

# MAC Access-List Configuration

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# Chapter 1 MAC Access-List Configuration

Access-list configuration includes:

- Creating MAC access-list
- Configuring items of MAC access-list
- Applying MAC access-list

## 1.1 Creating MAC Access-List

A MAC access-list must be created first before applying it on the port. When a MAC access-list has been created, it enters MAC access-list configuration mode, under which items of MAC access-list can be configured.

Enter privilege mode and use the following steps to add or delete a MAC access-list.

Command	Purpose
<b>configure</b>	Enters the global configuration mode.
<b>[no] mac access-list name</b>	Adds or cancels a MAC access list  Name stands for the name of mac access list

## 1.2 Configuring Items of MAC Access List

In MAC access-list configuration mode, specify to permit or deny any source MAC address or a specific host source MAC address and any destination MAC address. The same items can be configured in a MAC access list only once.

If there is no permit any any or deny any any in the access list, one command "deny any any" will be automatically applied in the end.

Enter MAC access list configuration mode and use the following steps to set MAC access list entry.

Command	Purpose
<b>[no] {permit   deny} {any   host src-mac-addr   src-mac-addr src-mac-addr-mask} {any   host dst-mac-addr   dst-mac-addr dst-mac-addr-mask } [arp [{any   src-ip-addr} {any   dst-ip-addr }]]   ether-type]</b>	Adds/deletes a MAC access list entry. You can repeat this command to add/delete multiple MAC access list entry.  <b>Any</b> means match with any MAC address;  <i>src-mac-addr</i> stands for source MAC address;  <i>src-mac-addr-mask</i> stands for source MAC address mask;  <i>dst-mac-addr</i> stands for destination MAC

	<p>address;</p> <p><i>dst-mac-addr-mask</i> stands for destination MAC address mask;</p> <p><b>arp</b> stands for matched arp packet;</p> <p><i>src-ip-addr</i> stands for source ip address stands for source ip address;</p> <p><i>dst-ip-addr</i> stands for the destination ip address;</p> <p><i>ethertype</i> stands for type of the matched Ethernet packet</p>
<b>exit</b>	Logs out from the MAC list configuration mode and enters the global configuration mode again.
<b>exit</b>	Goes back to the EXEC mode.
<b>write</b>	Saves the settings.

### MAC list configuration example

```
Switch_config# mac access-list 1
Switch-config-macl# permit host 1.1.1 any
Switch-config-macl# permit host 2.2.2 any
```

The above configuration is to compare the source MAC address, so the mask is the same. The configuration is successful.

## 1.3 Applying MAC Access List

The created MAC list can be applied on any physical port. Only one MAC list can be applied to a port. The same MAC list can be applied to multiple ports.

### Note:

MAC access list cannot be applied on the ONU port. Refer to "ONU Management Configuration" for the configuration mode of ONU port.

Enter the privilege mode and perform the following operation to configure the MAC list.

Command	Purpose
<b>config</b>	Enters the global configuration mode.
<b>interface</b> <i>g0/1</i>	Enters the to-be-configured port.
<b>[no] mac access-group</b> <i>name</i> [ <b>egress</b> ]	<p>Applies the established MAC access list to an interface or cancel a MAC access list which is already applied to an interface.</p> <p><i>Name</i> stands for the name of access list</p> <p><b>Egress</b> means the role on the egress</p>

	direction.
<b>exit</b>	Goes back to the global configuration mode.
<b>exit</b>	Goes back to the EXEC mode.
<b>write</b>	Saves the settings.

MAC access list can also be applied in the global mode. MAC access list in the global mode functions on all ports.

Enter the privilege mode and perform the following operation to configure the MAC list.

Command	Purpose
<b>configure</b>	Enters the global configuration mode.
<b>[no] mac access-group name [egress   vlan {WORD   add WORD   remove WORD}]</b>	Applies the established MAC access list to an interface or cancel a MAC access list which is already applied to an interface.  <i>Name</i> stands for the name of access list <b>Egress</b> means the role on the egress direction. <b>Vlan:</b> The access list is applied in ingress. <i>word</i> applies to vlan range table <b>add:</b> add vlan to the range table of the applied vlan <b>remove:</b> remove vlan from the vlan range table
<b>exit</b>	Goes back to the EXEC mode.
<b>write</b>	Saves the settings.