

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

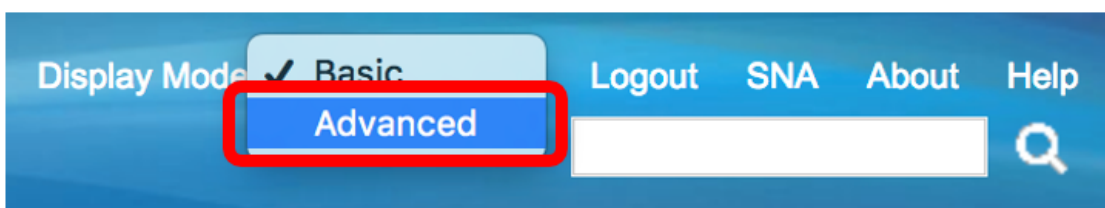
Software Version

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

Configure Multicast Properties

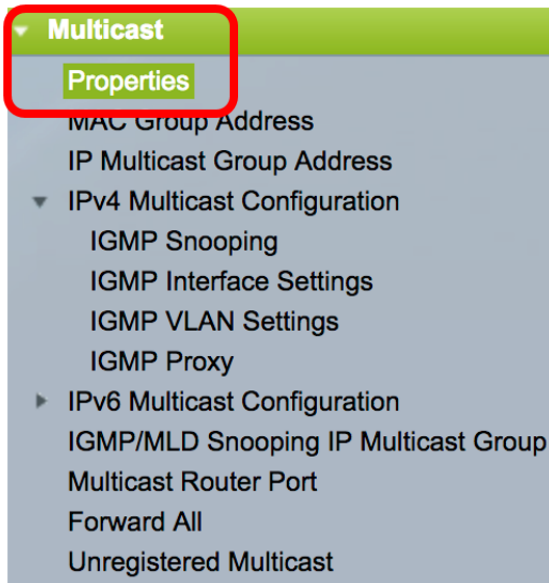
Step 1. Log in to the web-based utility of your switch then choose **Advanced** in the Display Mode drop-down list.

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

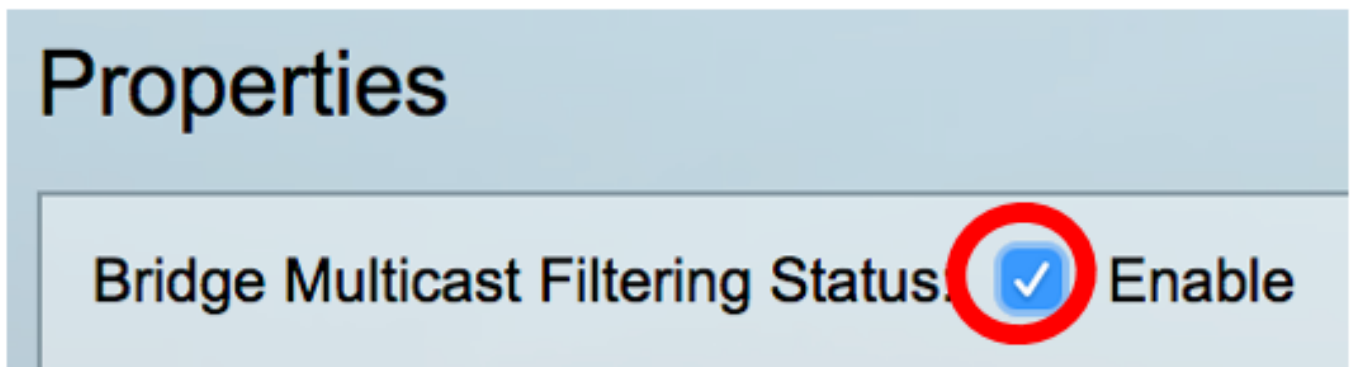


Note: If you have an Sx300 or Sx500 Series switch, skip to [Step 2](#).

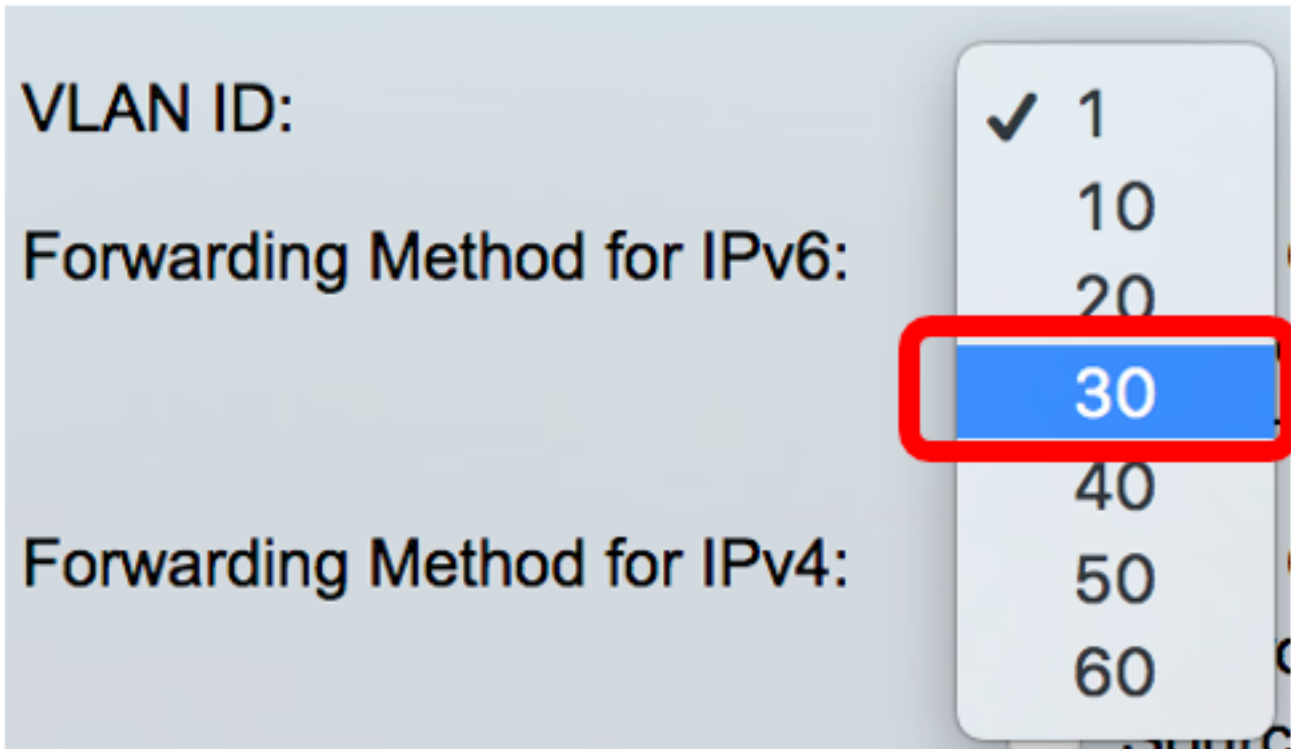
[Step 2.](#) Choose **Multicast > Properties**.



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.



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.



- 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.

The screenshot shows a configuration window titled "Properties". At the top, it says "Bridge Multicast Filtering Status: Enable". Below this, there is a "VLAN ID:" field with a dropdown menu set to "30". Underneath, there are two sections for "Forwarding Method". The first section is for IPv6, and the second is for IPv4. In both sections, the "MAC Group Address" radio button is selected, while "IP Group Address" and "Source Specific IP Group Address" are unselected. At the bottom of the window, there are two buttons: "Apply" and "Cancel". The "Apply" button is highlighted with a red rectangular box.

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

The screenshot shows the top part of the configuration page. At the top right, there is a "Save" button with a red 'x' icon, highlighted with a red rectangular box. Below it, the text "Cisco Language: English" is visible. The main heading is "24-Port Gigabit PoE Stackable Managed Switch". Below the heading, the "Properties" section is visible. A green checkmark icon is followed by the text: "Success. To permanently save the configuration, go to the [File Operations](#) page or". Below this, the configuration options for Bridge Multicast Filtering are shown, identical to the previous screenshot. At the bottom, the "Apply" and "Cancel" buttons are visible.

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