



I Commands

This chapter describes the Cisco NX-OS IGMP snooping commands that begin with I.

ip igmp snooping (Global)

To enable IGMP snooping for the current virtual device configuration (VDC), use the **ip igmp snooping** command. To disable IGMP snooping for the current VDC, 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 Enabled

Command Modes Global configuration mode

SupportedUserRoles network-admin
vdc-admin

| Command History | Release | Modification |
|-----------------|-------------|------------------------------|
| | 6.0(2)N1(1) | This command was introduced. |

Usage Guidelines If the global configuration of IGMP snooping is disabled, then all VLANs are treated as disabled, whether they are enabled or not.

This command does not require a license.

Examples This example shows how to enable IGMP snooping for the current VDC:

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

This example shows how to disable IGMP snooping for the current VDC:

```
switch(config)# no ip igmp snooping
switch(config)#
```

| Related Commands | Command | Description |
|------------------|------------------------------|-------------------------------------|
| | show ip igmp snooping | Displays IGMP snooping information. |

ip igmp snooping (VLAN)

To enable IGMP snooping on specified VLAN interfaces, use the **ip igmp snooping** command. To disable IGMP snooping on the interface, 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 Enabled

Command Modes VLAN configuration mode

Supported User Roles network-admin
vdc-admin

| Command History | Release | Modification |
|-----------------|-------------|------------------------------|
| | 6.0(2)N1(1) | This command was introduced. |

Usage Guidelines If the global configuration of IGMP snooping is disabled, then all VLANs are treated as disabled, whether they are enabled or not.

This command does not require a license.

Examples This example shows how to enable IGMP snooping on a VLAN interface:

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

This example shows how to disable IGMP snooping on a VLAN interface:

```
switch(config)# vlan 1
switch(config-vlan)# no ip igmp snooping
switch(config-vlan)#
```

| Related Commands | Command | Description |
|------------------|------------------------------|-------------------------------------|
| | show ip igmp snooping | Displays IGMP snooping information. |

ip igmp snooping event-history

To configure the size of the IGMP snooping event history buffers, use the **ip igmp snooping event-history** command. To revert to the default buffer size, use the **no** form of this command.

```
ip igmp snooping event-history {igmp-snoop-internal | mfdm | mfdm-sum | rib | vlan | vlan-events | vpc} size buffer-size
```

```
no ip igmp snooping event-history {igmp-snoop-internal | mfdm | mfdm-sum | rib | vlan | vlan-events | vpc} size buffer-size
```

| Syntax Description | | |
|----------------------------|--|---|
| igmp-snoop-internal | | Clears the IGMP snooping internal event history buffer. |
| mfdm | | Clears the multicast FIB distribution (MFDM) event history buffer. |
| mfdm-sum | | Clears the MFDM sum event history buffer. |
| rib | | Clears the Routing Information Base (RIB) event history buffer. |
| vlan | | Clears the VLAN event history buffer. |
| vlan-events | | Clears the VLAN-event event history buffer. |
| vpc | | Clears the virtual port channel (vPC) event history buffer. |
| size | | Specifies the size of the buffer to allocate. |
| <i>buffer-size</i> | | Buffer size that is one of the following values: disabled , large , medium , or small . The default buffer size is small . |

Command Default All history buffers are allocated as small.

Command Modes Global configuration mode

Supported User Roles

- network-admin
- network-operator
- vdc-admin
- vdc-operator

| Command History | Release | Modification |
|-----------------|-------------|------------------------------|
| | 6.0(2)N1(1) | This command was introduced. |

Usage Guidelines This command does not require a license.

Examples This example shows how to configure the IGMP snooping VLAN event history buffer size:

```
switch(config)# ip igmp snooping event-history vlan size large
```

```
switch(config)#
```

Related Commands

| Command | Description |
|---|---|
| clear ip igmp snooping event-history | Clears the contents of the IGMP snooping event history buffers. |
| show ip igmp snooping event-history | Displays information in the IGMP snooping event history buffers. |
| show running-config igmp | Displays information about the IGMP running-system configuration. |

ip igmp snooping explicit-tracking

To enable tracking of IGMPv3 membership reports from individual hosts for each port on a per-VLAN basis, use the **ip igmp snooping explicit-tracking** command. To disable tracking, use the **no** form of this command.

ip igmp snooping explicit-tracking

no ip igmp snooping explicit-tracking

Syntax Description This command has no arguments or keywords.

Command Default Enabled

Command Modes VLAN configuration mode

Supported User Roles network-admin
vdc-admin

| Command History | Release | Modification |
|-----------------|-------------|------------------------------|
| | 6.0(2)N1(1) | This command was introduced. |

Usage Guidelines This command does not require a license.

Examples This example shows how to enable tracking of IGMPv3 membership reports on a VLAN interface:

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

This example shows how to disable IGMP snooping on a VLAN interface:

```
switch(config)# vlan 1
switch(config-vlan)# no ip igmp snooping explicit-tracking
switch(config-vlan)#
```

| Related Commands | Command | Description |
|------------------|------------------------------|-------------------------------------|
| | show ip igmp snooping | Displays IGMP snooping information. |

ip igmp snooping fast-leave

To enable support of IGMPv2 hosts that cannot be explicitly tracked because of the host report suppression mechanism of the IGMPv2 protocol, use the **ip igmp snooping fast-leave** command. To disable support of IGMPv2 hosts, use the **no** form of this command.

ip igmp snooping fast-leave

no ip igmp snooping fast-leave

Syntax Description This command has no arguments or keywords.

Command Default Disabled

Command Modes VLAN configuration mode

SupportedUserRoles network-admin
vdc-admin

| Command History | Release | Modification |
|-----------------|-------------|------------------------------|
| | 6.0(2)N1(1) | This command was introduced. |

Usage Guidelines When you enable fast leave, the IGMP software assumes that no more than one host is present on each VLAN port.

This command does not require a license.

Examples This example shows how to enable support of IGMPv2 hosts:

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

This example shows how to disable support of IGMPv2 hosts:

```
switch(config)# vlan 1
switch(config-vlan)# no ip igmp snooping fast-leave
switch(config-vlan)#
```

| Related Commands | Command | Description |
|------------------|------------------------------|-------------------------------------|
| | show ip igmp snooping | Displays IGMP snooping information. |

ip igmp snooping last-member-query-interval

To configure a query interval in which the software removes a group, use the **ip igmp snooping last-member-query-interval** command. To reset the query interval to the default, use the **no** form of this command.

ip igmp snooping last-member-query-interval *interval*

no ip igmp snooping last-member-query-interval [*interval*]

| | |
|---------------------------|---|
| Syntax Description | <i>interval</i> Query interval in seconds. The range is from 1 to 25. The default is 1. |
|---------------------------|---|

| | |
|------------------------|--------------------------|
| Command Default | The query interval is 1. |
|------------------------|--------------------------|

| | |
|----------------------|-------------------------|
| Command Modes | VLAN configuration mode |
|----------------------|-------------------------|

| | |
|---------------------------|----------------------------|
| SupportedUserRoles | network-admin vdc-admin |
|---------------------------|----------------------------|

| Command History | Release | Modification |
|------------------------|----------------|------------------------------|
| | 6.0(2)N1(1) | This command was introduced. |

| | |
|-------------------------|--|
| Usage Guidelines | This command does not require a license. |
|-------------------------|--|

| | |
|-----------------|---|
| Examples | This example shows how to configure a query interval in which the software removes a group: |
|-----------------|---|

```
switch(config)# vlan 1
switch(config-vlan)# ip igmp snooping last-member-query-interval 3
switch(config-vlan)#
```

This example shows how to reset a query interval to the default:

```
switch(config)# vlan 1
switch(config-vlan)# no ip igmp snooping last-member-query-interval
switch(config-vlan)#
```

| Related Commands | Command | Description |
|-------------------------|------------------------------|-------------------------------------|
| | show ip igmp snooping | Displays IGMP snooping information. |

ip igmp snooping link-local-groups-suppression

To enable suppression of IGMP reports from link-local groups, use the **ip igmp snooping link-local-groups-suppression** command. To disable suppression of these reports, use the **no** form of this command.

ip igmp snooping link-local-groups-suppression

no ip igmp snooping link-local-groups-suppression

Syntax Description This command has no arguments or keywords.

Command Default Enabled

Command Modes Global configuration mode
VLAN configuration mode

SupportedUserRoles network-admin
vdc-admin

| Command History | Release | Modification |
|-----------------|-------------|------------------------------|
| | 6.0(2)N1(1) | This command was introduced. |

Usage Guidelines If this setting is disabled on the entire device, then it is disabled on all VLANs on device, irrespective of the specific VLAN setting.

This command does not require a license.

Examples This example shows how to enable suppression of IGMP reports from link-local groups:

```
switch(config)# vlan 1
switch(config-vlan)# ip igmp snooping link-local-groups-suppression
switch(config-vlan)#
```

This example shows how to disable suppression of IGMP reports from link-local groups:

```
switch(config)# vlan 1
switch(config-vlan)# no ip igmp snooping link-local-groups-suppression
switch(config-vlan)#
```

| Related Commands | Command | Description |
|------------------|------------------------------|-------------------------------------|
| | show ip igmp snooping | Displays IGMP snooping information. |

ip igmp snooping mrouter interface

To configure a static connection to a multicast router, use the **ip igmp snooping mrouter interface** command. To remove the static connection, use the **no** form of this command.

ip igmp snooping mrouter interface {**ethernet** *slot/port* | **port-channel** *number* [*.sub_if_number*]}

no ip igmp snooping mrouter interface {**ethernet** *slot/port* | **port-channel** *number* [*.sub_if_number*]}

Syntax Description

| | |
|--------------------------------------|--|
| ethernet <i>slot/port</i> | (Optional) Specifies the Ethernet interface and the slot number and port number. The slot number is from 1 to 255, and the port number is from 1 to 128. |
| port-channel <i>number</i> | (Optional) Specifies the EtherChannel interface and EtherChannel number. The range is from 1 to 4096. |
| <i>sub_if_number</i> | (Optional) Subinterface number. The range is from 1 to 4093. |

Command Default

None

Command Modes

VLAN configuration mode

Supported User Roles

network-admin
vdc-admin

Command History

| Release | Modification |
|-------------|------------------------------|
| 6.0(2)N1(1) | This command was introduced. |

Usage Guidelines

The interface to the router must be in the selected VLAN.
This command does not require a license.

Examples

This example shows how to configure a static connection to a multicast router:

```
switch(config)# vlan 1
switch(config-vlan)# ip igmp snooping mrouter interface ethernet 2/1
switch(config-vlan)#
```

This example shows how to remove a static connection to a multicast router:

```
switch(config)# vlan 1
switch(config-vlan)# no ip igmp snooping mrouter interface ethernet 2/1
switch(config-vlan)#
```

Related Commands

| Command | Description |
|------------------------------|-------------------------------------|
| show ip igmp snooping | Displays IGMP snooping information. |

ip igmp snooping mrouter vpc-peer-link

To configure a static connection to a virtual port channel (vPC) peer link, use the **ip igmp snooping mrouter vpc-peer-link** command. To remove the static connection, use the **no** form of this command.

ip igmp snooping mrouter vpc-peer-link

no ip igmp snooping mrouter vpc-peer-link

Syntax Description This command has no arguments or keywords.

Command Default None

Command Modes Global configuration mode

| Command History | Release | Modification |
|-----------------|-------------|------------------------------|
| | 6.0(2)N1(1) | This command was introduced. |

Usage Guidelines By default, the vPC peer-link is considered as a multicast router port and the multicast packet is sent to the peer-link for each receiver VLAN.

To send the multicast traffic over a vPC peer-link to each receiver VLAN that does not have orphan ports, use the **no ip igmp snooping mrouter vpc-peer-link** command.

By default, a vPC Peer-link is considered an IGMP snooping mrouter port. The multicast traffic is sent over to a peer-link for the source VLAN and for each receiving VLAN. If you use the **no ip igmp snooping mrouter vpc-peer-link** command, the multicast traffic is not sent over to a peer-link for the source VLAN and receiver VLAN unless there are orphan ports in the VLAN.

This command does not require a license.

Examples This example shows how to configure a static connection to a vPC peer link:

```
switch(config)# ip igmp snooping mrouter vpc-peer-link
switch(config)#
```

This example shows how to remove a static connection to a vPC peer link:

```
switch(config)# no ip igmp snooping mrouter vpc-peer-link
Warning: IGMP Snooping mrouter vpc-peer-link should be globally disabled on peer
VPC switch as well.
switch(config)#
```

Related Commands

| Command | Description |
|------------------------------|-------------------------------------|
| show ip igmp snooping | Displays IGMP snooping information. |

ip igmp snooping optimise-multicast-flood

To configure Optimized Multicast Flood (OMF) on all VLANs, use the **ip igmp snooping optimise-multicast-flood** command. To remove the OMF from all VLANs, use the **no** form of this command.

ip igmp snooping optimise-multicast-flood

no ip igmp snooping optimise-multicast-flood

Syntax Description This command has no arguments or keywords.

Command Default None

Command Modes Global configuration mode

| Command History | Release | Modification |
|-----------------|-------------|------------------------------|
| | 6.0(2)N1(1) | This command was introduced. |

Usage Guidelines This command does not require a license.

Examples This example shows how to configure OMF on all VLANs:

```
switch(config)# ip igmp snooping optimise-multicast-flood
switch(config)#
```

This example shows how to remove OMF from all VLANs:

```
switch(config)# no ip igmp snooping optimise-multicast-flood
switch(config)#
```

| Related Commands | Command | Description |
|------------------|------------------------------|-------------------------------------|
| | show ip igmp snooping | Displays IGMP snooping information. |

ip igmp snooping querier

To configure a snooping querier on an interface when you do not enable Protocol Independent Multicast (PIM) because multicast traffic does not need to be routed, use the **ip igmp snooping querier** command. To remove the snooping querier, use the **no** form of this command.

ip igmp snooping querier *querier*

no ip igmp snooping querier [*querier*]

| | | |
|-----------------------------|---|-------------------------------------|
| Syntax Description | <i>querier</i> | Querier IP address. |
| Command Default | None | |
| Command Modes | VLAN configuration mode | |
| Supported User Roles | network-admin vdc-admin | |
| Command History | Release | Modification |
| | 6.0(2)N1(1) | This command was introduced. |
| Usage Guidelines | The querier IP address cannot be a multicast address. This command does not require a license. | |
| Examples | <p>This example shows how to configure a snooping querier:</p> <pre>switch(config)# vlan 1 switch(config-vlan)# ip igmp snooping querier 172.20.52.106 switch(config-vlan)#</pre> <p>This example shows how to disable IGMP snooping on a VLAN interface:</p> <pre>switch(config)# vlan 1 switch(config-vlan)# no ip igmp snooping querier switch(config-vlan)#</pre> | |
| Related Commands | Command | Description |
| | show ip igmp snooping | Displays IGMP snooping information. |

ip igmp snooping report-suppression

To enable limiting the membership report traffic sent to multicast-capable routers, use the **ip igmp snooping report-suppression** command. To disable the limitation, 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 Enabled

Command Modes Global configuration mode
VLAN configuration mode

SupportedUserRoles network-admin
vdc-admin

| Command History | Release | Modification |
|-----------------|-------------|--------------------------------------|
| | 6.0(2)N1(1) | This command was introduced. |
| | 4.0(3) | Global configuration mode was added. |

Usage Guidelines When you disable report suppression, all IGMP reports are sent as is to multicast-capable routers. This command does not require a license.

Examples This example shows how to enable limiting the membership report traffic:

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

This example shows how to disable limiting the membership report traffic:

```
switch(config)# vlan 1
switch(config-vlan)# no ip igmp snooping report-suppression
switch(config-vlan)#
```

| Related Commands | Command | Description |
|------------------|------------------------------|-------------------------------------|
| | show ip igmp snooping | Displays IGMP snooping information. |

ip igmp snooping static-group

To configure a Layer 2 port of a VLAN as a static member of a multicast group, use the **ip igmp snooping static-group** command. To remove the static member, use the **no** form of this command.

```
ip igmp snooping static-group group [source source] interface {ethernet slot/port | port-channel
number[.sub_if_number]}
```

```
no ip igmp snooping static-group group [source source] interface {ethernet slot/port |
port-channel number[.sub_if_number]}
```

| Syntax Description | |
|-----------------------------------|---|
| <i>group</i> | Group IP address. |
| source <i>source</i> | (Optional) Configures a static (S, G) channel for the source IP address. |
| interface | Specifies an interface for the static group. |
| ethernet <i>slot/port</i> | Specifies the Ethernet interface and the slot number and port number. The slot number is from 1 to 255, and the port number is from 1 to 128. |
| port-channel <i>number</i> | Specifies the EtherChannel interface and EtherChannel number. The range is from 1 to 4096. |
| <i>sub_if_number</i> | (Optional) Subinterface number. The range is from 1 to 4093. |

Command Default None

Command Modes VLAN configuration mode

Supported User Roles network-admin
vdc-admin

| Command History | Release | Modification |
|-----------------|-------------|------------------------------|
| | 6.0(2)N1(1) | This command was introduced. |

Usage Guidelines This command does not require a license.

Examples This example shows how to configure a static member of a multicast group:

```
switch(config)# vlan 1
switch(config-vlan)# ip igmp snooping static-group 230.0.0.1 interface ethernet 2/1
switch(config-vlan)#
```

This example shows how to remove a static member of a multicast group:

```
switch(config)# vlan 1
switch(config-vlan)# no ip igmp snooping static-group 230.0.0.1 interface ethernet 2/1
```

ip igmp snooping static-group

```
switch(config-vlan) #
```

Related Commands

| Command | Description |
|------------------------------|-------------------------------------|
| show ip igmp snooping | Displays IGMP snooping information. |

ip igmp snooping v3-report-suppression (Global)

To configure IGMPv3 report suppression and proxy reporting for VLANs on the entire device, use the **ip igmp snooping v3-report-suppression** command. To remove IGMPv3 report suppression, use the **no** form of this command.

ip igmp snooping v3-report-suppression

no ip igmp snooping v3-report-suppression

Syntax Description This command has no arguments or keywords.

Command Default Disabled

Command Modes Global configuration mode

SupportedUserRoles network-admin
vdc-admin

| Command History | Release | Modification |
|-----------------|-------------|------------------------------|
| | 6.0(2)N1(1) | This command was introduced. |

Usage Guidelines This command does not require a license.

Examples This example shows how to configure IGMPv3 report suppression and proxy reporting for VLANs:

```
switch(config)# ip igmp snooping v3-report-suppression
```

This example shows how to remove IGMPv3 report suppression:

```
switch(config)# no ip igmp snooping v3-report-suppression
```

| Related Commands | Command | Description |
|------------------|------------------------------|-------------------------------------|
| | show ip igmp snooping | Displays IGMP snooping information. |

ip igmp snooping v3-report-suppression (VLAN)

To configure IGMPv3 report suppression and proxy reporting for VLANs, use the **ip igmp snooping v3-report-suppression** command. To remove IGMPv3 report suppression, use the **no** form of this command.

ip igmp snooping v3-report-suppression

no ip igmp snooping v3-report-suppression

Syntax Description This command has no arguments or keywords.

Command Default Enabled

Command Modes VLAN configuration mode

SupportedUserRoles network-admin
vdc-admin

| Command History | Release | Modification |
|-----------------|-------------|------------------------------|
| | 6.0(2)N1(1) | This command was introduced. |

Usage Guidelines If this setting is disabled for the device, which is the default value, then it is disabled for all VLANs, irrespective of how you set this value for an individual VLAN. However, once you set the global setting to enabled, the settings for all the VLANs are enabled by default.

This command does not require a license.

Examples This example shows how to configure IGMPv3 report suppression and proxy reporting for specified VLANs:

```
switch(config)# vlan 10-20
switch(config-vlan)# ip igmp snooping v3-report-suppression
```

This example shows how to remove IGMPv3 report suppression on specified VLANs:

```
switch(config)# vlan 10-20
switch(config-vlan)# no ip igmp snooping v3-report-suppression
```

| Related Commands | Command | Description |
|------------------|------------------------------|-------------------------------------|
| | show ip igmp snooping | Displays IGMP snooping information. |