MAC Address Configuration Commands
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Chapter 1  MAC Address Configuration Commands

1.1  MAC Address Configuration Commands

1.1.1  mac address-table static

Syntax

```
[no] mac address-table static mac-addr vlan vlan-id interface interface-id
```

To add a static MAC address, run `mac address-table static mac-addr vlan vlan-id interface interface-id`. To cancel the static MAC address, run `no mac address-table static mac-addr vlan vlan-id interface interface-id`.

Parameter

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>mac-addr</td>
<td>Means an MAC address. Value range: H.H.H</td>
</tr>
<tr>
<td>vlan-id</td>
<td>A VLAN that the MAC address belongs to</td>
</tr>
<tr>
<td>interface-id</td>
<td>Physical port that the MAC address belongs to</td>
</tr>
</tbody>
</table>

Default value

N/A

Explanation

This command is configured in global configuration mode.

Example

The following example shows how to bind MAC address 0004.5600.67ab to port G0/2 of VLAN1.

```
Switch_config# mac address-table static 0004.5600.67ab vlan 1 interface g0/2
```

1.1.2  mac address-table aging-time

Syntax

```
mac address-table aging-time [0 | 10-100000]
```
To configure the aging time of the MAC address table, run the previous command.

**Parameter**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Means that the MAC address never ages.</td>
</tr>
<tr>
<td>10-1000000</td>
<td>Aging time of the MAC address whose unit is second</td>
</tr>
</tbody>
</table>

**Default value**

300s.

**Explanation**

This command is configured in global configuration mode.

**Example**

The following example shows how to set the aging time of the MAC address to 100 seconds.

```
Switch(config)# mac address-table aging-time 100
```

**1.1.3 show mac address-table**

**Syntax**

```
show mac address-table [dynamic [interface interface-id | vlan vlan-id] | static | brief | multicast | interface interface-id | vlan vlan-id | H.H.H] 
```

To display the MAC address table of the switch, run `show mac address-table {dynamic [interface interface-id | vlan vlan-id] | static | brief | multicast | interface interface-id | vlan vlan-id | H.H.H].`

**Parameter**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>dynamic</td>
<td>Dynamically-learned MAC address table</td>
</tr>
<tr>
<td>interface-id</td>
<td>Name of an interface</td>
</tr>
<tr>
<td>vlan-id</td>
<td>VLAN ID. Value range: 1-4094</td>
</tr>
<tr>
<td>static</td>
<td>Static MAC address table</td>
</tr>
<tr>
<td>brief</td>
<td>Brief information about the MAC address</td>
</tr>
<tr>
<td>multicast</td>
<td>Multicast MAC address table</td>
</tr>
<tr>
<td>Interface</td>
<td>Port’s MAC address table</td>
</tr>
<tr>
<td>Vlan</td>
<td>Vlan mac address table</td>
</tr>
</tbody>
</table>
### clear mac address-table

**Syntax**

```
clear mac address-table dynamic [address mac-addr | interface interface-id | vlan vlan-id]
```

To delete a dynamic MAC address, run the above-mentioned command:

**Parameter**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>address mac-addr</td>
<td>Means an MAC address. Value range: H.H.H</td>
</tr>
<tr>
<td>interface-id</td>
<td>Means a name of a L2 interface.</td>
</tr>
<tr>
<td>vlan-id</td>
<td>VLAN ID. Value range: 1-4094</td>
</tr>
</tbody>
</table>

**Default value**

N/A
Remarks

This command is used in EXEC mode.

Example

The following example shows how to clear all dynamically learned MAC addresses on interface g0/2.

Switch# clear mac address-table dynamic interface g0/2