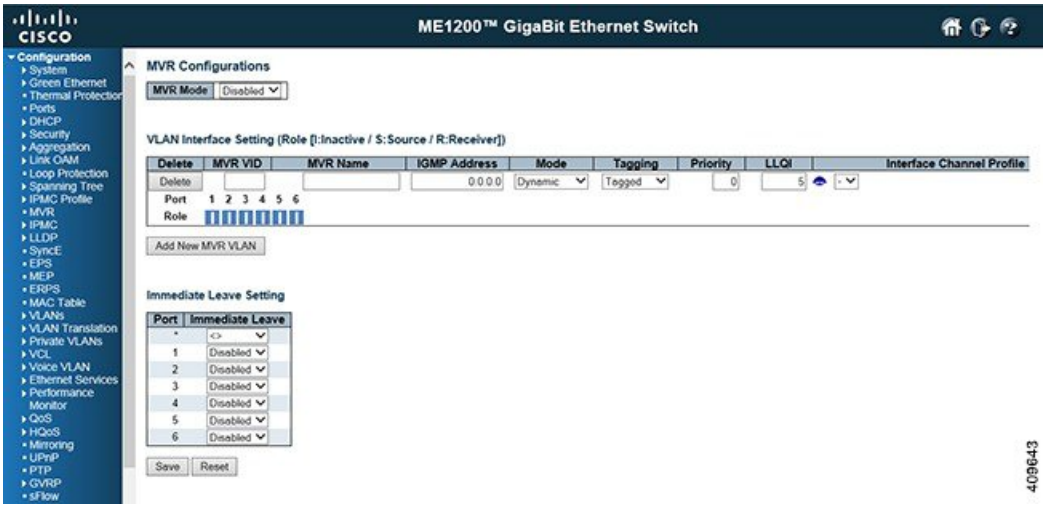
Configuring MVR

MVR Configurations

This feature provides MVR related configurations. It enables multicast traffic forwarding on Multicast VLANs.



In a multicast television application, a PC or a network television or a set-top box can receive the multicast stream. Multiple set-top boxes or PCs can be connected to one subscriber port, which is a switch port configured as an MVR receiver port. When a subscriber selects a channel, the set-top box or PC sends an IGMP or MLD report message to Switch A to join the appropriate multicast group address. Uplink ports that send and receive multicast data to and from the multicast VLAN are called MVR source ports.

It is allowed to create a maximum of four MVR VLANs with corresponding channel profiles for each Multicast VLAN. The channel profile is defined by the IPMC Profile which provides the filtering conditions.

- **MVR Mode**: Enables or disables the Global MVR. The Unregistered Flooding control depends on the current configuration in IGMP/MLD Snooping. It is suggested to enable Unregistered Flooding control when the MVR group table is full.

- **Delete**: Check the corresponding check box to delete an entry. The selected entry will be deleted during the next Save operation.
- **MVR VID**: Specify the Multicast VLAN ID.

Note It is recommended that you avoid overlapping MVR source ports with management VLAN ports.

- **MVR Name**: MVR Name is an optional attribute to indicate the name of the specific MVR VLAN. Maximum length of the MVR VLAN Name string is 16. MVR VLAN Name can only contain alphabets or numbers. When the optional MVR VLAN name is given, it should contain at least one alphabet. MVR VLAN name can be edited for the existing MVR VLAN entries or it can be added to the new entries.
- **IGMP Address**: Define the IPv4 address as source address used in IP header for IGMP control frames. The default IGMP address is not set (0.0.0.0). When the IGMP address is not set, the system uses IPv4 management address of the IP interface associated with this VLAN. When the IPv4 management address is not set, the system uses the first available IPv4 management address.

  Otherwise, the system uses a pre-defined value. By default, this value will be 192.0.2.1.
- **Mode**: Specify the MVR mode of operation. In Dynamic mode, MVR allows dynamic MVR membership reports on source ports. In Compatible mode, MVR membership reports are forbidden on source ports. The default is Dynamic mode.
- **Tagging**: Specify whether the traversed IGMP or MLD control frames will be sent as Untagged or Tagged with MVR VID. The default is Tagged.
- **Priority**: Specify how the traversed IGMP or MLD control frames will be sent in prioritized manner. The default Priority is 0.
- **LLQI**: Define the maximum time to wait for IGMP or MLD report memberships on a receiver port before removing the port from multicast group membership. The value is in units of tenths of a seconds. The range is from 0 to 31744. The default LLQI is 5 tenths or one-half second.
- **Interface Channel Profile**: When the MVR VLAN is created, select the IPMC Profile as the channel filtering condition for the specific MVR VLAN. Summary about the Interface Channel Profiling (of the MVR VLAN) will be shown by clicking the view button. Profile selected for designated interface channel is not allowed to have overlapped permit group address.
- **Navigate Profile** icon: You can use the **Navigate Profile** icon to list the rules associated with the selected profile.
- **Port**: The logical port for the settings.
- **Role**: Configure an MVR port of the designated MVR VLAN as one of the following roles.
  - Inactive: The designated port does not participate MVR operations.
  - Source: Configure uplink ports that receive and send multicast data as source ports. Subscribers cannot be directly connected to source ports.
  - Receiver: Configure a port as a receiver port if it is a subscriber port and should only receive multicast data. It does not receive data unless it becomes a member of the multicast group by issuing IGMP/MLD messages.

Note It is recommended that you avoid overlapping MVR source ports with management VLAN ports.

Select the port role by clicking the Role symbol to switch the setting. I indicates Inactive; S indicates Source; R indicates Receiver. The default Role is Inactive.

- **Immediate Leave**: Enables the fast leave on the port.
- **Add new MVR VLAN**: Click this button to add a new MVR VLAN, specify the VID, and configure the new entry. Click **Save**.

Related Topics

Monitoring MVR