

Contents

MFF commands	1
display mac-forced-forwarding interface	1
display mac-forced-forwarding vlan	1
mac-forced-forwarding	2
mac-forced-forwarding gateway probe	3
mac-forced-forwarding network-port	3
mac-forced-forwarding server	4

MFF commands

display mac-forced-forwarding interface

Use `display mac-forced-forwarding interface` to display MFF port configuration.

Syntax

```
display mac-forced-forwarding interface
```

Views

Any view

Predefined user roles

network-admin
network-operator

Examples

```
# Display MFF port configuration.  
<Sysname> display mac-forced-forwarding interface  
Network Port:  
GE1/0/1                GE1/0/2  
User Port:  
GE1/0/3                GE1/0/4                GE1/0/5  
...
```

Table 1 Command output

Field	Description
Network Port	List of network ports.
User Port	List of user ports.

Related commands

```
mac-forced-forwarding network-port
```

display mac-forced-forwarding vlan

Use `display mac-forced-forwarding vlan` to display the MFF configuration for a VLAN.

Syntax

```
display mac-forced-forwarding vlan vlan-id
```

Views

Any view

Predefined user roles

network-admin
network-operator

Parameters

vlan-id: Specifies a VLAN by its ID.

Examples

```
# Display the MFF configuration for VLAN 2.
<Sysname> display mac-forced-forwarding vlan 2
VLAN 2
Gateway:
-----
192.168.1.42          000f-e200-8046
Server:
-----
192.168.1.48          192.168.1.49
```

Table 2 Command output

Field	Description
VLAN 2	ID of the VLAN to which the gateways belong.
Gateway	IP and MAC addresses of gateways. If no address is learned, this field displays N/A .
Server	Server IP addresses.

Related commands

```
mac-forced-forwarding
mac-forced-forwarding server
```

mac-forced-forwarding

Use `mac-forced-forwarding` to enable MFF and specify the default gateway.

Use `undo mac-forced-forwarding` to disable MFF.

Syntax

```
mac-forced-forwarding default-gateway gateway-ip
undo mac-forced-forwarding
```

Default

MFF is disabled.

Views

VLAN view

Predefined user roles

network-admin

Parameters

`default-gateway gateway-ip`: Specifies the IP address of the default gateway.

Usage guidelines

For MFF to take effect, make sure ARP snooping is enabled on the VLAN where MFF is enabled.

For a network (or VLAN) with IP addresses manually configured, the gateway IP address must be manually configured. MFF checks for and denies only all-zero and all-one gateway IP addresses.

If you execute this command multiple times, the most recent configuration takes effect.

Examples

```
# Enable MFF for VLAN 2 and specify the IP address of the default gateway.
<Sysname> system-view
[Sysname] vlan 2
[Sysname-vlan2] mac-forced-forwarding default-gateway 1.1.1.1
```

Related commands

mac-forced-forwarding server

mac-forced-forwarding gateway probe

Use **mac-forced-forwarding gateway probe** to enable periodic gateway probe.

Use **undo mac-forced-forwarding gateway probe** to disable periodic gateway probe.

Syntax

```
mac-forced-forwarding gateway probe
undo mac-forced-forwarding gateway probe
```

Default

Periodic gateway probe is disabled.

Views

VLAN view

Predefined user roles

network-admin

Usage guidelines

Make sure you have enabled MFF before enabling periodic gateway probe. The probe interval is 30 seconds.

Examples

```
# Enable periodic gateway probe.
<Sysname> system-view
[Sysname] vlan 2
[Sysname-vlan2] mac-forced-forwarding gateway probe
```

Related commands

mac-forced-forwarding

mac-forced-forwarding network-port

Use **mac-forced-forwarding network-port** to configure the Ethernet port as a network port.

Use **undo mac-forced-forwarding network-port** to restore the default.

Syntax

```
mac-forced-forwarding network-port
undo mac-forced-forwarding network-port
```

Default

The Ethernet port is a user port.

Views

Layer 2 Ethernet interface view

Layer 2 aggregate interface view

Predefined user roles

network-admin

Usage guidelines

You should configure the following ports as network ports:

- Upstream ports connected to a gateway.
- Ports connected to the MFF devices in a cascaded network (a network with multiple MFF devices connected to one another).
- Ports between devices in a ring network.

You can configure multiple ports as network ports.

You can configure a port as a network port regardless of whether MFF is enabled for the VLAN of the port. However, the configuration takes effect only after MFF is enabled.

Link aggregation is supported by network ports in an MFF-enabled VLAN, but is not supported by user ports in the VLAN. To cancel the network port configuration of a link aggregation member port in a MFF-enabled VLAN, remove the network port from the link aggregation group first. For more information about link aggregation, see *Layer 2—LAN Switching Configuration Guide*.

Examples

```
# Configure GigabitEthernet 1/0/1 as a network port.
<Sysname> system-view
[Sysname] interface gigabitethernet 1/0/1
[Sysname-GigabitEthernet1/0/1] mac-forced-forwarding network-port
```

Related commands

mac-forced-forwarding

mac-forced-forwarding server

Use **mac-forced-forwarding server** to specify the IP addresses of servers.

Use **undo mac-forced-forwarding server** to remove server IP addresses.

Syntax

```
mac-forced-forwarding server server-ip&<1-10>
undo mac-forced-forwarding server server-ip&<1-10>
```

Default

No server IP address is specified.

Views

VLAN view

Predefined user roles

network-admin

Parameters

server-ip&<1-10>: Specifies a space-separated list of up to 10 server IP addresses.

Usage guidelines

You need to maintain a server list on the MFF device to ensure communication between the servers and clients.

Server IP addresses can be those of the interfaces on a router in a VRRP group and those of the servers collaborating with MFF, such as a RADIUS server.

When the MFF device receives an ARP request from a server, it searches the IP-to-MAC address entries it has stored. Then the device replies with the requested MAC address to the server.

In this way, packets from the server to a host are not forwarded by the gateway. However, packets from a host to the server are forwarded by the gateway.

MFF does not check whether the IP address of a server is on the same network segment as that of a gateway. Instead, it checks whether the IP address of a server is all-zero or all-one. An all-zero or all-one server IP address is invalid.

Make sure MFF is enabled before you execute the **mac-forced-forwarding server** command.

Examples

```
# Specify the server at 192.168.1.100.
```

```
<Sysname> system-view
```

```
[Sysname] vlan 2
```

```
[Sysname-vlan2] mac-forced-forwarding server 192.168.1.100
```

Related commands

mac-forced-forwarding