MAC Address Table Configuration

Contents

Chapter 1 MAC Address Table Configuration

1.1 MAC Address Configuration Task List

This chapter is to describe the functions of configuring MAC address table on S6800 series switch as follow:

- Configuring static MAC address

- Configuring MAC address aging time

- Displaying MAC address table

- Removing dynamic MAC address

1.2 MAC Address Configuration Tasks

1.2.1 Configuring Static MAC Address

A static MAC address table entry refers to the one that can not be aged by the switch. It only can be deleted manually. Static MAC address can be added or deleted according to the requirements when switches are in use. Enter privilege mode and use the following steps to add or delete a static MAC address.

Command	Purpose
Configure	Enter global configuration mode
[no] mac address-table static *mac-addr* **vlan** *vlan-id* **interface** *interface-id*	Add/delete a static MAC address entry. The mac-addr specifies MAC address; The **vlan-id** is VLAN number, The Availablein is 1 to 4094; The interface-id is a port name.
exit	Return to administration mode.
write	Save your configuration.

1.2.2 Configuring MAC Address Aging Time

When a dynamic MAC address is not used within a specified aging time, the switch will delete it from MAC address table. The aging time of MAC address can be configured on demand, default is 300s.

Enter privilege mode, use steps as follow to configure the Aging time of MAC address.

Command	Purpose
configure	Enter global configuration mode
mac address-table aging-time [**0** | **10-1000000**]	Configure MAC address aging time. 0 indicates MAC address does not age; The range of MAC address aging time is 10 to 1,000,000 seconds.
exit	Return to administration mode.
write	Save your configuration.

1.2.3 Configuring VLAN sharing MAC Address

After configured VLAN sharing MAC address, the interface learns MAC address from one VLAN and this MAC address will be shared among all VLAN. All other VLAN will learn this MAC address.

Enter privilege mode, use steps as follow to configure VLAN sharing MAC address.

Command	Purpose
configure	Enter global configuration mode
interface f0/1	Enter the interface to be configured
switchport shared-learning	Configure VLAN sharing MAC Address
exit	Return to global configuration mode
exit	Return to administration mode.
write	Save configuration.

1.2.4 Displaying MAC Address Table

When using switches, we expect to know the information about MAC address table in need of debugging or management. Use **show** to display MAC address table.

Command	Purpose
show mac address-table {**dynamic** [**interface** *interface-id* | **vlan** *vlan-id*] | **static**}	Display the content of MAC address table. Dynamic, specify the MAC address dynamically learned. The **vlan-id** is VLAN number, The Availablein is 1 to 4094;

	The interface-id is the port name.
	static means static MAC address table.

1.2.5   Removing Dynamic MAC Address

In some cases, it is necessary to clear up the MAC address which switch has learned.

Enter privilege mode and use the following commands to delete a dynamic MAC address.

Command	Purpose
clear mac address-table dynamic [address *mac-addr* | **interface** *interface-id* | **vlan** *vlan-id*]	Delete a dynamic MAC address entry. Dynamic specifies the MAC address dynamically learned. The **mac-addr** specifies MAC address; The **interface-id** is the port name. The **vlan-id** is VLAN number, The Availablein is 1 to 4094.