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

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.

mac address-table static mac-addr vlan vlan-id interface interface-id

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

Parameters

Parameter	Description
mac-addr	MAC address Value range: H.H.H
vlan-id	A VLAN that the MAC address belongs to Value range: 1-4094
interface-id	Physical port that the MAC address belongs to.

Default Value

None

Usage Guidelines

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

To configure the aging time of the MAC address table, run the following command.

mac address-table aging-time [**0** | **10-1000000**]

Parameters

Parameters	Description
0	Means that the MAC address never ages.
10-1000000	Aging time of the MAC address whose unit is second

Default Value

300s

Usage Guidelines

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 mac address-table blackhole

Syntax

To add or delete a black hole MAC address, run the following command.

[**no**] **mac address-table blackhole***mac-addr* **vlan** *vlan-id*

Parameters

Parameters	Description
mac-addr	MAC address Value range: H.H.H
vlan-id	A VLAN that the MAC address belongs to Value range: 1-4094

Default Value

None

Usage Guidelines

This command is configured in global configuration mode.

Example

The following example shows how to configure the address 0004.5600.67ab to the black hole mac on VLAN1.

Switch_config# mac address-table blackhole 0004.5600.67ab vlan 1

1.1.4   show mac address-table

Syntax

To display the MAC address table of the switch, run the following command.

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

Parameters

Parameters	Description
dynamic	Dynamically-learned MAC address table
interface-id	Name of an interface
vlan-id	VLAN ID Value range: 1-4094
static	Static MAC address table
brief	Brief information about the MAC address
multicast	Multicast MAC address table
Interface	Interface's MAC address table
Vlan	Vlan mac address table
H.H.H	Specific address
Blackhole	Blackhole MAC address;

Default Value

None

Usage Guidelines

This command is used to display the MAC address table.

Example

The following example shows how to display all dynamic MAC address tables.

Switch_config#show mac address-table

Mac Address Table (Total 2)

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Vlan	Mac Address	Type	Ports
1	0026.5a7c.fad3	DYNAMIC	g0/2
1	0000.0000.0004	DYNAMIC	g0/2

1.1.5 clear mac address-table

Syntax

To delete the dynamic MAC address, run the following command.

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

Parameters

Parameters	Description
mac-addr	MAC address Value range: H.H.H
interface-id	Means a name of a L2 interface.
vlan-id	VLAN ID Value range: 1-4094

Default Value

None

Usage Guidelines

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