

IGMP Proxy Commands

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ip igmp-proxy

To add downstream interfaces to an IGMP proxy tree, use the **ip igmp-proxy** command in Interface Configuration mode. To remove downstream from interfaces to an IGMP proxy tree, use the **no** form of this command.

Syntax

ip igmp-proxy *upstream-interface-id*

no ip igmp-proxy

Parameters

- ***upstream-interface-id***—Upstream Interface identifier.

Default Configuration

The protocol is disabled on the interface.

Command Mode

Interface Configuration mode

User Guidelines

Use the **ip igmp-proxy** command to add downstream interfaces to an IGMP proxy tree. If the proxy tree does not exist it is created.

Use the **no** format of the command to remove the downstream interface. When the last downstream interface is removed from the proxy tree it is deleted too.

Example 1. The following example adds a downstream interface to an IGMP Proxy process with vlan 200 as its Upstream interface:

```
switchxxxxxx(config)# interface vlan 100
switchxxxxxx(config-if)# ip igmp-proxy vlan 200
switchxxxxxx(config-if)# exit
```

Example 2. The following example adds a range of downstream interfaces to an IGMP Proxy process with vlan 200 as its Upstream interface:

```
switchxxxxxx(config)# interface range vlan 100-105
switchxxxxxx(config-if)# ip igmp-proxy vlan 200
switchxxxxxx(config-if)# exit
```

ip igmp-proxy downstream protected

To disable forwarding of IP Multicast traffic from downstream interfaces, use the **ip igmp-proxy downstream protected** command in Global Configuration mode. To allow forwarding from downstream interfaces, use the **no** form of this command.

Syntax

ip igmp-proxy downstream protected

no ip igmp-proxy downstream protected

Parameters

This command has no arguments or keywords.

Default Configuration

Forwarding from downstream interfaces is allowed.

Command Mode

Global Configuration mode

User Guidelines

Use the **ip igmp-proxy downstream protected** command to block forwarding from downstream interfaces.

Example

The following example prohibits forwarding from downstream interfaces:

```
switchxxxxxx(config)# ip igmp-proxy downstream protected
```

ip igmp-proxy downstream protected interface

To disable or enable forwarding of IP Multicast traffic from a given downstream interface, use the **ip igmp-proxy downstream protected interface** command in Interface Configuration mode. To return to default, use the **no** form of this command.

Syntax

ip igmp-proxy downstream protected interface {enabled | disabled}

no ip igmp-proxy downstream protected interface

Parameters

- **enabled**—Downstream interface protection on the interface is enabled. IPv4 Multicast traffic arriving on the interface will not be forwarded.
- **disabled**—Downstream interface protection on the interface is disabled. IPv4 Multicast traffic arriving on the interface will be forwarded.

Default Configuration

Global downstream protection configuration (see the **ip igmp-proxy downstream protected** command)

Command Mode

Interface Configuration mode

User Guidelines

Use the **ip igmp-proxy downstream protected interface disabled** command to block forwarding from the given downstream interface.

Use the **ip igmp-proxy downstream protected interface enabled** command to allow forwarding from the given downstream interface.

The command can be configured only for a downstream interface. When a downstream interface is removed from the IGMP Proxy tree the configuration is removed too.

Example

The following example prohibits forwarding from downstream interface vlan 100:

```
switchxxxxxx(config)# interface vlan100
switchxxxxxx(config-if)# ip igmp-proxy downstream protected interface enabled
switchxxxxxx(config-if)# exit
```

ip igmp-proxy ssm

To define the Source Specific Multicast (SSM) range of IP Multicast addresses, use the **ip igmp-proxy ssm** command in Global Configuration mode. To disable the SSM range, use the **no** form of this command.

Syntax

ip igmp-proxy ssm {**default** | **range** *access-list*}

no ip igmp-proxy ssm

Parameters

- **default**—Defines the SSM range access list to 232.0.0.0/8 (see rfc4607).
- **range** *access-list*—Specifies the standard IP access list name defining the SSM range.

Default Configuration

The command is disabled.

Command Mode

Global Configuration mode

User Guidelines

A new **ip igmp-proxy ssm** command overrides the previous **ip igmp-proxy ssm** command.

Use the **no ip igmp-proxy ssm** command to remove all defined ranges.

Example

The following example shows how to configure SSM service for the default IP address range and the IP address ranges defined by access list **list1**:

```
switchxxxxxx(config)# ip access-list list1 permit 224.2.151.0/24
switchxxxxxx(config)# ip access-list list1 deny 224.2.152.141
switchxxxxxx(config)# ip access-list list1 permit 224.2.152.0/24
switchxxxxxx(config)# ip igmp-proxy ssm range list1
```

show ip igmp-proxy interface

To display information about interfaces configured for IGMP Proxy, use the **show ip igmp-proxy interface** command in User EXEC mode or Privileged EXEC mode.

Syntax

show ip igmp-proxy interface [*interface-id*]

Parameters

- ***interface-id***—(Optional) Display IGMP Proxy information about the interface.

Command Mode

User EXEC mode

Privileged EXEC mode

User Guidelines

The **show ip igmp-proxy interface** command is used to display all interfaces where the IGMP Proxy is enabled or to display the IGMP Proxy configuration for a given interface.

Example 1. The following example displays IGMP Proxy status on all interfaces where the IGMP Proxy is enabled:

```
switchxxxxxx# show ip igmp-proxy interface
```

* - the switch is the Querier on the interface

```
IP Forwarding is enabled
IP Multicast Routing is enabled
IGMP Proxy is enabled
Global Downdtream interfaces protection is disabled
SSM Access List Name:list1
Interface  Type         Interface Protection
 vlan 100  upstream
*vlan 102  downstream   enabled
*vlan 110  downstream   default
 vlan 113  downstream   disabled
```

Example 2. The following is sample output from the **show ip igmp-proxy interface** command for given upstream interface:

```
switchxxxxxx# show ip igmp-proxy interface vlan 100
```

* - the switch is the Querier on the interface

```
IP Forwarding is enabled
IP Multicast Routing is enabled
IGMP Proxy is enabled
Global Downdtream interfaces protection is disabled
SSM Access List Name:
IP Multicast Tarffic Discarding from Downdtream interfaces is disabled
vlan 100 is a Upstream interface
Downstream interfaces:
 *vlan 102, *vlan 110, vlan 113
```

Example 3. The following is sample output from the **show ip igmp-proxy interface** command for given downstream interface:

```
switchxxxxxx# show ip igmp-proxy interface vlan 102
IP Forwarding is enabled
IP Multicast Routing is enabled
IGMP Proxy is enabled
Global Downdtream interfaces protection is disabled
vlan 102 is a Downstream interface
The switch is the Querier on vlan 102
Downsteam Interface protection is enabled
SSM Access List Name: default
Upstream interface: vlan 100
```

Example 4. The following is sample output from the **show ip igmp-proxy interface** command for an interface on which IGMP Proxy is disabled:

```
switchxxxxxx# show ip igmp-proxy interface vlan 1
IP Forwarding is enabled
IP Multicast Routing is enabled
IGMP Proxy is disabled
```