IGMP-SNOOPING Configuration Commands

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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
vlan id	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
vlan id	VLAN identity。Value is from 1 to 4094。
A.B.C.D	Specifies the IP address of multicast
inft	Specifies the interface

Default

None

Instruction

Use this command to configurethe 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
vlan id	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
filter	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
time value	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
time value	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
ip_addr	Tthe common unicast IP address

Default

disabled，the default source IP address is 10.0.0.200。

Instruction

None

Example

The following command activates IGMP quirier:

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 followig 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)#