

Configure Customer Port Multicast TV Virtual Local Area Network (VLAN) Membership on a Switch

Objective

A Virtual Local Area Network (VLAN) allows you to logically segment a Local Area Network (LAN) into different broadcast domains. In scenarios where sensitive data may be broadcast on a network, VLANs can be created to enhance security by designating a broadcast to a specific VLAN. Only users that belong to a VLAN are able to access and manipulate the data on that VLAN. VLANs can also be used to enhance performance by reducing the need to send broadcasts and multicasts to unnecessary destinations.

Multicast TV VLANs enable multicast transmissions to subscribers who are not on the same data VLAN without replicating the multicast transmission frames for each subscriber VLAN. Subscribers who are not on the same data VLAN and are connected to the device with different VLAN ID membership can share the same multicast stream by joining the ports to the same Multicast VLAN ID.

Port Multicast VLAN Membership connects a port configured for customer services to a Multicast TV VLAN. Configuration of Customer Port Multicast TV VLAN Membership helps maintain security by separating the transmissions between the source and receiver. Multicast VLAN configuration enables multicast traffic from a source VLAN to be shared with subscriber VLAN.

This article provides instructions on how to configure Customer Port Multicast VLAN Membership on a switch.

Note: To know how to map multicast groups to VLANs, click [here](#) for instructions.

If you are unfamiliar with terms in this document, check out [Cisco Business: Glossary of New Terms](#).

Applicable Devices

- Sx350 Series
- SG350X Series
- Sx500 Series
- Sx550X Series

Software Version

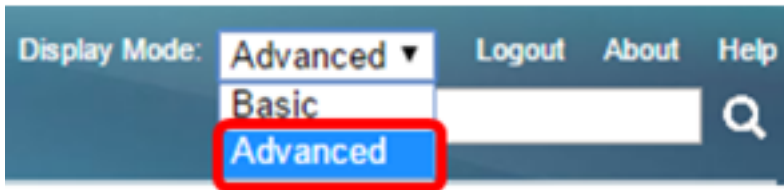
- 1.4.7.05 – Sx500 Series
- 2.2.5.68 – Sx350 Series, SG350X Series, Sx550X Series

Configure Customer Port to Multicast VLAN Membership on the Switch

Add a Customer Port to a Multicast TV VLAN

Step 1

Log into the web-based utility and choose **Advanced** from the Display Mode drop-down list.



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

[Step 2](#)

. Choose **VLAN Management > Customer Port Multicast TV VLAN > Port Multicast VLAN Membership**.



Step 3

Choose a Multicast TV VLAN from the Multicast TV VLAN drop-down list.

Port Multicast VLAN Membership

Multicast TV VLAN:

Interface Type:

Candidate Customer: Member Customer Ports:

GE30

GE31

GE32

>

<

Note: In this example, VLAN 20 is chosen.

Step 4

Choose an interface type from the Interface Type drop-down list.

Multicast TV VLAN:

Interface Type:

Candidate Customer: Member Customer Ports:

The options are:

- Unit — The unit ID of unit (active, member, or standby) in the stack and number of ports available in it will be displayed in the Candidate Access Ports area.
- LAG — The several ports of the switch are combined to form a single group called a Link Aggregation Group (LAG). If this option is chosen, the available LAGs will be displayed in the Candidate Access Ports area.

Note: In this example, Port of Unit 1 is chosen.

Step 5

The Candidate Customer Ports list contains all customer ports configured on the device. Choose an interface then click the > button to move the ports to the Member Customer Ports area.

Note: To learn how to configure VLAN interface settings on a switch, click [here](#) for instructions.

Multicast TV VLAN:

Interface Type:

Candidate Customer Ports:
GE31
GE32

Member Customer Ports:

Note: In this example, GE30 is chosen.

Step 6

Click **Apply** to save the configured settings in the running configuration file.

Multicast TV VLAN:

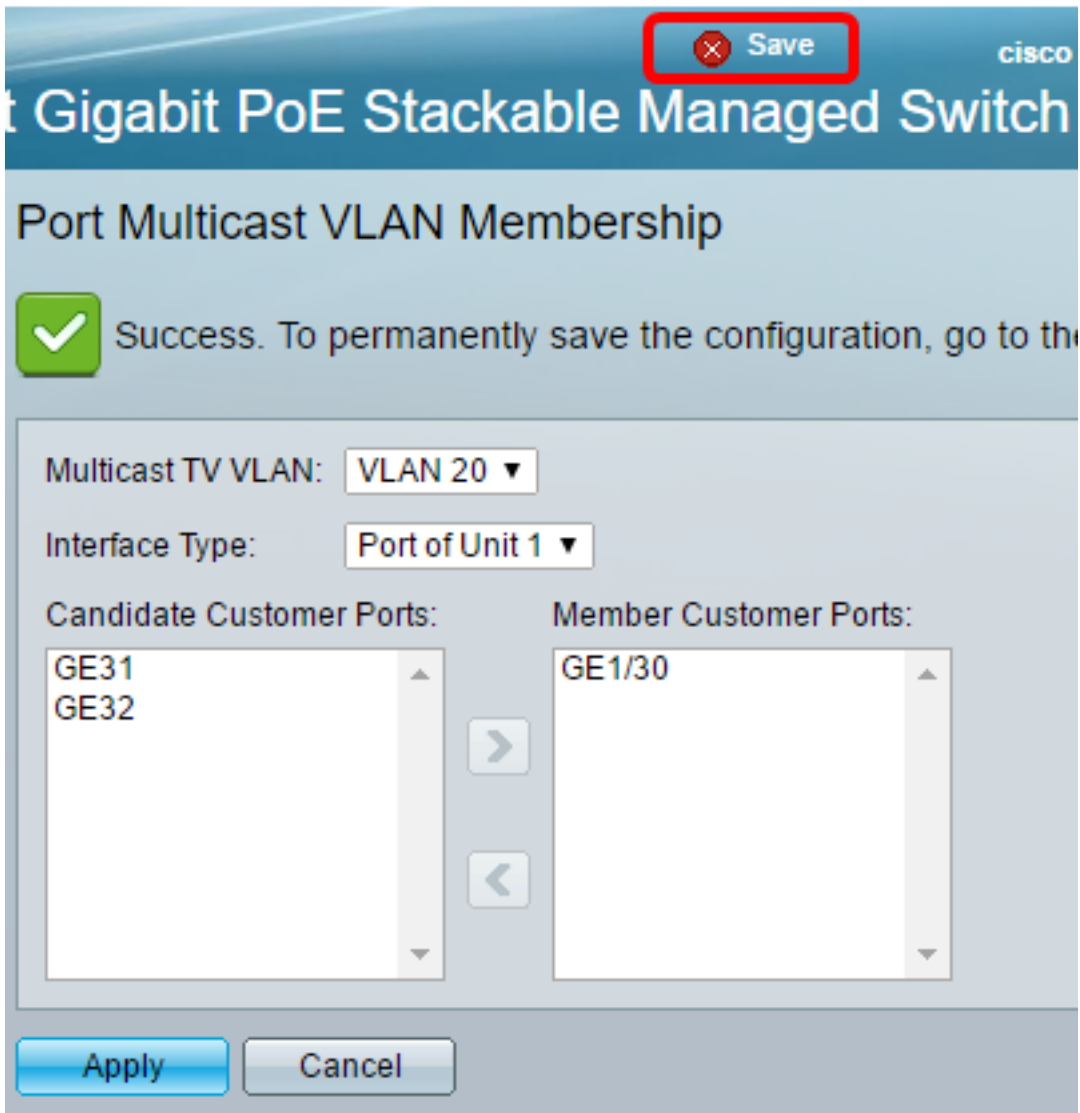
Interface Type:

Candidate Customer Ports:
GE32

Member Customer Ports:

Step 7 (Optional)

Click **Save** to save settings to the startup configuration file.

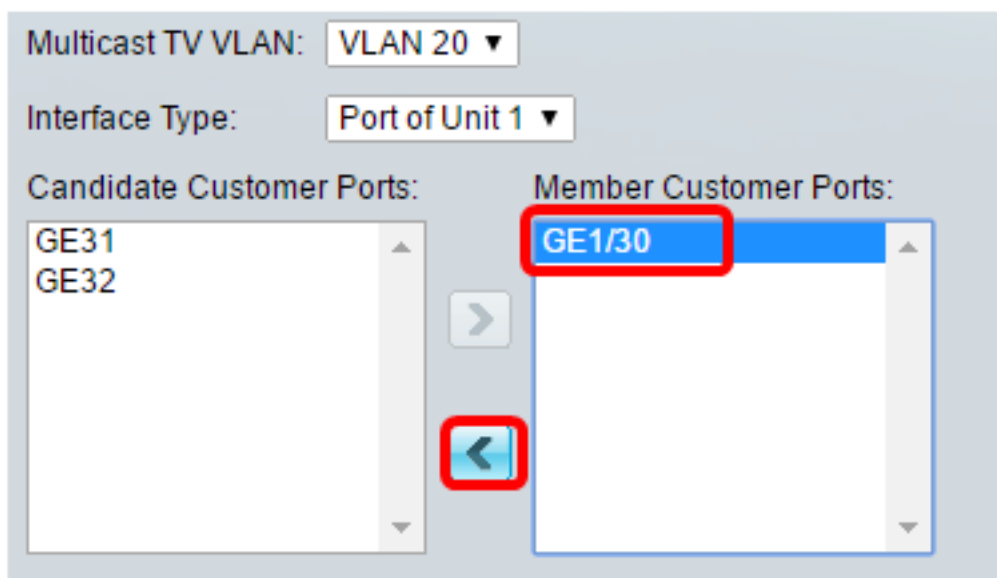


You should now have configured a customer port to become a member of Multicast TV VLAN.

Remove a Customer Port from a Multicast TV VLAN

Step 1

In Member Customer Ports area, choose an interface then click the < button to move the ports back to the Candidate Customer Ports area.



Step 2

Click **Apply** to save the settings to the running configuration file.

Multicast TV VLAN: VLAN 20 ▼

Interface Type: Port of Unit 1 ▼

Candidate Customer Ports: GE31, GE32, GE30

Member Customer Ports:

Apply Cancel

The image shows a configuration dialog box with a light blue background. At the top, there are two dropdown menus: 'Multicast TV VLAN' set to 'VLAN 20' and 'Interface Type' set to 'Port of Unit 1'. Below these are two list boxes. The left list box, titled 'Candidate Customer Ports', contains three entries: 'GE31', 'GE32', and 'GE30'. The right list box, titled 'Member Customer Ports', is currently empty. Between the two list boxes are two arrow buttons: a right-pointing arrow above a left-pointing arrow. At the bottom of the dialog, there are two buttons: 'Apply' and 'Cancel'. The 'Apply' button is highlighted with a red rectangular border.

Step 3 (Optional)

Click **Save** to save settings to the startup configuration file.

Save

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Port Gigabit PoE Stackable Managed Switch

Port Multicast VLAN Membership

Success. To permanently save the configuration, go to the

Multicast TV VLAN:

Interface Type:

Candidate Customer Ports: Member Customer Ports:

GE30		
GE31		
GE32		

You should now have removed a customer port from the Multicast TV VLAN.