

## Configuring Multiple VLAN Registration Protocol (MVRP)

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Multiple VLAN Registration Protocol (MVRP) is used to manage dynamic VLAN registration in Carrier Ethernet network. You can use MVRP on MX Series routers or on EX Series switches.

For information about using MVRP on EX Series switches, see Example: Configuring Automatic VLAN Administration Using MVRP on EX Series Switches.

MVRP is disabled by default on MX Series routers.

To enable MVRP or set MVRP options, follow these instructions:

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### Enabling MVRP

MVRP can only be enabled on trunk interfaces.

To enable MVRP on a specific trunk interface (here, interface `ge-3/0/5`):

```
[edit protocols mvrp]
user@host# set interfaces ge-3/0/5
```

### Disabling MVRP

MVRP is disabled by default. You only need to perform this procedure if you have previously enabled MVRP.

To disable MVRP on all trunk interfaces on the router, use one of the following:

```
[edit protocols mvrp]
user@host# deactivate protocols mvrp
user@host# delete protocols mvrp
```

### Changing the Registration Mode to Disable Dynamic VLANs

When the registration mode for an interface is set to `normal` (the default), dynamic VLANs are created on interfaces participating in MVRP. The dynamic VLANs created on one router are then propagated by means of MVRP to other routers in a topology.

However, Dynamic VLAN creation through MVRP can be disabled for all trunk interfaces on a router or for individual trunk interfaces.

For information about disabling dynamic VLAN creation on an interface so that the interface does not register and does not participate in MVRP, see Controlling the Management State of a VLAN in MVRP Configurations on MX Series Routers (CLI Procedure).

## Configuring Timer Values

The timers in MVRP define the amount of time an interface waits to join or leave MVRP or to send or process the MVRP information for the router after receiving an MVRP PDU:

- The join timer controls the amount of time the router waits to accept a registration request.
- The leave timer controls the period of time that the router waits in the Leave state before changing to the unregistered state.
- The leaveall timer controls the frequency with which the LeaveAll messages are communicated.

The default MVRP timer values are 200 ms for the join timer, 1000 ms for the leave timer, and 10000 ms for the leaveall timer.



**BEST PRACTICE:** Maintain default timer settings unless there is a compelling reason to change the settings. Modifying timers to inappropriate values might cause an imbalance in the operation of MVRP.

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To set the join timer for a specific interface:

```
[edit protocols mvrp]
user@host# set interfaces ge-3/0/5 join-timer 300
```

To set the leave timer for a specific interface:

```
[edit protocols mvrp]
user@host# set interfaces ge-3/0/5 leave-timer 1200
```

To set the leaveall timer for a specific interface:

```
[edit protocols mvrp]
user@host# set interface ge-3/0/5 leaveall-timerr 12000
```

## Configuring the Multicast MAC address for MVRP

MVRP uses the customer MVRP multicast MAC address when MVRP is enabled. However, you can configure MVRP to instead use the provider MVRP multicast MAC address.

To configure MVRP to use the provider MVRP multicast MAC address:

```
[edit protocols mvrp]
user@host# set bpdu-destination-mac-address provider-bridge-group;
```

## Configuring an MVRP Interface as a Point-to-Point Interface

Specify that a configured interface is connected point-to-point. If specified, a point-to-point subset of the MRP state machine provides a simpler and more efficient method to accelerate convergence on the network.

To specify that an MVRP interface is point-to-point (here, interface `ge-3/0/5`):

```
[edit protocols mvrp]
user@host# set interfaces ge-3/0/5 point-to-point;
```

## Configuring MVRP Tracing Options

Set MVRP protocol-level tracing options.

To specify MVRP protocol tracing (here, the file is `/var/log/mvrp-log`, size is 2m, number of files is 28, the option `world-readable` indicates the log can be read by user, and MVRP is flagging events):

```
[edit protocols mvrp]
user@host# edit protocols mvrp traceoptions file /var/log/mvrp-log size 2m files
28 world-readable flag events
```

- Related Topics**
- Example: Configuring Automatic VLAN Administration Using MVRP on MX Series Routers
  - Verifying That MVRP Is Working Correctly

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