

# IGMP-SNOOPING Configuration Commands

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## Chapter 1 IGMP-SNOOPING Configuration Commands

IGMP-SNOOPING configuration commands include:

- ip igmp-snooping
- ip igmp-snooping static
- ip igmp-snooping immediate-leave
- ip igmp-snooping dlf-frames
- ip igmp-snooping router age
- ip igmp-snooping response time
- ip igmp-snooping querier
- show ip igmp-snooping
- show ip igmp-snooping timer
- show ip igmp-snooping groups
- show ip igmp-snooping statistics
- debug ip igmp-snooping packet
- debug ip igmp-snooping timer

### 1.1.1 igmp-snooping

#### Description

To enable the IGMP-snooping of VLAN, use the ip igmp-snooping command. Use the no form of this command to restore the default.

**ip igmp-snooping [ vlan *vlan\_id* ]**

**no ip igmp-snooping [ vlan *vlan\_id* ]**

#### Parameter

Parameter	Description
<i>vlan id</i>	VLAN identity. Value is from 1 to 4094.

**Default**

disabled

**Instruction**

If not specified the vlan parameter, this command enable or disable all vlans in the system (IGMP-snooping currently can be ran on 16 vlans at most at the same time.)

**Example**

The following command enables IGMP snooping of vlan 1:

```
switch(config)# ip igmp-snooping vlan 1
switch(config)#
```

**1.1.2 igmp-snooping static****Description**

**ip igmp-snooping vlan *vlan\_id* static *A.B.C.D* interface *intf***

**no ip igmp-snooping vlan *vlan\_id* static *A.B.C.D* interface *intf***

**Parameter**

Parameter	Description
<i>vlan id</i>	VLAN identity. Value is from 1 to 4094.
<i>A.B.C.D</i>	Specifies the IP address of multicast
<i>intf</i>	Specifies the interface

**Default**

None

**Instruction**

Use this command to configure the static multicast address of vlan. Use the no form of this command to delete the address.

**Example**

The following command adds the static multicast address at 234.5.6.7 to the fast ethernet interface 5 of vlan 2:

```
switch(config)# ip igmp-snooping vlan 2 static 234.5.6.7 interface FastEthernet0/5
switch(config)#
```

**N o t e :**

224.0.0.0-224.0.0.255, as the multicast address which cannot be routed, cannot be registered to each interface.

### 1.1.3 igmp-snooping immediate-leave

#### Description

To configure the immediate-leave characteristic of vlan, use the ip igmp-snooping vlan command. Use the no form of this command to restore the default value.

**ip igmp-snooping vlan *vlan\_id* immediate-leave**

**no ip igmp-snooping vlan *vlan\_id* immediate-leave**

#### Parameter

Parameter	Description
<i>vlan id</i>	VLAN identity。 Value is from 1 to 4094。

#### Default

disabled

#### Instruction

None

#### Example

The following command enables immediate-leave characteristic of vlan 1:

```
switch(config)# ip igmp-snooping vlan 1 immediate-leave
switch(config)#
```

### 1.1.4 igmp-snooping dlf-frames

#### Description

**ip igmp-snooping dlf-frames *filter***

**no ip igmp-snooping dlf-frames**

**Parameter**

Parameter	Description
<i>filter</i>	Filters for the multicast packets of the unregistered address

**Default**

None

**Instruction**

Use this command to configure filter mode for the multicast packets of the unregistered destination address. Use the no form of this command to restore the default configuration( broadcasting in vlan)

**Example**

The following example configures to drop multicast packets of the unregistered destination address in all vlans:

```
switch(config)# ip igmp-snooping dlf-frames filter
switch(config)#
```

**1.1.5 igmp-snooping router age****Description**

**ip igmp-snooping timer router-age *timer\_value***

**no ip igmp-snooping timer router-age *timer\_value***

**Parameter**

Parameter	Description
<i>time value</i>	Query timer time. Value is from 10 to 2147483647 .

**Default**

260 seconds

**Instruction**

Use this command to configure query timer time. Use the no form of this command to restore the default value.

## Example

The following example configures router-age to 300 seconds

```
switch(config)# ip igmp-snooping timer router-age 300
```

```
switch(config)#
```

### 1.1.6 igmp-snooping response time

## Description

To configure the maximum response time of IGMP-snooping, use IGMP-snooping command. Use the no form of this command to restore the default value.

**ip igmp-snooping timer response-time** *timer\_value*

**no ip igmp-snooping timer response-time** *timer\_value*

## Parameter

Parameter	Description
<i>time value</i>	Query timer time . Value is from 1 to 255.

## Default

10 seconds

## Instruction

None

## Example

The following example configures response-time to 20 seconds:

```
switch(config)# ip igmp-snooping timer response-time 20
```

```
switch(config)#
```

### 1.1.7 igmp-snooping querier

## Description

To activate IGMP-snooping querier mechanism or configure the source ip address of the spontaneous query packets. Use the no form of this command to restore the default value.

**ip igmp-snooping querier** [**address** *<ip\_addr>*]

**no ip igmp-snooping querier [address <ip\_addr>]**

### Parameter

Parameter	Description
<i>ip_addr</i>	The common unicast IP address

### Default

disabled, the default source IP address is 10.0.0.200.

### Instruction

None

### Example

The following command activates IGMP querier:

```
switch(config)# ip igmp-snooping querier
switch(config)#
```

## 1.1.8 show ip igmp-snooping

### Description

**show ip igmp-snooping**

### Parameter

None

### Default

None

### Instruction

Use this command to show configuration information of IGMP-snooping.

### Example

The following example shows the vlan information of the running ipmp-snooping:



```
switch(config)# show ip igmp-snooping
igmp-snooping router age:260 s
igmp-snooping response time:10 s
  vlan 1
  -----
  running
  Router: 90.0.0.120(F0/2)
switch(config)#
```

### 1.1.9 show ip igmp-snooping timer

#### Description

**show ip igmp-snooping timer**

#### Parameter

None

#### Default

None

#### Instruction

Use this command to show timer information of IGMP.

#### Example

The following example shows timer information of igmp-snooping:

```
switch(config)# show ip igmp-snooping timer
vlan 1 router age : 246
switch(config)#
```

### 1.1.10 show ip igmp-snooping groups

#### Description

**show ip igmp-snooping groups**

#### Parameter

None

**Default**

None

**Instruction**

Use this command to configure multicast group information of IGMP-snooping.

**Example**

The following example shows the multicast group information of igmp-snooping:

```
switch(config)# show ip igmp-snooping groups
Vlan Source          Group                Type Port(s)
-----
1 0.0.0.0            234.5.6.6           IGMP F0/2
1 0.0.0.0            239.255.255.250    IGMP F0/2
switch(config)#
```

**1.1.11 show ip igmp-snooping statistics****Description**

**show ip igmp-snooping statistics**

**Parameter**

None

**Default**

None

**Instruction**

Use this command to show IGMP-snooping statistics.

**Example**

The following example shows igmp-snooping statistics:

```
switch(config)# show ip igmp-snooping statistics
vlan 1
-----
v1_packets:1
v2_packets:2
```

```
v3_packets:0
general_query_packets:1
special_query_packets:2
join_packets:0
leave_packets:0
send_query_packets:0
err_packets:0
switch(config)#
```

### 1.1.12 debug ip igmp-snooping packet

#### Description

**debug ip igmp-snooping packet**

**no debug ip igmp-snooping packet**

#### Parameter

None

#### Default

None

#### Instruction

Use this command to enable/disable the packet debugging switch of IGMP-snooping.

#### Example

The following command enables the packet debugging switch of igmp-snooping:

```
switch(config)# debug ip igmp-snooping packet
switch(config)#
```

### 1.1.13 debug ip igmp-snooping timer

#### Description

**debug ip igmp-snooping timer**

**no debug ip igmp-snooping timer**

**Parameter**

None

**Default**

None

**Instruction**

Use this command to enable/disable the timer debugging switch of IGMP-snooping

**Example**

The following example enables timer debugging switch of igmp-snooping:

```
switch(config)# debug ip igmp-snooping timer
switch(config)#
```