDv2 reports: 0
Received MLDv2 reports with right and wrong records: 0
Received MLDv2 specific queries: 0
Received MLDv2 specific sg queries: 0
Sent MLDv2 specific queries: 0
Sent MLDv2 specific sg queries: 0
Received IPv6 PIM hello: 0
Received error MLD messages: 0

```

**Table 12 Command output**

Field	Description
general queries	Number of MLD general queries.
specific queries	Number of MLD multicast-address-specific queries.
reports	Number of MLD reports.
dones	Number of MLD done messages.
reports with right and wrong records	Number of MLD reports with correct and incorrect records.
specific sg queries	Number of MLD multicast-address-and-source-specific queries.
IPv6 PIM hello	Number of IPv6 PIM hello messages.
error MLD messages	Number of MLD messages with errors.

## Related commands

```
reset mld-snooping statistics
```

## dot1p-priority (MLD-snooping view)

Use `dot1p-priority` to set the 802.1p priority for MLD messages globally.

Use `undo dot1p-priority` to restore the default.

### Syntax

```
dot1p-priority priority
```

```
undo dot1p-priority
```

### Default

The global 802.1p priority is 6 for MLD messages.

### Views

MLD-snooping view

### Predefined user roles

network-admin

### Parameters

*priority*: Specifies an 802.1p priority for MLD messages, in the range of 0 to 7. The greater the value, the higher the priority.

## Usage guidelines

You can set the 802.1p priority globally for all VLANs in MLD-snooping view or for a VLAN in VLAN view. For a VLAN, the VLAN-specific configuration takes priority over the global configuration.

## Examples

```
# Set the 802.1p priority for MLD messages to 3 globally.
<Sysname> system-view
[Sysname] mld-snooping
[Sysname-mld-snooping] dot1p-priority 3
```

## Related commands

**mld-snooping dot1p-priority**

## dscp

Use **dscp** to set the DSCP value for outgoing MLD protocol packets.

Use **undo dscp** to restore the default.

## Syntax

```
dscp dscp-value
undo dscp
```

## Default

The DSCP value is 48 for outgoing MLD protocol packets.

## Views

MLD-snooping view

## Predefined user roles

network-admin

## Parameters

*dscp-value*: Specifies a DSCP value in the range of 0 to 63.

## Usage guidelines

The DSCP value is carried in the Traffic Class field of an IPv6 packet to determine the transmission priority of the packet. A greater DSCP value represents a higher priority.

## Examples

```
# Set the DSCP value to 63 for outgoing MLD protocol packets.
<Sysname> system-view
[Sysname] mld-snooping
[Sysname-mld-snooping] dscp 63
```

## enable (MLD-snooping view)

Use **enable** to enable MLD snooping for VLANs.

Use **undo enable** to disable MLD snooping for VLANs.

## Syntax

```
enable vlan vlan-list
undo enable vlan vlan-list
```

## Default

The MLD snooping status in a VLAN is consistent with the global MLD snooping status.

## Views

MLD-snooping view

## Predefined user roles

network-admin

## Parameters

**vlan** *vlan-list*: Specifies a space-separated list of up to 10 VLAN items. Each item specifies a VLAN by its ID or a range of VLANs in the form of *start-vlan-id* to *end-vlan-id*. The VLAN ID is in the range of 1 to 4094.

## Usage guidelines

You must enable the MLD snooping feature by using the **mld-snooping** command before you enable MLD snooping for VLANs.

You can enable MLD snooping for multiple VLANs by using this command in MLD-snooping view or for a VLAN by using the **mld-snooping enable** command in VLAN view. The configuration in VLAN view has the same priority as the configuration in MLD-snooping view, and the most recent configuration takes effect.

## Examples

# Enable the MLD snooping feature, and then enable MLD snooping for VLAN 2 through VLAN 10.

```
<Sysname> system-view
[Sysname] mld-snooping
[Sysname-mld-snooping] enable vlan 2 to 10
```

## Related commands

**mld-snooping**

**mld-snooping enable**

## entry-limit (MLD-snooping view)

Use **entry-limit** to globally set the maximum number of MLD snooping forwarding entries, including dynamic entries and static entries.

Use **undo entry-limit** to restore the default.

## Syntax

```
entry-limit limit
```

```
undo entry-limit
```

## Default

The maximum number of MLD snooping forwarding entries is 4294967295.

## Views

MLD-snooping view

## Predefined user roles

network-admin

## Parameters

*limit*: Specifies the maximum number of MLD snooping forwarding entries, in the range of 0 to 4294967295.

## Examples

```
# Set the global maximum number of MLD snooping forwarding entries to 512.
<Sysname> system-view
[Sysname] mld-snooping
[Sysname-mld-snooping] entry-limit 512
```

## fast-leave (MLD-snooping view)

Use **fast-leave** to enable fast-leave processing globally.

Use **undo fast-leave** to disable fast-leave processing globally.

## Syntax

```
fast-leave [ vlan vlan-list ]
undo fast-leave [ vlan vlan-list ]
```

## Default

Fast-leave processing is disabled.

## Views

MLD-snooping view

## Predefined user roles

network-admin

## Parameters

**vlan** *vlan-list*: Specifies a space-separated list of up to 10 VLAN items. Each item specifies a VLAN by its ID or a range of VLANs in the form of *start-vlan-id* to *end-vlan-id*. The VLAN ID is in the range of 1 to 4094. If you do not specify a VLAN, this command takes effect for all VLANs.

## Usage guidelines

The fast-leave processing feature enables the device to immediately remove a port from the forwarding entry for an IPv6 multicast group when the port receives a done message.

You can enable fast-leave processing globally for all ports in MLD-snooping view or for a port in interface view. For a port, the port-specific configuration takes priority over the global configuration.

## Examples

```
# Globally enable MLD snooping fast-leave processing for VLAN 2.
<Sysname> system-view
[Sysname] mld-snooping
[Sysname-mld-snooping] fast-leave vlan 2
```

## Related commands

```
mld-snooping fast-leave
```

## global-enable (MLD-snooping view)

Use **global-enable** to enable MLD snooping globally.

Use **undo global-enable** to disable MLD snooping globally.

## Syntax

```
global-enable
undo global-enable
```

## Default

MLD snooping is disabled globally.

## Views

MLD-snooping view

## Predefined user roles

network-admin

## Usage guidelines

To configure other MLD snooping features for VLANs, you must enable MLD snooping for the specific VLANs even though MLD snooping is enabled globally.

## Examples

```
# Enable MLD snooping globally.
<Sysname> system-view
[Sysname] mld-snooping
[Sysname-mld-snooping] global-enable
```

## Related commands

```
enable (MLD-snooping view)
mld-snooping
mld-snooping disable
mld-snooping enable
```

# group-policy (MLD-snooping view)

Use **group-policy** to globally configure an IPv6 multicast group policy to control the IPv6 multicast groups that hosts can join.

Use **undo group-policy** to globally delete IPv6 multicast group policies.

## Syntax

```
group-policy ipv6-acl-number [ vlan vlan-list ]
undo group-policy [ vlan vlan-list ]
```

## Default

No IPv6 multicast group policies exist. Hosts can join any IPv6 multicast groups.

## Views

MLD-snooping view

## Predefined user roles

network-admin

## Parameters

*ipv6-acl-number*: Specifies an IPv6 basic or advanced ACL by its number in the range of 2000 to 3999. Hosts can join only IPv6 multicast groups that the ACL permits. If the ACL does not exist or does not have valid rules, hosts cannot join IPv6 multicast groups.

**vlan** *vlan-list*: Specifies a space-separated list of up to 10 VLAN items. Each item specifies a VLAN by its ID or a range of VLANs in the form of *start-vlan-id to end-vlan-id*. The VLAN ID is in the range of 1 to 4094. If you do not specify a VLAN, this command takes effect for all VLANs.

## Usage guidelines

An IPv6 multicast group policy filters MLD reports to control the IPv6 multicast groups that hosts can join.

This command does not take effect on static member ports, because static member ports do not send MLD reports.

You can configure an IPv6 multicast group policy globally for all ports in MLD-snooping view or for a port in interface view. For a port, the port-specific configuration takes priority over the global configuration.

When you configure a rule in the IPv6 ACL, follow these restrictions and guidelines:

- In a basic ACL, the **source** *source-address source-prefix* option specifies an IPv6 multicast group address.
- In an advanced ACL, the **source** *source-address source-prefix* option specifies an IPv6 multicast source address. The **destination** *dest-address dest-prefix* option specifies an IPv6 multicast group address.

To match MLDv1 reports and MLDv2 IS\_EX and MLDv2 TO\_EX reports that do not carry IPv6 multicast source addresses, set the **source** *source-address source-prefix* option to 0::0.

- Among the other optional parameters, only the **fragment** keyword and the **time-range** *time-range-name* option take effect.

You can configure different ACLs for all ports in different VLANs. If you configure multiple ACLs for all ports in the same VLAN, the most recent configuration takes effect.

## Examples

```
# Configure an IPv6 multicast group policy for VLAN 2 so that hosts in VLAN 2 can join only IPv6 multicast group FF03::101.
```

```
<Sysname> system-view
[Sysname] acl ipv6 basic 2000
[Sysname-acl-ipv6-basic-2000] rule permit source ff03::101 128
[Sysname-acl-ipv6-basic-2000] quit
[Sysname] mld-snooping
[Sysname-mld-snooping] group-policy 2000 vlan 2
```

## Related commands

**mld-snooping group-policy**

## host-aging-time (MLD-snooping view)

Use **host-aging-time** to set the aging timer for dynamic member ports globally.

Use **undo host-aging-time** to restore the default.

## Syntax

**host-aging-time** *seconds*

**undo host-aging-time**

## Default

The aging timer for dynamic member ports is 260 seconds.

## Views

MLD-snooping view

## Predefined user roles

network-admin

## Parameters

*seconds*: Specifies an aging timer for dynamic member ports, in the range of 1 to 8097894 seconds.

## Usage guidelines

You can set the timer globally for all VLANs in MLD-snooping view or for a VLAN in VLAN view. For a VLAN, the VLAN-specific configuration takes priority over the global configuration.

To avoid mistakenly deleting IPv6 multicast group members, set the aging timer for dynamic member ports to be greater than the value calculated by using the following formula:

[ MLD general query interval ] + [ maximum response time for MLD general queries ]

As a best practice, set the aging timer of dynamic member ports to the value calculated by using the following formula:

[ MLD general query interval ] × 2 + [ maximum response time for MLD general queries ]

## Examples

```
# Set the global aging timer for dynamic member ports to 300 seconds.
```

```
<Sysname> system-view  
[Sysname] mld-snooping  
[Sysname-mld-snooping] host-aging-time 300
```

## Related commands

```
mld-snooping host-aging-time
```

# host-tracking (MLD-snooping view)

Use **host-tracking** to enable host tracking globally.

Use **undo host-tracking** to disable host tracking globally.

## Syntax

```
host-tracking
```

```
undo host-tracking
```

## Default

Host tracking is disabled.

## Views

MLD-snooping view

## Predefined user roles

network-admin

## Usage guidelines

You can enable host tracking globally for all VLANs in MLD-snooping view or for a VLAN in VLAN view. For a VLAN, the global configuration has the same priority as the VLAN-specific configuration.

## Examples

```
# Enable host tracking globally.
<Sysname> system-view
[Sysname] mld-snooping
[Sysname-mld-snooping] host-tracking
```

## Related commands

```
display mld-snooping host-tracking
mld-snooping host-tracking
```

# last-listener-query-interval (MLD-snooping view)

Use **last-listener-query-interval** to set the MLD last listener query interval globally.

Use **undo last-listener-query-interval** to restore the default.

## Syntax

```
last-listener-query-interval interval
undo last-listener-query-interval
```

## Default

The MLD last listener query interval is 1 second.

## Views

MLD-snooping view

## Predefined user roles

network-admin

## Parameters

*interval*: Specifies an MLD last listener query interval in the range of 1 to 25 seconds.

## Usage guidelines

You can set the interval for a VLAN in VLAN view or globally for all VLANs in MLD-snooping view. For a VLAN, the VLAN-specific configuration takes priority over the global configuration.

## Examples

```
# Set the global MLD last listener query interval to 3 seconds.
<Sysname> system-view
[Sysname] mld-snooping
[Sysname-mld-snooping] last-listener-query-interval 3
```

## Related commands

```
mld-snooping last-listener-query-interval
```

# max-response-time (MLD-snooping view)

Use **max-response-time** to set the maximum response time for MLD general queries globally.

Use **undo max-response-time** to restore the default.

## Syntax

```
max-response-time seconds
```

**undo max-response-time**

## Default

The maximum response time for MLD general queries is 10 seconds.

## Views

MLD-snooping view

## Predefined user roles

network-admin

## Parameters

*seconds*: Specifies the maximum response time for MLD general queries, in the range of 1 to 3174 seconds.

## Usage guidelines

You can set the time globally for all VLANs in MLD-snooping view or for a VLAN in VLAN view. For a VLAN, the VLAN-specific configuration takes priority over the global configuration.

To avoid mistakenly deleting IPv6 multicast group members, set the maximum response time for MLD general queries to be less than the MLD general query interval.

## Examples

```
# Set the global maximum response time for MLD general queries to 5 seconds.  
<Sysname> system-view  
[Sysname] mld-snooping  
[Sysname-mld-snooping] max-response-time 5
```

## Related commands

```
mld-snooping max-response-time  
mld-snooping query-interval
```

# mld-snooping

Use **mld-snooping** to enable the MLD snooping feature and enter MLD-snooping view.

Use **undo mld-snooping** to disable the MLD snooping feature.

## Syntax

```
mld-snooping  
undo mld-snooping
```

## Default

The MLD snooping feature is disabled.

## Views

System view

## Predefined user roles

network-admin

## Usage guidelines

If you disable the MLD snooping feature, MLD snooping is disabled in all VLANs.

## Examples

```
# Enable the MLD snooping feature and enter MLD-snooping view.
```

```
<Sysname> system-view
[Sysname] mld-snooping
[Sysname-mld-snooping]
```

## Related commands

```
enable (MLD-snooping view)
mld-snooping enable
mld-snooping disable
```

## mld-snooping access-policy

Use **mld-snooping access-policy** to configure an MLD snooping access control policy.

Use **undo mld-snooping access-policy** to delete an MLD snooping access control policy.

## Syntax

```
mld-snooping access-policy ipv6-acl-number
undo mld-snooping access-policy { ipv6-acl-number | all }
```

## Default

No MLD snooping access control policies exist. IPv6 multicast users can join or leave any IPv6 multicast groups.

## Views

User profile view

## Predefined user roles

network-admin

## Parameters

*ipv6-acl-number*: Specifies an IPv6 basic or advanced ACL by its number, in the range of 2000 to 3999. IPv6 multicast users can join only the IPv6 multicast groups that the ACL permits. If the ACL does not exist or does not have valid rules, IPv6 multicast users cannot join or leave any IPv6 multicast groups.

**all**: Specifies all MLD snooping access control policies.

## Usage guidelines

You can repeat this command to configure multiple MLD snooping access control policies. An IPv6 multicast user can join or leave an IPv6 multicast group if its MLD report or done message is permitted by one of the MLD snooping access control policies.

When you configure a rule in the IPv6 ACL, follow these restrictions and guidelines:

- In a basic ACL, the **source** *source-address source-prefix* option specifies an IPv6 multicast group address.
- In an advanced ACL, the **source** *source-address source-prefix* option specifies an IPv6 multicast source address. The **destination** *dest-address dest-prefix* option specifies an IPv6 multicast group address.

To match the following MLD messages, set the **source** *source-address source-prefix* option to 0::0:

- MLDv1 report and done messages.
- MLDv2 IS\_EX and MLDv2 TO\_EX reports that do not carry IPv6 multicast source addresses.

- Among the other optional parameters, only the **fragment** keyword and the **time-range** *time-range-name* option take effect.

## Examples

# In user profile **abc**, configure an MLD snooping access control policy to allow IPv6 multicast users to join or leave only IPv6 multicast group FF03::101.

```
<Sysname> system-view
[Sysname] acl ipv6 basic 2001
[Sysname-acl6-basic-2001] rule permit source ff03::101 16
[Sysname-acl6-basic-2001] quit
[Sysname] user-profile abc
[Sysname-user-profile-abc] mld-snooping access-policy 2001
```

## mld-snooping done source-ip

Use **mld-snooping done source-ip** to configure the source IPv6 address for MLD done messages.

Use **undo mld-snooping done source-ip** to restore the default.

### Syntax

```
mld-snooping done source-ip ipv6-address
undo mld-snooping done source-ip
```

### Default

In a VLAN, the source IPv6 address of MLD done messages is the IPv6 link-local address of the current VLAN interface. If the current VLAN interface does not have an IPv6 link-local address, the source IPv6 address is FE80::02FF:FFFF:FE00:0001.

### Views

VLAN view

### Predefined user roles

network-admin

### Parameters

*ipv6-address*: Specifies the source IPv6 address for MLD done messages.

### Usage guidelines

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

### Examples

# In VLAN 2, enable MLD snooping, and specify FE80:0:0:1::1 as the source IPv6 address of MLD done messages.

```
<Sysname> system-view
[Sysname] mld-snooping
[Sysname-mld-snooping] quit
[Sysname] vlan 2
[Sysname-vlan2] mld-snooping enable
[Sysname-vlan2] mld-snooping done source-ip fe80:0:0:1::1
```

### Related commands

**enable** (MLD-snooping view)

```
mld-snooping enable
```

## mld-snooping dot1p-priority

Use **mld-snooping dot1p-priority** to set the 802.1p priority for MLD messages in a VLAN.

Use **undo mld-snooping dot1p-priority** to restore the default.

### Syntax

```
mld-snooping dot1p-priority priority  
undo mld-snooping dot1p-priority
```

### Default

The 802.1p priority is 6 for MLD messages in a VLAN.

### Views

VLAN view

### Predefined user roles

network-admin

### Parameters

*priority*: Specifies an 802.1p priority for MLD messages, in the range of 0 to 7. The greater the value, the higher the priority.

### Usage guidelines

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

You can set the 802.1p priority for a VLAN in VLAN view or globally for all VLANs in MLD-snooping view. For a VLAN, the VLAN-specific configuration takes priority over the global configuration.

### Examples

```
# In VLAN 2, enable MLD snooping, and set the 802.1p priority for MLD messages to 3.
```

```
<Sysname> system-view  
[Sysname] mld-snooping  
[Sysname-mld-snooping] quit  
[Sysname] vlan 2  
[Sysname-vlan2] mld-snooping enable  
[Sysname-vlan2] mld-snooping dot1p-priority 3
```

### Related commands

**dot1p-priority** (MLD-snooping view)

**enable** (MLD-snooping view)

**mld-snooping enable**

## mld-snooping drop-unknown

Use **mld-snooping drop-unknown** to enable dropping unknown IPv6 multicast data packets for a VLAN.

Use **undo mld-snooping drop-unknown** to disable dropping unknown IPv6 multicast data packets for a VLAN.

## Syntax

```
mld-snooping drop-unknown
undo mld-snooping drop-unknown
```

## Default

Dropping unknown IPv6 multicast data packets is disabled. Unknown IPv6 multicast data packets are flooded.

## Views

VLAN view

## Predefined user roles

network-admin

## Usage guidelines

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

## Examples

```
# In VLAN 2, enable MLD snooping, and enable dropping unknown IPv6 multicast data packets.
<Sysname> system-view
[Sysname] mld-snooping
[Sysname-mld-snooping] quit
[Sysname] vlan 2
[Sysname-vlan2] mld-snooping enable
[Sysname-vlan2] mld-snooping drop-unknown
```

## Related commands

```
enable (MLD-snooping view)
mld-snooping enable
```

## mld-snooping { disable | enable }

Use **mld-snooping enable** to enable MLD snooping for a VLAN.

Use **mld-snooping disable** to disable MLD snooping for a VLAN.

Use **undo mld-snooping** to restore the MLD snooping status in a VLAN to the global MLD snooping status.

## Syntax

```
mld-snooping { disable | enable }
undo mld-snooping
```

## Default

The MLD snooping status in a VLAN is consistent with the global MLD snooping status.

## Views

VLAN view

## Predefined user roles

network-admin

## Usage guidelines

You must enable the MLD snooping feature by using the **mld-snooping** command before you enable MLD snooping for a VLAN.

You can enable MLD snooping for a VLAN by using this command in VLAN view or for multiple VLANs by using the **enable** command. The configuration in VLAN view has the same priority as the configuration in MLD-snooping view, and the most recent configuration takes effect.

## Examples

# Enable the MLD snooping feature, and then enable MLD snooping for VLAN 2.

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

# Disable MLD snooping for VLAN 2.

```
<Sysname> system-view
[Sysname] vlan 2
[Sysname-vlan2] mld-snooping disable
```

## Related commands

**enable** (MLD-snooping view)

**mld-snooping**

# mld-snooping fast-leave

Use **mld-snooping fast-leave** to enable fast-leave processing on a port.

Use **undo mld-snooping fast-leave** to disable fast-leave processing on a port.

## Syntax

```
mld-snooping fast-leave [ vlan vlan-list ]
undo mld-snooping fast-leave [ vlan vlan-list ]
```

## Default

Fast-leave processing is disabled on a port.

## Views

Layer 2 Ethernet interface view

Layer 2 aggregate interface view

## Predefined user roles

network-admin

## Parameters

**vlan** *vlan-list*: Specifies a space-separated list of up to 10 VLAN items. Each item specifies a VLAN by its ID or a range of VLANs in the form of *start-vlan-id* to *end-vlan-id*. The VLAN ID is in the range of 1 to 4094. If you do not specify a VLAN, this command takes effect on all VLANs.

## Usage guidelines

The fast-leave processing feature enables the device to immediately remove a port from the forwarding entry for an IPv6 multicast group when the port receives a done message.

You can enable fast-leave processing for a port in interface view or globally for all ports in MLD-snooping view. For a port, the port-specific configuration takes priority over the global configuration.

## Examples

```
# Enable fast-leave processing for VLAN 2 on GigabitEthernet 1/0/1.
```

```
<Sysname> system-view
[Sysname] interface gigabitethernet 1/0/1
[Sysname-GigabitEthernet1/0/1] mld-snooping fast-leave vlan 2
```

## Related commands

**fast-leave** (MLD-snooping view)

# mld-snooping general-query source-ip

Use **mld-snooping general-query source-ip** to configure the source IPv6 address for MLD general queries.

Use **undo mld-snooping general-query source-ip** to restore the default.

## Syntax

```
mld-snooping general-query source-ip ipv6-address
undo mld-snooping general-query source-ip
```

## Default

In a VLAN, the source IPv6 address for MLD general queries is the IPv6 link-local address of the current VLAN interface. If the current VLAN interface does not have an IPv6 link-local address, the source IPv6 address is FE80::02FF:FFFF:FE00:0001.

## Views

VLAN view

## Predefined user roles

network-admin

## Parameters

*ipv6-address*: Specifies the source IPv6 address for MLD general queries.

## Usage guidelines

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

## Examples

```
# In VLAN 2, enable MLD snooping, and specify FE80:0:0:1::1 as the source IPv6 address for MLD general queries.
```

```
<Sysname> system-view
[Sysname] mld-snooping
[Sysname-mld-snooping] quit
[Sysname] vlan 2
[Sysname-vlan2] mld-snooping enable
[Sysname-vlan2] mld-snooping general-query source-ip fe80:0:0:1::1
```

## Related commands

**enable** (MLD-snooping view)

**mld-snooping enable**

## mld-snooping group-limit

Use **mld-snooping group-limit** to set the maximum number of IPv6 multicast groups that a port can join.

Use **undo mld-snooping group-limit** to remove the limit on the maximum number of IPv6 multicast groups that a port can join.

### Syntax

```
mld-snooping group-limit limit [ vlan vlan-list ]  
undo mld-snooping group-limit [ vlan vlan-list ]
```

### Default

No limit is placed on the maximum number of IPv6 multicast groups that a port can join.

### Views

Layer 2 Ethernet interface view

Layer 2 aggregate interface view

### Predefined user roles

network-admin

### Parameters

*limit*: Specifies the maximum number of multicast groups that a port can join, in the range of 0 to 4294967295.

**vlan vlan-list**: Specifies a space-separated list of up to 10 VLAN items. Each item specifies a VLAN by its ID or a range of VLANs in the form of *start-vlan-id to end-vlan-id*. The VLAN ID is in the range of 1 to 4094. If you do not specify a VLAN, this command takes effect for all VLANs.

### Usage guidelines

This command takes effect only on the IPv6 multicast groups that a port joins dynamically.

### Examples

```
# On GigabitEthernet 1/0/1, set the maximum number to 10 for IPv6 multicast groups that the port  
can join in VLAN 2.
```

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

```
[Sysname] interface gigabitethernet 1/0/1
```

```
[Sysname-GigabitEthernet1/0/1] mld-snooping group-limit 10 vlan 2
```

## mld-snooping group-policy

Use **mld-snooping group-policy** to configure an IPv6 multicast group policy on a port to control the IPv6 multicast groups that hosts attached to the port can join.

Use **undo mld-snooping group-policy** to delete IPv6 multicast group policies on a port.

### Syntax

```
mld-snooping group-policy ipv6-acl-number [ vlan vlan-list ]  
undo mld-snooping group-policy [ vlan vlan-list ]
```

### Default

No IPv6 multicast group policies exist. Hosts attached to the port can join any IPv6 multicast groups.

## Views

Layer 2 Ethernet interface view

Layer 2 aggregate interface view

## Predefined user roles

network-admin

## Parameters

*ipv6-acl-number*: Specifies an IPv6 basic or advanced ACL number in the range of 2000 to 3999. Hosts can join only the IPv6 multicast groups that the ACL permits. If the ACL does not exist or does not have valid rules, hosts cannot join IPv6 multicast groups.

**vlan** *vlan-list*: Specifies a space-separated list of up to 10 VLAN items. Each item specifies a VLAN by its ID or a range of VLANs in the form of *start-vlan-id to end-vlan-id*. The VLAN ID is in the range of 1 to 4094. If you do not specify a VLAN, this command takes effect on all VLANs.

## Usage guidelines

An IPv6 multicast group policy filters MLD reports to control the IPv6 multicast groups that hosts can join.

This command does not take effect on static member ports, because static member ports do not send MLD reports.

You can configure an IPv6 multicast group policy for a port in interface view or globally for all ports in MLD-snooping view. For a port, the port-specific configuration takes priority over the global configuration.

When you configure a rule in the IPv6 ACL, follow these restrictions and guidelines:

- In a basic ACL, the **source** *source-address source-prefix* option specifies an IPv6 multicast group address.
- In an advanced ACL, the **source** *source-address source-prefix* option specifies an IPv6 multicast source address. The **destination** *dest-address dest-prefix* option specifies an IPv6 multicast group address.  
To match MLDv1 reports and MLD IS\_EX and MLDv2 TO\_EX reports that do not carry IPv6 multicast source addresses, set the **source** *source-address source-prefix* option to 0::0.
- Among the other optional parameters, only the **fragment** keyword and the **time-range** *time-range-name* option take effect.

You can configure different ACLs for different VLANs on a port. If you configure multiple ACLs for the same VLANs on a port, the most recent configuration takes effect.

## Examples

```
# On GigabitEthernet 1/0/1, configure an IPv6 multicast group policy for VLAN 2 so that hosts attached to the port in VLAN 2 can join only the group FF03::101.
```

```
<Sysname> system-view
[Sysname] acl ipv6 basic 2000
[Sysname-acl-ipv6-basic-2000] rule permit source ff03::101 128
[Sysname-acl-ipv6-basic-2000] quit
[Sysname] interface gigabitethernet 1/0/1
[Sysname-GigabitEthernet1/0/1] mld-snooping group-policy 2000 vlan 2
```

## Related commands

**group-policy** (MLD-snooping view)

# mld-snooping host-aging-time

Use **mld-snooping host-aging-time** to set the aging timer for dynamic member ports in a VLAN.

Use **undo mld-snooping host-aging-time** to restore the default.

## Syntax

```
mld-snooping host-aging-time seconds
```

```
undo mld-snooping host-aging-time
```

## Default

The aging timer for dynamic member ports is 260 seconds.

## Views

VLAN view

## Predefined user roles

network-admin

## Parameters

*seconds*: Specifies an aging timer for dynamic member ports, in the range of 1 to 8097894 seconds.

## Usage guidelines

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

You can set the timer for a VLAN in VLAN view or globally for all VLANs in MLD-snooping view. For a VLAN, the VLAN-specific configuration takes priority over the global configuration.

To avoid mistakenly deleting IPv6 multicast group members, set the aging timer for dynamic member ports to be greater than the value calculated by using the following formula:

[ MLD general query interval ] + [ maximum response time for MLD general queries ]

As a best practice, set the aging timer of dynamic member ports to the value calculated by using the following formula:

[ MLD general query interval ] × 2 + [ maximum response time for MLD general queries ]

## Examples

# In VLAN 2, enable MLD snooping, and set the aging timer for dynamic member ports in the VLAN to 300 seconds.

```
<Sysname> system-view
[Sysname] mld-snooping
[Sysname-mld-snooping] quit
[Sysname] vlan 2
[Sysname-vlan2] mld-snooping enable
[Sysname-vlan2] mld-snooping host-aging-time 300
```

## Related commands

**enable** (MLD-snooping view)

**host-aging-time** (MLD-snooping view)

**mld-snooping enable**

# mld-snooping host-join

Use **mld-snooping host-join** to configure a port as a simulated member host for an IPv6 multicast group or an IPv6 multicast source and group.

Use **undo mld-snooping host-join** to remove the configuration of a simulated member host for an IPv6 multicast group.

## Syntax

```
mld-snooping host-join ipv6-group-address [ source-ip ipv6-source-address ] vlan vlan-id
```

```
undo mld-snooping host-join { ipv6-group-address [ source-ip ipv6-source-address ] vlan vlan-id | all }
```

## Default

A port is not a simulated member host of any IPv6 multicast groups or any IPv6 multicast sources and groups.

## Views

Layer 2 Ethernet interface view

Layer 2 aggregate interface view

## Predefined user roles

network-admin

## Parameters

*ipv6-group-address*: Specifies an IPv6 multicast group address. The value range for this argument is FFxy::/16 (excluding FFx1::/16 and FFx2::/16), where "x" and "y" represent any hexadecimal numbers in the range of 0 to F.

**source-ip** *ipv6-source-address*: Specifies an IPv6 multicast source by its IPv6 address. If you specify an IPv6 multicast source, this command configures the port as a simulated member host for an IPv6 multicast source and group. If you do not specify an IPv6 multicast source, this command configures the port as a simulated member host for an IPv6 multicast group. This option takes effect on MLDv2 snooping devices.

**vlan** *vlan-id*: Specifies a VLAN by its VLAN ID in the range of 1 to 4094.

**all**: Specifies all IPv6 multicast groups and all IPv6 multicast sources and groups.

## Usage guidelines

The version of MLD running on a simulated member host is the same as the version of MLD snooping running on the port. The port ages out in the same way as a dynamic member port.

## Examples

```
# Configure GigabitEthernet 1/0/1 as a simulated member host for the IPv6 multicast group (*, FF3E::101) in VLAN 2.
```

```
<Sysname> system-view
[Sysname] mld-snooping
[Sysname-mld-snooping] quit
[Sysname] vlan 2
[Sysname-vlan2] mld-snooping enable
[Sysname-vlan2] quit
[Sysname] interface gigabitethernet 1/0/1
[Sysname-GigabitEthernet1/0/1] mld-snooping host-join ff3e::101 vlan 2
```

## mld-snooping host-tracking

Use `mld-snooping host-tracking` to enable host tracking for a VLAN.

Use `undo mld-snooping host-tracking` to disable host tracking for a VLAN.

### Syntax

```
mld-snooping host-tracking
```

```
undo mld-snooping host-tracking
```

### Default

Host tracking is disabled.

### Views

VLAN view

### Predefined user roles

network-admin

### Usage guidelines

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

You can enable host tracking for a VLAN in VLAN view or globally for all VLANs in MLD-snooping view. For a VLAN, the VLAN-specific configuration has the same priority as the global configuration.

### Examples

```
# In VLAN 2, enable MLD snooping, and then enable host tracking.
```

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

```
[Sysname] mld-snooping
```

```
[Sysname-mld-snooping] quit
```

```
[Sysname] vlan 2
```

```
[Sysname-vlan2] mld-snooping enable
```

```
[Sysname-vlan2] mld-snooping host-tracking
```

### Related commands

```
display mld-snooping host-tracking
```

```
host-tracking (MLD-snooping view)
```

```
mld-snooping enable
```

## mld-snooping last-listener-query-interval

Use `mld-snooping last-listener-query-interval` to set the MLD last listener query interval for a VLAN.

Use `undo mld-snooping last-listener-query-interval` to restore the default.

### Syntax

```
mld-snooping last-listener-query-interval interval
```

```
undo mld-snooping last-listener-query-interval
```

### Default

The MLD last listener query interval is 1 second.

## Views

VLAN view

## Predefined user roles

network-admin

## Parameters

*interval*: Specifies an MLD last listener query interval in the range of 1 to 25 seconds.

## Usage guidelines

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

You can set the interval for a VLAN in VLAN view or globally for all VLANs in MLD-snooping view. For a VLAN, the VLAN-specific configuration takes priority over the global configuration.

## Examples

# In VLAN 2, enable MLD snooping, and set the MLD last listener query interval to 3 seconds.

```
<Sysname> system-view
[Sysname] mld-snooping
[Sysname-mld-snooping] quit
[Sysname] vlan 2
[Sysname-vlan2] mld-snooping enable
[Sysname-vlan2] mld-snooping last-listener-query-interval 3
```

## Related commands

**enable** (MLD-snooping view)

**last-listener-query-interval** (MLD-snooping view)

**mld-snooping enable**

# mld-snooping max-response-time

Use **mld-snooping max-response-time** to set the maximum response time for MLD general queries in a VLAN.

Use **undo mld-snooping max-response-time** to restore the default.

## Syntax

**mld-snooping max-response-time** *seconds*

**undo mld-snooping max-response-time**

## Default

The maximum response time for MLD general queries is 10 seconds.

## Views

VLAN view

## Predefined user roles

network-admin

## Parameters

*seconds*: Specifies the maximum response time for MLD general queries, in the range of 1 to 3174 seconds.

## Usage guidelines

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

You can set the time for a VLAN in VLAN view or globally for all VLANs in MLD-snooping view. For a VLAN, the VLAN-specific configuration takes priority over the global configuration.

To avoid mistakenly deleting IPv6 multicast group members, set the maximum response time for MLD general queries to be less than the MLD general query interval.

## Examples

```
# In VLAN 2, enable MLD snooping, and set the maximum response time for MLD general queries to 5 seconds.
```

```
<Sysname> system-view
[Sysname] mld-snooping
[Sysname-mld-snooping] quit
[Sysname] vlan 2
[Sysname-vlan2] mld-snooping enable
[Sysname-vlan2] mld-snooping max-response-time 5
```

## Related commands

```
enable (MLD-snooping view)
max-response-time (MLD-snooping view)
mld-snooping enable
mld-snooping query-interval
```

## mld-snooping overflow-replace

Use **mld-snooping overflow-replace** to enable the IPv6 multicast group replacement feature on a port.

Use **undo mld-snooping overflow-replace** to disable the multicast group replacement feature on a port.

## Syntax

```
mld-snooping overflow-replace [ vlan vlan-list ]
undo mld-snooping overflow-replace [ vlan vlan-list ]
```

## Default

The IPv6 multicast group replacement feature is disabled.

## Views

Layer 2 Ethernet interface view  
Layer 2 aggregate interface view

## Predefined user roles

network-admin

## Parameters

**vlan *vlan-list***: Specifies a space-separated list of up to 10 VLAN items. Each item specifies a VLAN by its ID or a range of VLANs in the form of *start-vlan-id to end-vlan-id*. The VLAN ID is in the range of 1 to 4094. If you do not specify a VLAN, this command takes effect on all VLANs.

## Usage guidelines

This command takes effect only on the IPv6 multicast groups that a port joins dynamically.

You can enable the IPv6 multicast group replacement feature for a port in interface view or globally for all ports in MLD-snooping view. For a port, the port-specific configuration takes priority over the global configuration.

## Examples

# On GigabitEthernet 1/0/1, enable the IPv6 multicast group replacement feature for VLAN 2.

```
<Sysname> system-view
[Sysname] interface gigabitethernet 1/0/1
[Sysname-GigabitEthernet1/0/1] mld-snooping overflow-replace vlan 2
```

## Related commands

**overflow-replace** (MLD-snooping view)

# mld-snooping proxy enable

Use **mld-snooping proxy enable** to enable MLD snooping proxying for a VLAN.

Use **undo mld-snooping proxy enable** to disable MLD snooping proxying for a VLAN.

## Syntax

```
mld-snooping proxy enable
undo mld-snooping proxy enable
```

## Views

VLAN view

## Predefined user roles

network-admin

## Usage guidelines

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

This command does not take effect on a VLAN that is a sub-VLAN of an IPv6 multicast VLAN.

## Examples

# In VLAN 2, enable MLD snooping, and enable MLD snooping proxying.

```
<Sysname> system-view
[Sysname] mld-snooping
[Sysname-mld-snooping] quit
[Sysname] vlan 2
[Sysname-vlan2] mld-snooping enable
[Sysname-vlan2] mld-snooping proxy enable
```

## Related commands

**enable** (MLD-snooping view)

**mld-snooping enable**

**subvlan** (IPv6 multicast VLAN view)

# mld-snooping querier

Use **mld-snooping querier** to enable the MLD snooping querier.

Use **undo mld-snooping querier** to disable the MLD snooping querier.

## Syntax

```
mld-snooping querier
undo mld-snooping querier
```

## Default

The MLD snooping querier is disabled.

## Views

VLAN view

## Predefined user roles

network-admin

## Usage guidelines

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

For a sub-VLAN of an IPv6 multicast VLAN, this command takes effect only after you remove the VLAN from the IPv6 multicast VLAN.

## Examples

# In VLAN 2, enable MLD snooping, and enable the MLD snooping querier.

```
<Sysname> system-view
[Sysname] mld-snooping
[Sysname-mld-snooping] quit
[Sysname] vlan 2
[Sysname-vlan2] mld-snooping enable
[Sysname-vlan2] mld-snooping querier
```

## Related commands

**enable** (MLD-snooping view)  
**mld-snooping enable**  
**subvlan** (IPv6 multicast VLAN view)

# mld-snooping querier-election

Use **mld-snooping querier-election** to enable MLD snooping querier election for a VLAN.

Use **undo mld-snooping querier-election** to disable MLD snooping querier election for a VLAN.

## Syntax

```
mld-snooping querier-election
undo mld-snooping querier-election
```

## Default

MLD snooping querier election is disabled.

## Views

VLAN view

## Predefined user roles

network-admin

## Usage guidelines

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

For MLD snooping querier election to take effect, you must enable the MLD snooping querier.

## Examples

# In VLAN 2, enable MLD snooping, and enable MLD snooping querier election.

```
<Sysname> system-view
[Sysname] mld-snooping
[Sysname-mld-snooping] quit
[Sysname] vlan 2
[Sysname-vlan2] mld-snooping enable
[Sysname-vlan2] mld-snooping querier
[Sysname-vlan2] mld-snooping querier-election
```

## Related commands

**mld-snooping querier**

# mld-snooping query-interval

Use **mld-snooping query-interval** to set the MLD general query interval for a VLAN.

Use **undo mld-snooping query-interval** to restore the default.

## Syntax

```
mld-snooping query-interval interval
undo mld-snooping query-interval
```

## Default

The MLD general query interval is 125 seconds.

## Views

VLAN view

## Predefined user roles

network-admin

## Parameters

*interval*: Specifies an MLD general query interval, in the range of 2 to 31744 seconds.

## Usage guidelines

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

To avoid mistakenly deleting IPv6 multicast group members, set the MLD general query interval to be greater than the maximum response time for MLD general queries.

## Examples

# In VLAN 2, enable MLD snooping, and set the MLD general query interval to 20 seconds.

```
<Sysname> system-view
[Sysname] mld-snooping
[Sysname-mld-snooping] quit
[Sysname] vlan 2
[Sysname-vlan2] mld-snooping enable
[Sysname-vlan2] mld-snooping query-interval 20
```

## Related commands

```
enable (MLD-snooping view)
max-response-time
mld-snooping enable
mld-snooping max-response-time
mld-snooping querier
```

## mld-snooping report source-ip

Use `mld-snooping report source-ip` to configure the source IPv6 address for MLD reports.

Use `undo mld-snooping report source-ip` to restore the default.

### Syntax

```
mld-snooping report source-ip ipv6-address
undo mld-snooping report source-ip
```

### Default

In a VLAN, the source IPv6 address for MLD reports is the IPv6 link-local address of the current VLAN interface. If the current VLAN interface does not have an IPv6 link-local address, the source IPv6 address is FE80::02FF:FFFF:FE00:0001.

### Views

VLAN view

### Predefined user roles

network-admin

### Parameters

*ipv6-address*: Specifies the source IPv6 address for MLD reports.

### Usage guidelines

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

### Examples

# In VLAN 2, enable MLD snooping, and specify FE80:0:0:1::1 as the source IPv6 address for MLD reports.

```
<Sysname> system-view
[Sysname] mld-snooping
[Sysname-mld-snooping] quit
[Sysname] vlan 2
[Sysname-vlan2] mld-snooping enable
[Sysname-vlan2] mld-snooping report source-ip fe80:0:0:1::1
```

### Related commands

```
enable (MLD-snooping view)
mld-snooping enable
```

## mld-snooping router-aging-time

Use **mld-snooping router-aging-time** to set the aging timer for dynamic router ports in a VLAN.

Use **undo mld-snooping router-aging-time** to restore the default.

### Syntax

```
mld-snooping router-aging-time seconds  
undo mld-snooping router-aging-time
```

### Default

The aging timer for dynamic router ports is 260 seconds.

### Views

VLAN view

### Predefined user roles

network-admin

### Parameters

*seconds*: Specifies an aging timer for dynamic router ports, in the range of 1 to 8097894 seconds.

### Usage guidelines

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

You can set the timer for a VLAN in VLAN view or globally for all VLANs in MLD-snooping view. For a VLAN, the VLAN-specific configuration takes priority over the global configuration.

### Examples

# In VLAN 2, enable MLD snooping, and set the aging timer for dynamic router ports in the VLAN to 100 seconds.

```
<Sysname> system-view  
[Sysname] mld-snooping  
[Sysname-mld-snooping] quit  
[Sysname] vlan 2  
[Sysname-vlan2] mld-snooping enable  
[Sysname-vlan2] mld-snooping router-aging-time 100
```

### Related commands

```
enable (MLD-snooping view)  
mld-snooping enable  
router-aging-time (MLD-snooping view)
```

## mld-snooping router-port-deny

Use **mld-snooping router-port-deny** to disable a port from becoming a dynamic router port.

Use **undo mld-snooping router-port-deny** to allow a port to become a dynamic router port.

### Syntax

```
mld-snooping router-port-deny [ vlan vlan-list ]  
undo mld-snooping router-port-deny [ vlan vlan-list ]
```

## Default

A port is allowed to become a dynamic router port.

## Views

Layer 2 Ethernet interface view

Layer 2 aggregate interface view

## Predefined user roles

network-admin

## Parameters

**vlan *vlan-list***: Specifies a space-separated list of up to 10 VLAN items. Each item specifies a VLAN by its ID or a range of VLANs in the form of *start-vlan-id to end-vlan-id*. The VLAN ID is in the range of 1 to 4094. If you specify VLANs, this command takes effect only when the port belongs to the specified VLANs. If you do not specify a VLAN, this command takes effect on all VLANs.

## Examples

```
# Disable GigabitEthernet 1/0/1 from becoming a dynamic router port in VLAN 2.
```

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

```
[Sysname] interface gigabitethernet 1/0/1
```

```
[Sysname-GigabitEthernet1/0/1] mld-snooping router-port-deny vlan 2
```

# mld-snooping source-deny

Use **mld-snooping source-deny** to enable IPv6 multicast source port filtering on a port to discard all IPv6 multicast data packets.

Use **undo mld-snooping source-deny** to disable IPv6 multicast source port filtering on a port.

## Syntax

```
mld-snooping source-deny
```

```
undo mld-snooping source-deny
```

## Default

IPv6 multicast source port filtering is disabled.

## Views

Layer 2 Ethernet interface view

## Predefined user roles

network-admin

## Usage guidelines

You can enable this feature for a port in interface view or for the specified ports in MLD-snooping view. For a port, the configuration in interface view has the same priority as the configuration in MLD-snooping view, and the most recent configuration takes effect.

## Examples

```
# Enable source port filtering for IPv6 multicast data on GigabitEthernet 1/0/1.
```

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

```
[Sysname] interface gigabitethernet 1/0/1
```

```
[Sysname-GigabitEthernet1/0/1] mld-snooping source-deny
```

## Related commands

`source-deny` (MLD-snooping view)

# mld-snooping special-query source-ip

Use `mld-snooping special-query source-ip` to configure the source IPv6 address for MLD multicast-address-specific queries.

Use `undo mld-snooping special-query source-ip` to restore the default.

## Syntax

```
mld-snooping special-query source-ip ipv6-address
```

```
undo mld-snooping special-query source-ip
```

## Default

In a VLAN, the source IPv6 address of MLD multicast-address-specific queries is one of the following:

- The source address of MLD general queries if the MLD snooping querier of the VLAN has received MLD general queries.
- The IPv6 link-local address of the current VLAN interface if the MLD snooping querier does not receive an MLD general query.
- FE80::02FF:FFFF:FE00:0001 if the MLD snooping querier does not receive an MLD general query and the current VLAN interface does not have an IPv6 link-local address.

## Views

VLAN view

## Predefined user roles

network-admin

## Parameters

*ipv6-address*: Specifies the source IPv6 address for MLD multicast-address-specific queries.

## Usage guidelines

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

## Examples

# In VLAN 2, enable MLD snooping, and specify FE80:0:0:1::1 as the source IPv6 address of MLD multicast-address-specific queries.

```
<Sysname> system-view
[Sysname] mld-snooping
[Sysname-mld-snooping] quit
[Sysname] vlan 2
[Sysname-vlan2] mld-snooping enable
[Sysname-vlan2] mld-snooping special-query source-ip fe80:0:0:1::1
```

## Related commands

`enable` (MLD-snooping view)

`mld-snooping enable`

## mld-snooping static-group

Use **mld-snooping static-group** to configure a port as a static member port of an IPv6 multicast group or an IPv6 multicast source and group.

Use **undo mld-snooping static-group** to delete the configuration of static member ports.

### Syntax

```
mld-snooping static-group ipv6-group-address [ source-ip ipv6-source-address ] vlan vlan-id  
undo mld-snooping static-group { ipv6-group-address [ source-ip ipv6-source-address ] vlan vlan-id | all }
```

### Default

A port is not a static member port of IPv6 multicast groups.

### Views

Layer 2 Ethernet interface view

Layer 2 aggregate interface view

### Predefined user roles

network-admin

### Parameters

*ipv6-group-address*: Specifies an IPv6 multicast group address. The value range for this argument is FFxy::/16 (excluding FFx1::/16 and FFx2::/16), where "x" and "y" represent any hexadecimal numbers in the range of 0 to F.

**source-ip** *ipv6-source-address*: Specifies an IPv6 multicast source by its IPv6 address. If you specify an IPv6 multicast source, this command configures the port as a static member port of an IPv6 multicast source and group. If you do not specify an IPv6 multicast source, this command configures the port as a static member port of an IPv6 multicast group. This option takes effect on MLDv2 snooping devices.

**vlan** *vlan-id*: Specifies a VLAN by its VLAN ID in the range of 1 to 4094.

**all**: Specifies all IPv6 multicast groups and all IPv6 multicast sources and groups.

### Examples

```
# Configure GigabitEthernet 1/0/1 as a static member port for the IPv6 multicast group (*, FF3E::101) in VLAN 2.
```

```
<Sysname> system-view  
[Sysname] mld-snooping  
[Sysname-mld-snooping] quit  
[Sysname] vlan 2  
[Sysname-vlan2] mld-snooping enable  
[Sysname-vlan2] quit  
[Sysname] interface gigabitethernet 1/0/1  
[Sysname-GigabitEthernet1/0/1] mld-snooping static-group ff3e::101 vlan 2
```

## mld-snooping static-router-port

Use **mld-snooping static-router-port** to configure a port as a static router port.

Use `undo mld-snooping static-router-port` to remove the configuration of static router ports.

### Syntax

```
mld-snooping static-router-port vlan vlan-id  
undo mld-snooping static-router-port { all | vlan vlan-id }
```

### Default

A port is not a static router port.

### Views

Layer 2 Ethernet interface view  
Layer 2 aggregate interface view

### Predefined user roles

network-admin

### Parameters

**all**: Specifies all VLANs.  
**vlan *vlan-id***: Specifies a VLAN by its VLAN ID in the range of 1 to 4094.

### Examples

```
# Configure GigabitEthernet 1/0/1 as a static router port in VLAN 2.  
<Sysname> system-view  
[Sysname] interface gigabitethernet 1/0/1  
[Sysname-GigabitEthernet1/0/1] mld-snooping static-router-port vlan 2
```

## mld-snooping version

Use `mld-snooping version` to specify an MLD snooping version for a VLAN.  
Use `undo mld-snooping version` to restore the default.

### Syntax

```
mld-snooping version version-number  
undo mld-snooping version
```

### Default

The MLD snooping version in a VLAN is 1.

### Views

VLAN view

### Predefined user roles

network-admin

### Parameters

***version-number***: Specifies an MLD snooping version, 1 or 2.

### Usage guidelines

You must enable MLD snooping for a VLAN before you configure this command.

You can specify the version for a VLAN in VLAN view or for the specified VLANs in MLD-snooping view. The VLAN-specific configuration has the same priority as the configuration in MLD-snooping view, and the most recent configuration takes effect.

## Examples

```
# In VLAN 2, enable MLD snooping, and specify MLD snooping version 2.
<Sysname> system-view
[Sysname] mld-snooping
[Sysname-mld-snooping] quit
[Sysname] vlan 2
[Sysname-vlan2] mld-snooping enable
[Sysname-vlan2] mld-snooping version 2
```

## Related commands

**enable** (MLD-snooping view)  
**mld-snooping enable**  
**version** (MLD-snooping view)

## overflow-replace (MLD-snooping view)

Use **overflow-replace** to enable the IPv6 multicast group replacement feature globally.

Use **undo overflow-replace** to disable the IPv6 multicast group replacement feature globally.

## Syntax

```
overflow-replace [ vlan vlan-list ]
undo overflow-replace [ vlan vlan-list ]
```

## Default

The IPv6 multicast group replacement feature is disabled.

## Views

MLD-snooping view

## Predefined user roles

network-admin

## Parameters

**vlan** *vlan-list*: Specifies a space-separated list of up to 10 VLAN items. Each item specifies a VLAN by its ID or a range of VLANs in the form of *start-vlan-id* to *end-vlan-id*. The VLAN ID is in the range of 1 to 4094. If you do not specify a VLAN, this command takes effect on all VLANs.

## Usage guidelines

This command takes effect only on the IPv6 multicast groups that a port joins dynamically.

You can enable IPv6 multicast group replacement globally for all ports in MLD-snooping view or for a port in interface view. For a port, the port-specific configuration takes priority over the global configuration.

## Examples

```
# Globally enable the IPv6 multicast group replacement feature for VLAN 2.
<Sysname> system-view
[Sysname] mld-snooping
[Sysname-mld-snooping] overflow-replace vlan 2
```

## Related commands

**mld-snooping overflow-replace**

## report-aggregation (MLD-snooping view)

Use **report-aggregation** to enable MLD report suppression.

Use **undo report-aggregation** to disable MLD report suppression.

### Syntax

```
report-aggregation  
undo report-aggregation
```

### Default

MLD report suppression is enabled.

### Views

MLD-snooping view

### Predefined user roles

network-admin

### Examples

```
# Disable MLD report suppression.  
<Sysname> system-view  
[Sysname] mld-snooping  
[Sysname-mld-snooping] undo report-aggregation
```

## reset ipv6 l2-multicast fast-forwarding cache

Use **reset ipv6 l2-multicast fast-forwarding cache** to clear Layer 2 IPv6 multicast fast forwarding entries.

### Syntax

```
reset ipv6 l2-multicast fast-forwarding cache [ vlan vlan-id ]  
{ { ipv6-source-address | ipv6-group-address } * | all } [ slot slot-number ]
```

### Views

Any view

### Predefined user roles

network-admin

### Parameters

**vlan** *vlan-id*: Specifies a VLAN by its VLAN ID in the range of 1 to 4094.

*ipv6-source-address*: Specifies an IPv6 multicast source address.

*ipv6-group-address*: Specifies an IPv6 multicast group address. The value range for this argument is FFxy::/16 (excluding FFx1::/16 and FFx2::/16), where "x" and "y" represent any hexadecimal numbers in the range of 0 to F.

**slot** *slot-number*: Specifies an IRF member device by its member ID. If you do not specify a member device, this command clears Layer 2 IPv6 multicast fast forwarding entries for the master device.

**all**: Specifies all Layer 2 IPv6 multicast fast forwarding entries.

### Examples

```
# Clear all Layer 2 IPv6 multicast fast forwarding entries.
```

```
<Sysname> reset ipv6 l2-multicast fast-forwarding cache all
# Clear the Layer 2 IPv6 multicast fast forwarding entry for the IPv6 group (*, FF1E::2).
<Sysname> reset ipv6 l2-multicast fast-forwarding cache FF1E::2
```

### Related commands

```
display ipv6 l2-multicast fast-forwarding cache
```

## reset mld-snooping group

Use **reset mld-snooping group** to clear information about dynamic MLD snooping group entries.

### Syntax

```
reset mld-snooping group { ipv6-group-address [ ipv6-source-address ] |
all } [ vlan vlan-id ]
```

### Views

User view

### Predefined user roles

network-admin

### Parameters

*ipv6-group-address*: Specifies an IPv6 multicast group address. The value range for this argument is FFxy::/16 (excluding FFx1::/16 and FFx2::/16), where "x" and "y" represent any hexadecimal numbers in the range of 0 to F.

*ipv6-source-address*: Specifies an IPv6 multicast source address. If you do not specify an IPv6 multicast source, this command clears information about dynamic MLD snooping group entries for all IPv6 multicast sources.

**all**: Specifies all IPv6 multicast groups.

**vlan vlan-id**: Specifies a VLAN by its VLAN ID in the range of 1 to 4094. If you do not specify a VLAN, this command clears information about dynamic MLD snooping group entries for all VLANs.

### Examples

```
# Clear information about all dynamic MLD snooping group entries.
<Sysname> reset mld-snooping group all
```

### Related commands

```
display mld-snooping group
```

## reset mld-snooping router-port

Use **reset mld-snooping router-port** to clear dynamic router port information.

### Syntax

```
reset mld-snooping router-port { all | vlan vlan-id }
```

### Views

User view

### Predefined user roles

network-admin

## Parameters

**all**: Specifies all dynamic router ports.

**vlan *vlan-id***: Specifies a VLAN by its VLAN ID in the range of 1 to 4094. If you do not specify a VLAN, this command clears dynamic router port information for all VLANs.

## Examples

```
# Clear information about all dynamic router ports.
<Sysname> reset mld-snooping router-port all
```

## Related commands

```
display mld-snooping router-port
```

# reset mld-snooping statistics

Use **reset mld-snooping statistics** to clear statistics for MLD messages and IPv6 PIM hello messages learned through MLD snooping.

## Syntax

```
reset mld-snooping statistics
```

## Views

User view

## Predefined user roles

network-admin

## Examples

```
# Clear statistics for all MLD messages and IPv6 PIM hello messages learned through MLD
snooping.
<Sysname> reset mld-snooping statistics
```

## Related commands

```
display mld-snooping statistics
```

# router-aging-time (MLD-snooping view)

Use **router-aging-time** to set the aging timer for dynamic router ports globally.

Use **undo router-aging-time** to restore the default.

## Syntax

```
router-aging-time seconds
undo router-aging-time
```

## Default

The aging timer for dynamic router ports is 260 seconds.

## Views

MLD-snooping view

## Predefined user roles

network-admin

## Parameters

*seconds*: Specifies an aging timer for dynamic router ports, in the range of 1 to 8097894 seconds.

## Usage guidelines

You can set the timer globally for all VLANs in MLD-snooping view or for a VLAN in VLAN view. For a VLAN, the VLAN-specific configuration takes priority over the global configuration.

## Examples

```
# Set the global aging timer for dynamic router ports to 100 seconds.
```

```
<Sysname> system-view
[Sysname] mld-snooping
[Sysname-mld-snooping] router-aging-time 100
```

## Related commands

```
mld-snooping router-aging-time
```

# source-deny (MLD-snooping view)

Use **source-deny** to enable IPv6 multicast source port filtering on ports to discard all IPv6 multicast data packets.

Use **undo source-deny** to disable IPv6 multicast source port filtering on ports.

## Syntax

```
source-deny port interface-list
undo source-deny port interface-list
```

## Default

IPv6 multicast source port filtering is disabled.

## Views

MLD-snooping view

## Predefined user roles

network-admin

## Parameters

**port** *interface-list*: Specifies a space-separated list of port items. Each item specifies a port by its port type and number or a range of ports in the form of *start-interface-type interface-number to end-interface-type interface-number*.

## Usage guidelines

You can enable this feature for the specified ports in MLD-snooping view or for a port in interface view. For a port, the configuration in MLD-snooping view has the same priority as the configuration in interface view, and the most recent configuration takes effect.

## Examples

```
# Enable source port filtering for IPv6 multicast data on ports GigabitEthernet 1/0/1 through GigabitEthernet 1/0/4.
```

```
<Sysname> system-view
[Sysname] mld-snooping
[Sysname-mld-snooping] source-deny port gigabitethernet 1/0/1 to gigabitethernet 1/0/4
```

## Related commands

`mld-snooping source-deny`

## version (MLD-snooping view)

Use `version` to specify an MLD snooping version for VLANs.

Use `undo version` to restore the default.

## Syntax

```
version version-number vlan vlan-list
```

```
undo version vlan vlan-list
```

## Default

The MLD snooping version in a VLAN is 1.

## Views

MLD-snooping view

## Predefined user roles

network-admin

## Parameters

*version-number*: Specifies an MLD snooping version, 1 or 2.

**vlan** *vlan-list*: Specifies a space-separated list of up to 10 VLAN items. Each item specifies a VLAN by its ID or a range of VLANs in the form of *start-vlan-id to end-vlan-id*. The VLAN ID is in the range of 1 to 4094.

## Usage guidelines

You must enable MLD snooping for the specified VLANs before you execute this command.

You can specify the version for the specified VLANs in MLD-snooping view or for a VLAN in VLAN view. The VLAN-specific configuration has the same priority as the configuration in MLD-snooping view, and the most recent configuration takes effect.

## Examples

```
# Enable MLD snooping for VLAN 2 through VLAN 10, and specify MLD snooping version 2 for these VLANs.
```

```
<Sysname> system-view
[Sysname] mld-snooping
[Sysname-mld-snooping] enable vlan 2 to 10
[Sysname-mld-snooping] version 2 vlan 2 to 10
```

## Related commands

`enable` (MLD-snooping view)

`mld-snooping enable`

`mld-snooping version`