

MAC Address Table Configuration

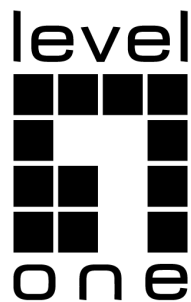


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Chapter 1 Configuring MAC Address Attribute

1.1 MAC Address Configuration Task List

- Configuring Static Mac Address
- Configuring Mac Address Aging Time
- Displaying Mac Address Table
- Clearing Dynamic Mac Address

1.2 MAC address Configuration Task

1.2.1 Configuring Static Mac Address

Static MAC address entries are MAC address entries that do not age by the switch and can only be deleted manually. According to the actual requirements during the operation process, you can add and delete a static MAC address. Use the following command in EXEC level to add and delete a static MAC address.

| Command | Purpose |
|---|--|
| configure | Enters the global configuration mode. |
| [no] mac address-table static <i>mac-addr</i> vlan <i>vlan-id</i> interface <i>interface-id</i> | Adds/deletes a static MAC address entry. Mac-addr indicates the MAC address. Vlan-id indicates the VLAN number. Valid value is from 1~4094. Interface-id indicates the interface name. |
| exit | Returns to EXEC mode. |
| write | Saves configuration. |

1.2.2 Configuring MAC Address Aging Time

When a dynamic MAC address is not used during the specified aging time, the switch will delete this MAC address from the MAC address table. The aging time of the switch MAC address can be configured in terms of needs. The default aging time is 300 seconds.

Configure the aging time of MAC address in the EXEC mode as follows:

| Command | Purpose |
|--|---|
| configure | Enters the global configuration mode |
| mac address-table aging-time [0 10-1000000] | Configures the aging time of MAC address. |

| | |
|--------------|--|
| | 0 indicates no-age of the MAC address. Valid value is from 10 to 1000000 in seconds. |
| exit | Returns to the management mode. |
| write | Saves configuration. |

1.2.3 Displaying MAC Address Table

Since debugging and management are required in operation process, we want to know content of the switch MAC address table. Use the show command to display content of the switch MAC address table.

| Command | Purpose |
|---|--|
| show mac address-table [dynamic [interface <i>interface-id</i> vlan <i>vlan-id</i>] static brief mcast interface <i>interface-id</i> vlan <i>vlan-id</i> mac <i>AA:BB:CC:DD:EE:FF</i> blackhole] | Dynamic indicates the MAC address that acquires dynamically. Interface-id indicates the interface name. Vlan-id indicates the VLAN number. Valid value is from 1 to 4094. Static indicates the static MAC address table. Brief indicates the brief information of the MAC address. Mcast indicates multicast MAC address table. Interface indicates interface MAC address table. Vlan indicates MAC address table in VLAN. Mac indicates to show a mac <i>AA:BB:CC:DD:EE:FF</i> indicates specific address. Blackhole indicates BLACKHOLE MAC address table. |

1.2.4 Clearing Dynamic MAC Address

The acquired MAC addresses need to be cleared in some circumstances.

Use the following command to delete a dynamic MAC address in EXEC mode:

| Command | Purpose |
|---|---|
| clear mac address-table dynamic [address <i>mac-addr</i> interface <i>interface-id</i> vlan <i>vlan-id</i>] | Deletes a dynamic MAC address entry. Dynamic indicates the MAC address that dynamically acquires. Mac-addr is the MAC address. Interface-id indicates the interface name. Vlan-id indicates the VLAN number. Valid value is from 1 to 4094. |

