



Port Security MAC Aging

- [Information About Port Security MAC Aging, on page 1](#)
- [How to Configure Port Security MAC Aging, on page 2](#)
- [Feature History for Port Security, on page 2](#)

Information About Port Security MAC Aging

Default MAC Address Table Settings

The following table shows the default settings for the MAC address table.

Table 1: Default Settings for the MAC Address

Feature	Default Setting
Aging time	300 seconds
Dynamic addresses	Automatically learned
Static addresses	None configured

MAC Address Table Creation

With multiple MAC addresses supported on all ports, you can connect any port on the device to other network devices. The device provides dynamic addressing by learning the source address of packets it receives on each port and adding the address and its associated port number to the address table. As devices are added or removed from the network, the device updates the address table, adding new dynamic addresses and aging out those that are not in use.

The aging interval is globally configured. However, the device maintains an address table for each VLAN, and STP can accelerate the aging interval on a per-VLAN basis.

The device sends packets between any combination of ports, based on the destination address of the received packet. Using the MAC address table, the device forwards the packet only to the port associated with the destination address. If the destination address is on the port that sent the packet, the packet is filtered and not forwarded. The device always uses the store-and-forward method: complete packets are stored and checked for errors before transmission.

How to Configure Port Security MAC Aging

Changing the Address Aging Time

Follow these steps to configure the dynamic address table aging time:

Procedure

	Command or Action	Purpose
Step 1	enable Example: Device> enable	Enables privileged EXEC mode. <ul style="list-style-type: none"> • Enter your password if prompted.
Step 2	configure terminal Example: Device# configure terminal	Enters global configuration mode.
Step 3	mac address-table aging-time [0 10-1000000] [routed-mac vlan <i>vlan-id</i>] Example: Device(config)# mac address-table aging-time 500 vlan 2	Sets the length of time that a dynamic entry remains in the MAC address table after the entry is used or updated. The range is 10 to 1000000 seconds. The default is 300. You can also enter 0, which disables aging. Static address entries are never aged or removed from the table. <i>vlan-id</i> —Valid IDs are 1 to 4094.
Step 4	end Example: Device(config)# end	Exits global configuration mode and returns to privileged EXEC mode.

Feature History for Port Security

This table provides release and related information for features explained in this module.

These features are available on all releases subsequent to the one they were introduced in, unless noted otherwise.

Release	Feature	Feature Information
Cisco IOS XE Everest 16.5.1a	Port Security	The Port Security feature restricts input to an interface by limiting and identifying MAC addresses of the stations allowed to access the port. Support for this feature was introduced on all the models of the Cisco Catalyst 9500 Series Switches.
Cisco IOS XE Fuji 16.8.1a	Port Security	Support for this feature was introduced on the C9500-32C, C9500-32QC, C9500-48Y4C, and C9500-24Y4C models of the Cisco Catalyst 9500 Series Switches.
Cisco IOS XE Everest 16.5.1a	Port Security MAC Aging	When devices are added or removed from a network, the device updates the address table, adding new dynamic addresses and aging out those that are not in use. Support for this feature was introduced on all the models of the Cisco Catalyst 9500 Series Switches.
Cisco IOS XE Fuji 16.8.1a	Port Security MAC Aging	Support for this feature was introduced on the C9500-32C, C9500-32QC, C9500-48Y4C, and C9500-24Y4C models of the Cisco Catalyst 9500 Series Switches.

Use Cisco Feature Navigator to find information about platform and software image support. To access Cisco Feature Navigator, go to <http://www.cisco.com/go/cfn>.

