



# Multicast Configuration

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# igmp-snooping

To enable IGMP Snooping, use the **igmp-snooping** in the global configuration mode. To disable IGMP Snooping use the **no** form of the command.

**igmp-snooping**

**no igmp-snooping**

<b>Syntax Description</b>	<b>igmp-snooping</b> Enables IGMP Snooping.
<b>Command Default</b>	IGMP Snooping is enabled by default.
<b>Command Modes</b>	Interface configuration
<b>Examples</b>	<p>The following example shows how to enable IGMP Snooping.</p> <pre>Device(config)#igmp-snooping</pre>

## igmp-snooping drop

To configure a port to drop query or report packets, use the **igmp-snooping drop** command in the interface configuration mode. To configure the port to start receiving IGMP query or report packets, use the **no** form of the command.

**igmp-snooping drop** { **query** | **report** }

**no igmp-snooping drop**

<b>Syntax Description</b>	<b>query</b> Configures the port to drop IGMP query packets.
	<b>report</b> Configures the port to drop IGMP report packets.

<b>Command Default</b>	Packet dropping is not enabled by default.
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<b>Command Modes</b>	Interface configuration
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### Examples

The following example shows how to configure a port to drop query packets:

```
Device(config-if-ethernet-1/1)# igmp-snooping drop query
```

## igmp-snooping fast-leave

To remove the port directly from the multicast group upon receiving an IGMP Leave message, use the **igmp-snooping fast-leave** command in the interface configuration mode. To disable fast leave use the **no** form of the command.

**igmp-snooping fast-leave**

**no igmp-snooping fast-leave**

<b>Syntax Description</b>	<b>fast-leave</b> Removes the port directly from the multicast group upon receiving an IGMP Leave message
<b>Command Default</b>	Fast leave is not configured by default.
<b>Command Modes</b>	Interface configuration
<b>Examples</b>	<p>The following example shows how to configure fast leave:</p> <pre>Device(config-if-ethernet-1/1)#igmp-snooping fast-leave</pre>

## igmp-snooping group-limit action

To configure the action that the port will perform when it reaches the maximum number of multicast groups it can join, use the **igmp-snooping group-limit action** command in the interface configuration mode.

**igmp-snooping group-limit action** { **drop** | **replace** }

<b>Syntax Description</b>	<b>drop</b>	Drops the multicast group. This is the default action.
	<b>replace</b>	Replaces an old multicast group with the new group.

<b>Command Default</b>	When the group limit is reached, the new group is dropped.
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<b>Command Modes</b>	Interface configuration
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**Examples**

This example shows how to configure the port to drop new multicast groups when it reaches the group limit

```
Device(config-if-ethernet-1/1)#igmp-snooping group-limit action drop
```

## igmp-snooping group-limit

To configure the maximum number of multicast groups that an interface or a port can learn or join, use the **igmp-snooping group-limit** command in the interface configuration mode. To undo the limit on the maximum number of multicast groups that a port can join use the **no** form of the command.

**igmp-snooping group-limit** *number*

**no igmp-snooping group-limit**

---

**Syntax Description**

*number* Specifies the maximum number of multicast groups that a port can join. The range is 0-1024.

---

---

**Command Default**

No limit is configured by default.

---

**Command Modes**

Interface configuration

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**Examples**

The following examples shows how to configure a group limit of 100:

```
Device(config-if-ethernet-1/4)#igmp-snooping group-limit 100
```

# igmp-snooping general-query source-ip

To configure the source IP address for sending general query packets, use the **igmp-snooping general-query source-ip** command in the global configuration mode. To disable the source IP address for sending general query, use the **no** form of the command.

**igmp-snooping general-query source-ip***ip-address*

**no igmp-snooping general-query source-ip***ip-address*

Syntax Description	<i>ip-address</i> Configures the source IP address for sending general query packets.
--------------------	---

Command Default	None
-----------------	------

Command Modes	Global configuration
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**Examples**

The following example shows how to configure a source IP address for sending general query packets:

```
Device(config)# igmp-snooping general-query source-ip 192.168.1.2
```



## igmp-snooping host-aging-time

To configure the aging time of dynamic multicast members, use the **igmp-snooping host-aging-time** command in the global configuration mode. To disable aging time for dynamic multicast members use the **no** form of the command.

**igmp-snooping host-aging-time***time*

**no igmp-snooping host-aging-time**

<b>Syntax Description</b>	<i>time</i> Specifies the aging time for dynamic multicast members. The range is from 10-1000000 seconds. The default value is 300 seconds.
<b>Command Default</b>	The aging time is set to 300 seconds.
<b>Command Modes</b>	Global configuration
<b>Examples</b>	<p>The following example shows how to configure an aging time of 500 seconds:</p> <pre>Device(config)# <b>igmp-snooping host-aging-time 500</b></pre>

## igmp-snooping max-response-time

To configure the maximum waiting time for deleting group ports after receiving a leave packet, use the **igmp-snooping max-response-time** command in the global configuration mode. To disable a maximum waiting time use the **no** form of the command.

**igmp-snooping max-response-time** *time*

**no igmp-snooping max-response-time** *time*

### Syntax Description

*time* Configures the maximum waiting time for deleting group ports after receiving a leave packet. The range is from 1-100 seconds. The default value is 10 seconds.

### Command Default

The default maximum waiting time is 10 seconds.

### Command Modes

Global configuration

### Examples

The following example shows how to configure a maximum response time of 20 seconds:

```
Device(config)# igmp-snooping max-response-time 20
```

## igmp-snooping multicast vlan

To configure multicast VLAN for IGMP packets, use the **igmp-snooping multicast vlan** command in the interface configuration mode. To disable multicast VLAN for IGMP packets, use the **no** form of the command.

**igmp-snooping multicast vlan** *vlan-id*

**no igmp-snooping multicast vlan**

<b>Syntax Description</b>	<b>multicast vlan</b> Configures multicast VLAN for the IGMP packets on the port.
<b>Command Default</b>	None
<b>Command Modes</b>	Interface configuration

### Examples

The following example shows how to enable multicast VLAN for IGMP packets on VLANs 1-50:

```
Device(config-if-ethernet-1/1) # igmp-snooping multicast vlan 50
```

## igmp-snooping {permit|deny}

To configure the default learning rule for multicast groups that are not in the blocked list or the allowed list, use the **igmp-snooping {permit|deny}** command in the global configuration mode. By default, the learning rule for all multicast groups that are not in the blocked list or the allowed list is to learn all multicast groups.

**igmp-snooping {permit | deny} {group all | vlanvlan-id}**

<b>Syntax Description</b>	<b>permit</b>	Configures the list of groups that are permitted to join by IGMP snooping.
	<b>deny</b>	Configures the list of groups that are denied to join by IGMP snooping.
<b>Command Default</b>	Default is to learn all multicast groups that are not in the blocked list or the allowed list	
<b>Command Modes</b>	Global configuration	
<b>Examples</b>	<p>This example shows how to configure the rule to learn all multicast groups:</p> <pre>Device(config)#igmp-snooping permit group all</pre>	

# igmp-snooping profile refer

To configure a profile or a list of profiles as a reference for a port, use the **igmp-snooping profile refer** command in the interface configuration mode. You can disable the profile reference of a port using the **no** form of the command.

**igmp-snooping profile refer***profile-list*

**no igmp-snooping profile refer***profile-list*

<b>Syntax Description</b>	<i>profile-list</i> Configures a list of reference profiles for the port.
---------------------------	---

<b>Command Default</b>	None
------------------------	------

<b>Command Modes</b>	Interface configuration
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**Examples**

The following exaple shows how to create reference profile for the port:

```
Device(config-if) # igmp-snooping profile refer 1-5
```

# igmp-snooping profile

To create an IGMP Snooping profile, use the **igmp-snooping profile** command in the global configuration mode. To disable IGMP snooping profile use the **no** form of the command.

**igmp-snooping profile** *profile-id*

**no igmp-snooping profile**

<b>Syntax Description</b>	<i>profile-id</i> Functions as an identifier for an IGMP Snooping profile. The range is 1-128.
---------------------------	--

<b>Command Default</b>	IGMP Snooping profile is not enabled by default.
------------------------	--

<b>Command Modes</b>	Global configuration
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<b>Examples</b>	The following example shows how to create an IGMP Snooping profile:
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```
Device(config)# igmp-snooping profile 1
```

# igmp-snooping {permit|deny} group-range

To configure a port to learn (or not learn) a range of MAC addresses and VLAN ids, use the **igmp-snooping {permit|deny} group-range** command in the interface configuration mode.

**igmp-snooping { permit | deny } group-range** *MAC-address multi-count multi-count-number* **vlan** *vlan-list*

<b>Syntax Description</b>	<b>multi-count</b> <i>multi-count-number</i> Configures the number of MAC addresses in the group range.
---------------------------	---

<b>Command Default</b>	None
------------------------	------

<b>Command Modes</b>	Interface configuration
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## Examples

The following example shows how to permit a group range of MAC addresses and VLAN ids:

```
Device(config-if-ethernet-1/1)# igmp-snooping permit group-range 01:00:5e:09:08:07 multi-count
12 vlan 10
```

# igmp-snooping query-interval

To configure the interval for sending general query packets, use the **igmp-snooping query-interval** command in the global configuration mode.

**igmp-snooping query-interval** *interval*

<b>Syntax Description</b>	<i>interval</i> Configures the interval for sending general query packets. The range is from 1 to 30000 seconds.
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<b>Command Default</b>	None
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<b>Command Modes</b>	Global configuration
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<b>Examples</b>	The following example shows how to configure the IGMP Snooping query interval to 500 seconds:
-----------------	---

```
Device(config)# igmp-snooping query-interval 500
```



## igmp-snooping querier version

To configure the version of the IGMP Snooping querier, use the **igmp-snooping querier version** command in the global configuration mode. The IGMP snooping querier version is set to 2 by default.

**igmp-snooping querier version** *version-id*

---

### Syntax Description

*version-id* Configures the version of the IGMP Snooping querier. The range is 2-3. The default version is 2.

---

---

### Command Default

the querier is set to version 2 by default.

---

### Command Modes

Global configuration

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### Examples

The following example shows how to configure the IGMP Snooping querier version to version 3:

```
Device(config)# igmp-snooping querier version 3
```

## igmp-snooping querier-vlan

To configure VLANs for general query packets, use the **igmp-snooping querier-vlan** command in the global configuration mode. To disable VLANs for query packets use the **no** form of the command.

**igmp-snooping querier-vlan***vlan-list*

**no igmp-snooping querier-vlan***vlan-list*

<b>Syntax Description</b>	<b>querier-vlan</b> Configures a list of VLANs for general query packets.
---------------------------	---

<b>Command Default</b>	None
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<b>Command Modes</b>	Global configuration
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### Examples

The following example shows how to configure VLANs for the IGMP-Snooping querier:

```
Device(config)# igmp-snooping querier-vlan 1-50
```

## igmp-snooping query-max-respond

To configure the maximum response time for general query packets, use the **igmp-snooping query-max-respond** command in the global configuration mode. To disable a maximum response time, use the **no** form of the command.

**igmp-snooping query-max-respond** *time*

**no igmp-snooping query-max-respond** *time*

<b>Syntax Description</b>	<i>time</i> Configures the maximum response time for general query packets. The range is from 1 to 25 seconds.
---------------------------	--

<b>Command Default</b>	None
------------------------	------

<b>Command Modes</b>	Global configuration
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### Examples

The following example shows how to configure the maximum response time for general query packets to 10 seconds:

```
Device(config)# igmp-snooping query-max-respond 10
```

# igmp-snooping record-host

To enable recording the MAC address of the source of an IGMP report packet, use the **igmp-snooping record-host** command in the interface configuration mode. To disable the recording of the host MAC address, use the **no** form of the command.

**igmp-snooping record-host**

**no igmp-snooping record-host**

Syntax Description	<b>record-host</b> Enables recording the MAC address of the source of an IGMP report packet
--------------------	---

Command Default	recording is not enabled by default
-----------------	-------------------------------------

Command Modes	Interface configuration
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Examples	<p>The following example shows how to configure a port to record the host MAC address</p> <pre>Device(config-if-ethernet-1/1)# <b>igmp-snooping record-host</b></pre>
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## igmp-snooping router-port-age

To configure the ageing time for the dynamic route port, use the **igmp-snooping router-port-age** command in the global configuration mode. To disable ageing time for the dynamic route port, use the **no** form of the command.

**igmp-snooping router-port-age** { **on** | **off** | *age-time* }

**no igmp-snooping router-port-age** { **on** | **off** | *age-time* }

### Syntax Description

<b>on</b>	Starts router port age
<b>off</b>	Stops router port age.
<b>age-time</b>	Sets router port age time in seconds. The range is 10-1000000 seconds. The default value is 300 seconds.

### Command Default

The router port age is on by default.

### Command Modes

Global configuration

### Examples

The following example shows how to start the router port age:

```
Device(config)# igmp-snooping router-port-age on
```

## igmp-snooping route-port forward

To configure a dynamic route port to forward multicast traffic packets, use the **igmp-snooping route-port forward** command in the global configuration mode. To disable the route port from forwarding multicast traffic packets, use the **no** form of the command.

**igmp-snooping route-port forward**

**no igmp-snooping route-port forward**

<b>Syntax Description</b>	<b>forward</b> Configures the port to forward multicast traffic packets.
---------------------------	--

<b>Command Default</b>	None
------------------------	------

<b>Command Modes</b>	Global configuration
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### Examples

The following example shows how to configure a dynamic route port to forward multicast traffic packets:

```
Device(config)#igmp-snooping route-port forward
```

## igmp-snooping report-supression

To enable IGMP Snooping supression of multicast reports, use the **igmp-snooping report-supression** command in the global configuration mode. To disable the suppression of multicast reports, use the **no** form of the command.

**igmp-snooping report-supression**

**no igmp-snooping report-supression**

<b>Syntax Description</b>	<b>report-supression</b> Enables IGMP Snooping supression of multicast reports.
---------------------------	---

<b>Command Default</b>	Report supression is not enabled by default.
------------------------	--

<b>Command Modes</b>	Global configuration
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<b>Examples</b>	The following example shows how to enable IGMP Snooping report supression:
-----------------	--

```
Device(config)# igmp-snooping report-supression
```

## igmp-snooping route-port vlan

To configure a static route port, use the **igmp-snooping route-port vlan** command in the global configuration mode. You can disable the static route port by using the **no** form of the command.

**igmp-snooping route-port vlan** *vlan-id* **interface** { **all** | **channel-group** *channel-group-id* | **ethernet** *interface-number*

**no igmp-snooping route-port vlan** *vlan-id* **interface** { **all** | **channel-group** *channel-group-id* | **ethernet** *interface-number*

### Syntax Description

<i>channel-group-id</i>	Specifies the number of the channel group. The range is from 0-5.
<i>interface-number</i>	Specifies the ethernet interface number.

### Command Default

None.

### Command Modes

Global configuration

### Examples

The following examples shows how to configure all the ports of an interface as static route ports:

```
Device(config)# igmp-snooping route-port vlan 50 interface all
```



# ip range

To configure the range of IP addresses and VLAN IDs for an IGMP profile, use the **ip range** command in profile configuration mode.

**ip range** *start-ip-address end-ip-address* **vlan** *vlan-id*

<b>Syntax Description</b>	<i>start-ip-address</i>	Configures the start IP Address for the IGMP Snooping profile. The IP addresses range is from 224.0.0.1 to 239.255.255.254.
	<i>end-ip-address</i>	Configures the end IP Address for the IGMP Snooping profile. The IP addresses range is from 224.0.0.1 to 239.255.255.254.
	<i>vlan-id</i>	Configures the range of VLAN IDs for the IGMP Snooping profile. The VLAN id range is from 1 to 4094.

<b>Command Default</b>	None
	Profile configuration mode

**Examples**

The following example shows how to configure the range of IP addresses and VLAN ids for an IGMP Snooping profile.

```
Device(config-igmp-profile-1)# ip range 224.0.0.1 239.255.255.254 vlan 50
```

# mac range

To configure the range of MAC addresses and VLAN IDs for an IGMP profile, use the **mac range** command in profile configuration mode.

**mac range** *start-mac-address end-mac-address* **vlan** *vlan-id*

Syntax Description	<i>start-mac-address</i>	Configures the start MAC Address for the IGMP Snooping profile. The MAC addresses range is 01:00:5e:H:H:H. .
	<i>end-mac-address</i>	Configures the end MAC Address for the IGMP Snooping profile. The MAC addresses range is 01:00:5e:H:H:H.
	<i>vlan-id</i>	Configures the range of VLAN IDs for the IGMP Snooping profile. The VLAN id range is from 1 to 4094.

Command Default      None

Command Modes      Profile configuration

Examples

The following example shows how to configure the range of MAC addresses and VLAN ids for an IGMP Snooping profile.

```
Device (config-igmp-profile-1) # mac range 01:00:5e:09:08:07 01:00:5e:09:09:08 vlan 50
```

# multicast

To create a static multicast group, use the **multicast** command in the global configuration mode.

```
multicast { mac-address mac-address | ip-address ip-address } vlan vlan-id
```

Syntax Description	<i>ip-address</i>	Configures the static multicast IP address. It can only be in the format 224.x.x.x.
	<i>mac-address</i>	Configures the static multicast MAC address. It can only be in the format 01:00:5e:H:H:H.
	<i>vlan-id</i>	Configures the VLANs for the static multicast group.

**Command Default** Multicast group is not configured by default.

**Command Modes** Global configuration

The following example shows how to configure a static multicast group:

```
Device(config)# multicast ip-address 224.0.0.3 vlan 50
Adding multicast group successfully !
```

## multicast ds-tag add

To configure the ONT downlink multicast VLAN tag adding rule, use the **multicast ds-tag add** command in line profile configuration mode.

To disable the ONT uplink multicast VLAN tag adding rule, use the **no multicast ds-tag add** command.

**multicast ds-tag add** *vlan\_id* {*priority* | **port** *port\_id*}

**no multicast ds-tag port** *port\_id*

### Syntax Description

<i>vlan_id</i>	The VLAN ID The range is from 1 to 4094.
<i>priority</i>	The 802.1 priority value. The range is from 0 to 7.
<i>port_id</i>	The ONT Ethernet port ID. The range is from 1 to 24.

### Command Modes

Line profile configuration (deploy-profile-line)

### Examples

This example shows how to configure the ONT downlink multicast VLAN tag adding rule.

```
Device> enable
Device# configure terminal
Device(config)# deploy profile line
Device(deploy-profile-line)# aim 5
Device(deploy-profile-line-5)# multicast ds-tag add 3
```

# multicast ds-tag remove

To configure the ONT downlink multicast VLAN tag removing rule, use the **multicast ds-tag remove port** command in line profile configuration mode. To delete the ONT downlink multicast VLAN tag, use the **no multicast ds-tag port** command

**multicast ds-tag remove** [**port** *port\_id*]

**no multicast ds-tag** [**port** *port\_id*]

<b>Syntax Description</b>	<i>port_id</i>	The ONT Ethernet port ID. The range is from 1 to 24.
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<b>Command Modes</b>	Line profile configuration (deploy-profile-line)
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**Examples** This example shows how to configure the ONT downlink multicast VLAN tag removing rule.

```
Device> enable
Device# configure terminal
Device(config)# deploy profile line
Device(deploy-profile-line)# aim 5
Device(deploy-profile-line-5)# multicast ds-tag remove
```

# multicast ds-tag translate

To configure the ONT downlink multicast VLAN tag translating rule, use the **multicast ds-tag translate** command in line profile configuration mode.

**multicast ds-tag translate** *vlan\_id* [{*priority* | **port** *port\_id*}]

<b>Syntax Description</b>	<i>vlan_id</i>	The VLAN ID The range is from 1 to 4094.
	<i>priority</i>	The 802.1 priority value. The range is from 0 to 7.
	<i>port_id</i>	The ONT Ethernet port ID. The range is from 1 to 24.

**Command Modes** Line profile configuration (deploy-profile-line)

**Usage Guidelines** You must configure a device type.

**Examples** This example shows how to configure the ONT downlink multicast VLAN tag translating rule.

```
Device> enable
Device# configure terminal
Device(config)# deploy profile line
Device(deploy-profile-line)# aim 5
Device(deploy-profile-line-5)# multicast ds-tag translate 3
```

# multicast fast-leave disable

To disable fast-leave, use the **multicast fast-leave disable** command in global configuration mode.

**multicast fast-leave disable** [**port** *port\_id*]

**no multicast fast-leave disable** [**port** *port\_id*]

<b>Syntax Description</b>	<i>port_id</i>	The ONT Ethernet port ID. The range is from 1 to 24.
---------------------------	----------------	--

<b>Command Modes</b>	Line profile configuration (deploy-profile-line)
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<b>Examples</b>	<p>This example shows how to disable fast-leave on a port.</p> <pre> Device&gt; enable Device# configure terminal Device(config)# deploy profile line Device(deploy-profile-line)# aim 5 Device(deploy-profile-line-5)# multicast fast-leave disable                     </pre>
-----------------	---

## multicast group-limit

To configure the limit of multicast groups, use the **multicast group-limit** *limit\_number* command in line profile configuration mode. To disable the limit of multicast groups, use the **no multicast group-limit** *limit\_number* command.

**multicast group-limit** *limit\_number* [**port** *port\_id*]

**no multicast group-limit** *limit\_number* [**port** *port\_id*]

### Syntax Description

<i>limit_number</i>	The multicast group limit. The range is from 1 to 128.
<i>port_id</i>	The ONT Ethernet port ID. The range is from 1 to 24.

### Command Modes

Line profile configuration (deploy-profile-line)

### Examples

This example shows how to configure the limit of multicast groups.

```
Device> enable
Device# configure terminal
Device(config)# deploy profile line
Device(deploy-profile-line)# aim 5
Device(deploy-profile-line-5)# multicast group-limit 4
```



# multicast interface

To add a port to a static multicast group, use the **multicast interface** command in the global configuration mode.

**multicast** { **mac-address***mac-address* | **ip-address** *ip-address* } **vlan** *vlan-id* **interface** { **all** | *interface-list* }

Syntax Description	<i>all</i>	Adds all the ports of the interface to the static multicast group.
	<i>interface-list</i>	Adds the specified ports of the interface to the static multicast group.
Command Default	None.	
Command Modes	Global configuration	

The following example shows how to add all the ports of an interface to a static multicast group:

```
Device(config)# multicast ip-address 224.0.0.11
vlan 1 interface all
```

# multicast mode igmp-snooping

To enable Internet Group Management Protocol (IGMP) snooping, use the **multicast mode igmp-snooping** command in line profile configuration mode.

**multicast mode igmp-snooping** [**port** *port\_id*]

## Syntax Description

*port\_id*

The ONT Ethernet port ID. The range is from 1 to 24.

## Command Modes

Line profile configuration (deploy-profile-line)

## Examples

This example shows how to enable IGMP snooping on a port.

```
Device> enable
Device# configure terminal
Device(config)# deploy profile line
Device(deploy-profile-line)# aim 5
Device(deploy-profile-line-5)# multicast mode igmp-snooping port 10
```

# multicast proxy-interval

To configure the interval at which the device sends report packets to the multicast source through the proxy port, use the **multicast proxy-interval** command in the global configuration mode.

**multicast proxy-interval** *seconds*

<b>Syntax Description</b>	<b>proxy-interval</b>	Configures the interval at which the device sends report packets to the multicast source through the proxy port.
	<i>seconds</i>	Configures the proxy-interval in seconds. The range is from 1-300. The default is 10 seconds.
<b>Command Default</b>	The default interval is 10 seconds.	
<b>Command Modes</b>	Global configuration	

## Example

The following example shows how to configure the proxy-interval to 100 seconds

```
Device(config)# multicast proxy-interval 100
```

## multicast proxy-port

To configure a proxy-port for the static multicast group, use the **multicast proxy-port** command in the global configuration mode.

**multicast** { **mac-address** *mac-address* | **ip-address** *ip-address* } **vlan** *vlan-id* **proxy-port ethernet** *port-id*

<b>Syntax Description</b>	<b>proxy-port</b>	Configures a proxy port to send the multicast report to the multicast source.
	<i>port-id</i>	Configures the port that will act as the proxy port.
<b>Command Default</b>	None	
<b>Command Modes</b>	Global configuration	

The following example shows how to configure a proxy port for a static multicast group:

```
Device(config)# multicast ip-address 225.0.0.11 vlan 1 proxy-port ethernet 1/1
```

# multicast us-tag add

To configure the ONT uplink multicast VLAN tag adding rule, use the **multicast us-tag add** command in line profile configuration mode. To disable the ONT uplink multicast VLAN tag adding rule, use the **no multicast us-tag add** command.

**multicast us-tag add** *vlan\_id* {*priority* | **port** *port\_id*}

**no multicast us-tag** *port* *port\_id*

Syntax Description	<i>vlan_id</i>	The VLAN ID The range is from 1 to 4094.
	<i>priority</i>	The 802.1 priority value. The range is from 0 to 7.
	<i>port_id</i>	The ONT Ethernet port ID. The range is from 1 to 24.

**Command Modes** Line profile configuration (deploy-profile-line)

**Examples** This example shows how to configure the ONT uplink multicast VLAN tag adding rule

```
Device> enable
Device# configure terminal
Device(config)# deploy profile line
Device(deploy-profile-line)# aim 5
Device(deploy-profile-line-5)# multicast us-tag add 3
```

# multicast us-tag translate

To configure the ONT downlink multicast VLAN tag translating rule, use the **multicast us-tag translate** command in line profile configuration mode. To disable the ONT downlink multicast VLAN tag translating rule, use the **no multicast us-tag translate** command

**multicast us-tag translate** *vlan\_id* {*priority* | **port** *port\_id*}

**no multicast us-tag port** *port\_id*

## Syntax Description

<i>vlan_id</i>	The VLAN ID The range is from 1 to 4094.
<i>priority</i>	The 802.1 priority value. The range is from 0 to 7.
<i>port_id</i>	The ONT Ethernet port ID. The range is from 1 to 24.

## Command Modes

Line profile configuration (deploy-profile-line)

## Examples

This example shows how to configure the ONT uplink multicast VLAN tag translating rule.

```
Device> enable
Device# configure terminal
Device(config)# deploy profile line
Device(deploy-profile-line)# aim 5
Device(deploy-profile-line-5)# multicast us-tag translate 3
```

## profile limit

To configure the IGMP snooping profile type as a permit or deny profile, use the **profile limit** command in the profile configuration mode.

**profile limit** { **permit** | **deny** }

<b>Syntax Description</b>	<b>permit</b>	Configures a list of groups that are permitted by the IGMP Snooping profile.
	<b>deny</b>	Configures a list of groups that are denied by the IGMP Snooping profile.

<b>Command Default</b>	None
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<b>Command Modes</b>	Profile configuration
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<b>Examples</b>	The folloiwng example shows how to configure a permit type profile:
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```
Device(config-igmp-profile-1)# profile limit permit
```

# show igmp-snooping

To displays IGMP Snooping configurations, use the **show igmp-snooping** command in the EXEC mode.

## show igmp-snooping

<b>Syntax Description</b>	<b>igmp-snooping</b> Displays IGMP Snooping configurations.
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<b>Command Default</b>	None
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<b>Command Modes</b>	User EXEC Privileged EXEC
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## Examples

The following example shows the output from **show igmp-snooping** command on an interface where IGMP Snooping is enabled:

```
Device# show igmp-snooping
Enable IGMP-Snooping
Disable IGMP-Snooping report-suppression
The max response time is 10 second(s)
The host aging time is 300 second(s).
Disable IGMP-Snooping route-port forward
The Router port timeout is 300 second(s), Currently aging is running
Denied VLAN:
Black list:
NULL
White list:
NULL
Default group policy is permit
IGMP-Snooping Querier : ON
Querier vlan : 1
Querier Source IP 0.0.0.0 | Max Query Respond Time 10 sec | Query interval 60
sec | Igmp version 2
Port Information:
port  limit  action  fast-leave  mcast-vlan  igmp-profile  drop-type
p0/1  1024    drop    disabled    disabled    disabled      null
p0/2  1024    drop    disabled    disabled    disabled      null
p0/3  1024    drop    disabled    disabled    disabled      null
p0/4  1024    drop    disabled    disabled    disabled      null
p0/5  1024    drop    disabled    disabled    disabled      null
p0/6  1024    drop    disabled    disabled    disabled      null
p0/7  1024    drop    disabled    disabled    disabled      null
p0/8  1024    drop    disabled    disabled    disabled      null
e1/1  1024    drop    disabled    disabled    1             null
e1/2  1024    drop    disabled    disabled    disabled      null
e1/3  1024    drop    disabled    disabled    disabled      null
e1/4  1024    drop    disabled    disabled    disabled      null
e2/1  1024    drop    disabled    disabled    disabled      null
e2/2  1024    drop    disabled    disabled    disabled      null
```



# show igmp-snooping profile

To display the details of an IGMP Snooping profile, use the **show igmp-snooping profile** command in the EXEC mode.

**show igmp-snooping profile** {*profile-id* | **interface** *port-id* | **vlan** *vlan-id*}

<b>Syntax Description</b>	<i>profile-id</i>	Displays the details of the particular IGMP Snooping profile
	<i>port-id</i>	Displays the IGMP Snooping profile details for the port.
	<i>vlan-id</i>	Displays the IGMP Snooping profile details for the VLANs.
<b>Command Default</b>	None	
<b>Command Modes</b>	User EXEC Privileged EXEC	

## Examples

The following example displays the output of the **show igmp-snooping profile** command:

```
Device# show igmp-snooping profile 1

IGMP-Snooping profile 1
Profile description :
Profile limit       : permit
Profile referred    : e1/1.
start-address       end-address      vlan
224.0.0.1           239.255.255.254      any
Total ip range: 1, mac range: 0

Total profiles: 1, IP&MAC ranges: 1
```

# show igmp-snooping record-host

To display the MAC address of the record host, use the **show igmp-snooping record-host** command in the EXEC mode.

**show igmp-snooping record-host** [*interface-id*]

Syntax Description	<b>record-host</b>	Displays the MAC address of the record host.
	<i>interface-id</i>	Displays the MAC address of the record host for the interface.

Command Default      None

Command Modes      User EXEC  
Privileged EXEC

Examples      The following eample shows the output of the **show igmp-snooping record-host** command:

```
Device# show igmp-snooping record-host
show host record information
Total Record: 0
```

# show igmp-snooping router-dynamic

To display the dynamic route ports, use the **show igmp-snooping router-dynamic** command in the EXEC mode.

**show igmp-snooping router-dynamic**

<b>Syntax Description</b>	<b>router-dynamic</b> Displays the dynamic route ports.
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<b>Command Default</b>	None
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<b>Command Modes</b>	User EXEC Privileged EXEC
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## Examples

The following example shows the output from **show igmp-snooping router-dynamic** command on an interface where IGMP Snooping is enabled:

```
Device# show igmp-snooping router-dynamic
  Port      VID      Age      Type
  e1/3      100      237      { QUERY }
Total Record: 1
```

# show igmp-snooping router-static

To display the static route ports on an interface or an a multicast VLAN, use the **show igmp-snooping router-static** command in the EXEC mode.

```
show igmp-snooping router-static [interface { channel-group channel-group-id | ethernet port } | vlan
vlan-id]
```

Syntax Description	router-static	Displays the static router ports.
	channel-group-id	Displays the static ports for a LACP channel group. The range is 0-5.
	vlan-id	Displays the static ports for Multicast VLANs.

Command Default      None

Command Modes      User EXEC  
Privileged EXEC

Examples      The following example shows the output from **show igmp-snooping router-static** command on an interface where IGMP SNooping is enabled:

```
Device# show igmp-snooping router-static interface channel-group 1
  Port      VID      Age      Type
Total Record: 0
```

# show multicast igmp-snooping

To display igmp-snooping multicast table information, use the **show multicast igmp-snooping** command in the EXEC mode.

```
show multicast igmp-snooping {interfaceinterface-id | ip-address ip-address}
```

Syntax Description	<i>interface-id</i>	Displays the IGMP Snooping multicast table for the interface.
	<i>ip-address</i>	Displays the IGMP Snooping multicast table for the IP address.

Command Default	None
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Command Modes	User EXEC
	Privileged EXEC

Examples

The following example displays the output of the **show multicast igmp snooping** command for an interface:

```
Device# show multicast igmp-snooping interface ethernet 1/1
show igmp-snooping multicast table information Total Record: 0
```

# show ont multicast

To display information about the multicast learning table on an ONT, use the **show ont multicast** command in privileged EXEC or global configuration mode.

**show ont multicast** *slot-num/pon-num/ont-num* [**port** *port-id* ]

Syntax Description	<i>slot-num/pon-num/ont-num</i>	The ONT ID. <ul style="list-style-type: none"><li>• <i>slot-num</i>: The slot number. The value is 0.</li><li>• <i>pon-num</i>: The PON number. The range is from 1 to 8.</li><li>• <i>ont-num</i>: The ONT number. The range is from 1 to 128.</li></ul>
	<i>port-id</i>	The ONT Ethernet port ID. The range is from 1 to 24.

Command Modes	Privileged EXEC (#) Global configuration (config)
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**Examples**

This example shows how to view the information about the multicast learning table on an ONT.

```
Device> enable
Device# configure terminal
Device(config)# show ont multicast 0/1/1
```