

## **Configuring Mirroring**

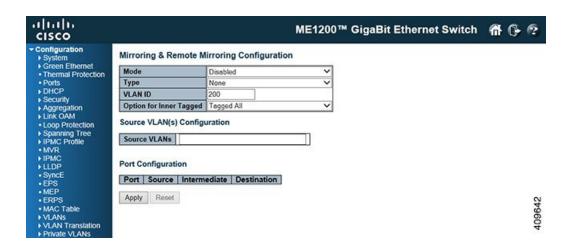
• Mirroring and Remote Mirroring Configuration, page 1

## Mirroring and Remote Mirroring Configuration

Mirroring is a feature for switched port analyzer. The administrator can use the Mirroring to debug network problems. The selected traffic can be mirrored or copied on a destination port where a network analyzer can be attached to analyze the network traffic.

Remote Mirroring is an extend function of Mirroring. It can extend the destination port in other switch. So the administrator can analyze the network traffic on the other switches.

If a frame is mirrored by more than one mirror probe, then the highest numbered probe is selected. This implies that only one mirror copy is made per frame even if multiple probes are active.



- Mode: Enables or disables the mirror or Remote Mirroring function.
- Type: Selects switch type.
  - *Mirror*: The switch is running on mirror mode. The source port(s) and destination port are located on this switch.

- *Source*: The switch is a source node for monitor flow. The source port(s) and intermediate port(s) are located on this switch.
- *Intermediate*: The switch is a forwarding node for monitor flow and the switch is an option node. The object is to forward traffic from source switch to destination switch. The intermediate ports are located on this switch.
- *Destination*: The switch is an end node for monitor flow. The destination port(s) and intermediate port(s) are located on this switch.
- VLAN ID: The VLAN ID points out where the monitor packet will copy to. The default VLAN ID is 200.
- Option for Inner Tagged: Select an inner tagged or an inner untagged type.

**Source VLAN(s)** Configuration: The switch can supports VLAN-based Mirroring. If you want to monitor some VLANs on the switch, you can set the selected VLANs on this field.



The Mirroring session shall have either ports or VLANs as sources, but not both.

**Port Configuration**: The following options are used for port role selecting:

- Port: The logical port for the settings contained in the same row. The CPU also can be selected
- Source: Selects mirror mode.
  - · Disabled: Neither frames transmitted nor frames received are mirrored.
  - · Both: Frames received and frames transmitted are mirrored on the Intermediate/Destination port.
  - Rx only: Frames received on this port are mirrored on the Intermediate/Destination port. Frames transmitted are not mirrored.
  - Tx only: Frames transmitted on this port are mirrored on the Intermediate/Destination port. Frames received are not mirrored.
- Intermediate: Select intermediate port. This checkbox is designed for Remote Mirroring. The intermediate port is a switched port to connect to other switch. All packets that are going through intermediate port will be tagged when the rmirror function is enabled.



Note

The intermediate port needs to disable MAC Table learning.

• **Destination**: Select destination port. This checkbox is designed for mirror or Remote Mirroring. The destination port is a switched port that you receive a copy of traffic from the source port.



Note

On mirror mode, the device only supports one destination port.



Note

The destination port needs to disable MAC Table learning.

## **Configuration Guideline for All Features**

When the switch is running on Remote Mirroring mode, the administrator also needs to check whether or not other features are enabled or disabled. All recommended settings are described as follows.

Feature	Impact	source port	intermediate port	destination port	Remote Mirroring VLAN
arp_inspection	High		* disabled		
acl	Critical		* disabled	* disabled	
dhcp_relay	High		* disabled		
dhcp_snooping	High	* disabled			
ip_source_guard	Critical	* disabled	* disabled		
ipmc/igmpsnp	Critical				un-conflict
ipmc/mldsnp	Critical				un-conflict
lacp	Low			o disabled	
lldp	Low			o disabled	
mac learning	Critical		* disabled	* disabled	
mstp	Critical			o disabled	
mvr	Critical				un-conflict
nas	Critical		* authorized	* authorized	
psec	Critical		* disabled	* disabled	
qos	Critical		* unlimited	* unlimited	
upnp	Low			o disabled	
mac-based vlan	Critical		* disabled		
protocol-based vlan	Critical		* disabled		
vlan_translation	Critical		* disabled	* disabled	
voice_vlan	Critical		* disabled		
mrp	Low		o disabled		
mvrp	Low		o disabled		



- \* -- must
  - o -- optional
  - Impact: Critical/High/Low
  - Critical 5 packets -> 0 packet
  - High 5 packets -> 4 packets
  - Low 5 packets -> 6 packets