



IGMP Snooping Command Reference

This chapter describes commands used to configure Internet Group Management Protocol (IGMP) snooping.

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ip igmp snooping

To enable Internet Group Management Protocol (IGMP) snooping, use the **ip igmp snooping** command in the bridge domain configuration mode. To disable IGMP snooping, use the **no** form of this command.

ip igmp snooping

no ip igmp snooping

Syntax Description

This command has no arguments or keywords.

Command Default

IGMP snooping is not enabled.

Command Modes

Bridge domain configuration (config-bdomain)

Command History

Release	Modification
9.3.0	This command was introduced.

Usage Guidelines

On a CPT system, IGMP snooping can be configured at the bridge domain level.

Following configuration restrictions are applicable while configuring the IGMP snooping on the CPT system:

- For a single tagged packet, the tag is removed using the rewrite ingress tag pop 1 symmetric command at the EFP level.
- For a double tagged packet, the tag is removed using the rewrite ingress tag pop 2 symmetric command at the EFP level.
- For an untagged packet, a rewrite operation is not required.

Examples

The following example shows how to enable IGMP snooping on a bridge domain:

```
Router(config)# bridge-domain 30
Router(config-bdomain)# ip igmp snooping
```

Related Commands

Command	Description
show ip igmp snooping	Displays the IGMP snooping configuration.

ip igmp snooping immediate-leave

To enable Internet Group Management Protocol (IGMP) Immediate-Leave processing on a bridge-domain, use the **ip igmp snooping immediate-leave** command in global configuration mode. To disable Immediate-Leave processing on the bridge domain, use the **no** form of this command.

ip igmp snooping immediate-leave

no ip igmp snooping immediate-leave

Syntax Description

This command has no arguments or keywords.

Command Default

By default, IGMP Immediate-Leave processing is disabled.

Command Modes

Bridge domain configuration (config-bdomain)

Command History

Release	Modification
9.3.0	This command was introduced.

Usage Guidelines

The Immediate Leave feature is supported only on IGMP version 2 hosts.

Examples

The following example shows how to enable IGMP Immediate Leave feature for bridge-domain130:

```
Router# configure terminal
Router(config)# bridge-domain 130
Router(config-bdomain)# ip igmp snooping immediate-leave
Router(config-bdomain)# end
```

Related Commands

Command	Description
ip igmp snooping	Enables IGMP snooping on the bridge domain.
ip igmp snooping mrouter	Configures a multicast router port.

ip igmp snooping mrouter

To configure a port as a multicast router port, use the **ip igmp snooping mrouter** command in the service-instance configuration mode. To remove the configuration, use the **no** form of this command.

ip igmp snooping mrouter

no ip igmp snooping mrouter

Syntax Description

This command has no arguments or keywords.

Command Default

Disabled

Command Modes

Service-instance configuration (config-if-srv)

Command History

Release	Modification
9.3.0	This command was introduced.

Usage Guidelines

Static connections to multicast routers are supported only at the EFP.

Examples

The following example shows how to enable a static connection to a multicast router:

```
Router(config)# interface TenGigabitEthernet4/2
Router(config-if)# service instance 20 ethernet
Router(config-if-srv)# encapsulation dot1q 10
Router(config-if-srv)# rewrite ingress tag pop 1 symmetric
Router(config-if-srv)# bridge-domain 20
Router(config-if-srv)# ip igmp snooping mrouter
```

The following example shows how to disable a static connection to a multicast router:

```
Router(config)# interface TenGigabitEthernet4/2
Router(config-if)# service instance 20 ethernet
Router(config-if-srv)# no ip igmp snooping mrouter
```

Related Commands

Command	Description
ip igmp snooping	Enables IGMP snooping on the bridge domain.
show ip igmp snooping mrouter	Displays the information about the dynamically learned and manually configured multicast router interfaces.

ip igmp snooping report-suppression

To turn on IP IGMP snooping report suppression, use the **ip igmp snooping report-suppression** command in the bridge domain configuration mode. To turn off report suppression, use the **no** form of this command.

ip igmp snooping report-suppression

no ip igmp snooping report-suppression

Syntax Description

This command has no arguments or keywords.

Command Default

Disabled

Command Modes

Bridge domain configuration (config-bdomain)

Command History

Release	Modification
9.3.0	This command was introduced.

Usage Guidelines

IGMP report suppression is supported only when the multicast query has IGMPv1 and IGMPv2 reports. This feature is not supported when the query includes IGMPv3 reports.

Examples

The following example shows how to re-enable IGMP report suppression for bridge-domain 130:

```
Router# configure terminal
Router(config-bdomain) # bridge-domain 130
Router(config-bdomain) # ip igmp snooping report-suppression
Router(config-bdomain) # end
```

Related Commands

Command	Description
show ip igmp snooping	Displays the IGMP snooping configuration.

show ip igmp snooping

To display the Internet Group Management Protocol (IGMP) snooping configuration of a device, use the **show ip igmp snooping** command in the privileged EXEC mode.

show ip igmp snooping [**groups** [**count** | **vlan** *bridge-domain ID* [*ip-address* | **count** | **dynamic** [**count**] | **user** [**count**]]]] | **mrouter** [**vlan** *bridge-domain ID*] **querier** | **vlan** *bridge-domain ID*]

Syntax Description

groups	(Optional) Displays group information.
count	(Optional) Displays the number of multicast groups learned by IGMP snooping.
vlan <i>bridge-domain ID</i>	(Optional) Specifies a bridge domain. <i>bridge-domain ID</i> — Bridge domain ID. Valid values are from 1 to 16384.
<i>ip-address</i>	(Optional) Displays information about the specified group.
count	(Optional) Displays the group count inside a bridge domain.
dynamic	(Optional) Displays dynamic entries learned through IGMP snooping.
count	(Optional) Displays the number of dynamic entries.
user	(Optional) Displays only the user-configured multicast entries.
count	(Optional) Displays the number of user-configured multicast entries.
mrouter	(Optional) Displays information about dynamically learned and manually configured multicast router ports.
querier	(Optional) Displays IGMP querier information.

Command Default

This command has no default settings.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
9.3.0	This command was introduced.

Examples

The following example displays the output of the **show ip igmp snooping** [**vlan** *bridge-domain ID*] command.

```
Router# show ip igmp sn vlan 2
```

Global IGMP Snooping configuration:

```

-----
IGMP snooping Oper State      : Enabled
IGMPv3 snooping (minimal)    : Enabled
Report suppression           : Enabled
TCN solicit query            : Disabled
Robustness variable          : 2
Last member query count       : 2
Last member query interval    : 1000
Check TTL=1                  : No
Check Router-Alert-Option     : No

```

Vlan 2

```

-----
IGMP snooping Admin State      : Enabled
IGMP snooping Oper State      : Enabled
IGMPv2 immediate leave        : Disabled
Report suppression            : Enabled
Robustness variable           : 2
Last member query count        : 2
Last member query interval     : 1000
Check TTL=1                   : Yes
Check Router-Alert-Option      : Yes
Query Interval                 : 0
Max Response Time              : 10000

```

The following example displays the output of the **show ip igmp snooping groups** command.

Router# **show ip igmp snooping groups**

Flags: I -- IGMP snooping, S -- Static, P -- PIM snooping, A -- ASM mode

Vlan	Group/source	Type	Version	Port List
2	224.1.1.1	I	v2	Te7/4 Te5/2
	Gi41/1 Gi41/44 Gi51/1 Gi51/44	Te4/2		

The following example displays the output of the **show ip igmp snooping groups vlan** command.

Router# **show ip igmp snooping groups vlan 2**

Flags: I -- IGMP snooping, S -- Static, P -- PIM snooping, A -- ASM mode

Vlan	Group/source	Type	Version	Port List
2	224.1.1.1	I	v2	Te7/4 Te5/2
	Gi41/1 Gi41/44 Gi51/1 Gi51/44	Te4/2		

The following example displays the output of the **show ip igmp snooping groups vlan *bridge-domain ID* [*ip address*]** command.

Router# **show ip igmp snooping groups vlan 2 224.1.1.1**

Flags: I -- IGMP snooping, S -- Static, P -- PIM snooping, A -- ASM mode

Vlan	Group/source	Type	Version	Port List
2	224.1.1.1	I	v2	Te7/4 Te5/2
	Gi41/1 Gi41/44 Gi51/1 Gi51/44	Te4/2		

The following example displays the output of the **show ip igmp snooping mrouter** command.

```
Router# show ip igmp snooping mrouter
```

```
Vlan      ports
-----
  2       Te4/4 (dynamic)
```

The following example displays the output of the **show ip igmp snooping mrouter vlan 2** command.

```
Router# show ip igmp snooping mrouter
```

```
Vlan      ports
-----
  2       Te4/4 (dynamic)
```

Related Commands

Command	Description
ip igmp snooping	Enables IGMP snooping on the bridge domain.
ip igmp snooping immediate-leave	Enables IGMP snooping immediate leave.
ip igmp snooping mrouter	Configures a multicast router port.

show ip igmp snooping querier

To display information about the IP address and the receiving port for the recently received IGMP query messages, use the **show ip igmp snooping querier** command.

show ip igmp snooping querier [*vlan bridge-domain ID*] [**detail**]

Syntax Description

vlan <i>bridge-domain ID</i>	(Optional) Specifies a bridge domain. <i>bridge-domain ID</i> — Bridge domain ID. Valid values are from 1 to 16384.
detail	Specifies the configuration and operational state of the IGMP snooping querier in the bridge domain.

Command Default

This command has no default settings.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
9.3.0	This command was introduced.

Examples

The following example shows the output of the **show ip igmp snooping querier** command.

```
Router# show ip igmp snooping querier
```

Vlan	IP Address	IGMP Version	Port
2	10.10.10.1	v2	Te4/4

The following example shows the output of the **show ip igmp snooping querier** [*vlan bridge-domain ID*] command.

```
Router# show ip igmp snooping querier vlan 2
```

IP address	: 10.10.10.1
IGMP version	: v2
Port	: Te4/4
Max response time	: 10s

Related Commands

Command	Description
ip igmp snooping	Enables IGMP snooping on the bridge domain.

Command	Description
ip igmp snooping mrouter	Configures a multicast router port.