# **Configure Multicast Properties on a Switch**

## Objective

Multicast forwarding enables one-to-many information dissemination. Multicast applications are useful for dissemination of information to multiple clients, where clients do not require reception of the entire content. A typical application is a cable-TV-like service, where clients can join a channel in the middle of a transmission, and leave before it ends.

The data is sent only to relevant ports. Forwarding the data only to the relevant ports conserves bandwidth and host resources on links.

By default, all Multicast frames are flooded to all ports of the Virtual Local Area Network (VLAN). It is possible to selectively forward only to relevant ports and filter (drop) the Multicast on the rest of the ports by enabling the Bridge Multicast filtering status on the switch.

This article explains how to enable multicast filtering and to define the way by which IPv6 and IPv4 address type multicast frames are forwarded on the switch.

### **Applicable Devices**

- Sx250 Series
- Sx300 Series
- Sx350 Series
- SG350X Series
- Sx500 Series
- Sx550X Series

#### **Software Version**

- 1.4.7.06 Sx300, Sx500
- 2.2.8.04 Sx250, Sx350, SG350X, Sx550X

#### **Configure Multicast Properties**

Step 1. Log in to the web-based utility of your switch then choose **Advanced** in the Display Mode drop-down list.

**Note:** The available menu options may vary depending on the device model. In this example, SG350X-48MP is used.



Note: If you have an Sx300 or Sx500 Series switch, skip to Step 2.

#### <u>Step 2</u>. Choose **Multicast > Properties**.

<ul> <li>Multicast</li> </ul>	
Properties	
MAC Group Address	
IP Multicast Group Address	
<ul> <li>IPv4 Multicast Configuration</li> </ul>	
IGMP Snooping	
IGMP Interface Settings	
IGMP VLAN Settings	
IGMP Proxy	
IPv6 Multicast Configuration	
IGMP/MLD Snooping IP Multicast Group	
Multicast Router Port	
Forward All	
Unregistered Multicast	

Step 3. Check the **Enable** check box in the Bridge Multicast Filtering Status field to enable filtering.



Step 4. Choose the desired VLAN ID from the VLAN ID drop-down list for which multicast frame forwarding is to be defined.



**Note:** In this example, VLAN 30 is chosen but the drop-down list will only contain previously created VLAN IDs.

Step 5. Click one of the following radio buttons in the Forwarding Method for IPv6 field to define the way that IPv6 multicast frames are forwarded.

- MAC Group Address Frame forwarding is done by the destination Media Access Control (MAC) address.
- IP Group Address Frame forwarding is done by the destination IP address.
- Source Specific IP Group Address Frame forwarding is done by both the source IP address and the destination IP address.

Forwarding Method for IPv6:

MAC Group Address IP Group Address Source Specific IP Group Address

Note: In this example, MAC Group Address is chosen.

Step 6. Click one of the following radio buttons in the *Forwarding Method for IPv4* field to define the way that IPv4 multicast frames are forwarded.

Forwarding Method for IPv4:

MAC Group Address IP Group Address Source Specific IP Group Address

- MAC Group Address Frame forwarding is done by the destination MAC address.
- IP Group Address Frame forwarding is done by the destination IP address.

• Source Specific IP Group Address — Frame forwarding is done by both the source IP address and the destination IP address.

Note: In this example, MAC Group Address is chosen.

Step 7. Click **Apply** to save the changes.



Step 8. (Optional) Click Save to save the configured settings to the startup configuration file.

Port Gigabit PoE S	Save cisco Language: English 🗘	
Properties		
Success. To permanently save the configuration, go to the File Operations page or		
Bridge Multicast Filtering Status: 🗹 Enable		
VLAN ID:	30 🛊	
Forwarding Method for IPv6:	MAC Group Address     IP Group Address     Source Specific IP Group Address	
Forwarding Method for IPv4:	<ul> <li>MAC Group Address</li> <li>IP Group Address</li> <li>Source Specific IP Group Address</li> </ul>	
Apply Cancel		

You should now have successfully configured the Multicast properties on your switch.