

# DHCP Snooping Binding Database Configuration on ESW2-550X Switches

## Objective

DHCP assigns IP addresses to hosts and also maintains a database of all the devices which are connected to the network. DHCP snooping acts like a firewall between untrusted hosts and the trusted DHCP servers, and the DHCP snooping binding database contains information about trusted hosts with leased IP addresses. You can add an IP address to the snooping database if you think it is trusted or safe. Also, you can query a database for an entry that has already been added and edit its parameters if the server has been updated.

This article explains how to add a DHCP snooping database entry and query the same on ESW2-550X stackable managed switches.

## Applicable Devices

- ESW2-550X
- ESW2-550X-DC

## Software Version

- v1.2.9.44

## Add DHCP Snooping Entry

Step 1. Log in to the web configuration utility and choose **IP Configuration > DHCP > DHCP Snooping Binding Database**. The *DHCP Snooping Binding Database* page opens:

DHCP Snooping Binding Database

Supported IP Format: Version 4

**Binding Database Table**

Filter:  VLAN ID equals to  (Range: 1 - 4094)

MAC Address equals to

IP Address equals to

Interface equals to  Unit/Slot  Port   LAG

	VLAN ID	MAC Address	IP Address	Interface	Type	Lease Time	IP Source Guard	
							Status	Reason
0 results found.								

## DHCP Snooping Binding Database

Supported IP Format: Version 4

Binding Database Table							
VLAN ID	MAC Address	IP Address	Interface	Type	Lease Time	IP Source Guard	
						Status	Reason
0 results found.							
<input type="button" value="Add..."/> <input type="button" value="Delete"/> <input type="button" value="Clear Dynamic"/>							

Step 2. Click **Add** to add a DHCP Snooping entry. The *Add DHCP Snooping Entry* window appears:

Supported IP Format: Version 4

VLAN ID:

MAC Address:

IP Address:

Interface:  Unit/Slot  Port   LAG

Type:  Dynamic  Static

Lease Time:  Infinite  User Defined  Sec (Range: 10 - 4294967294, Default: Infinite)

**Note:** The supported IP format is displayed on the top. This IP format agrees with the device IP version.

Supported IP Format: Version 4

VLAN ID:

MAC Address:

IP Address:

Interface:  Unit/Slot  Port   LAG

Type:  Dynamic  Static

Lease Time:  Infinite  User Defined  Sec (Range: 10 - 4294967294, Default: Infinite)

Step 3. In the VLAN ID field, choose the VLAN on which the data is expected from the drop-down list. A Virtual LAN (VLAN) is a group of hosts which are not physically attached but still communicate as if they are in the same broadcast domain.

Step 4. In the MAC Address field, enter the MAC address of the entry. The MAC address is a unique identifier assigned to a network interface on the device.

Step 5. In the IP Address field, enter the IP address of the entry. The IP address is a number assigned to the devices in a computer network.

Step 6. In the Interface field, click an appropriate radio button for the type of interface that you wish to be associated with the entry. The possible options are:

- **Unit/Slot and Port** — The unit identifies the whether the switch is active or a member in the stack. Unit 1 is active and unit 2 is a member. If you are unfamiliar with the terms used, check out [Cisco Business: Glossary of New Terms](#). The slot identifies whether the switch is ESW2-550 or ESW2-550X. Slot 1 is ESW2-550 and slot 2 is ESW2-550X. Choose the desired option from the Unit/Slot drop-down list and choose the desired port from the Port drop-down list.
- **LAG** — Choose the desired LAG from the LAG drop-down list. A Link Aggregate Group (LAG) is used to link multiple ports together. LAGs multiply bandwidth, increase port flexibility, and provide link redundancy between two devices to optimize port usage.

Supported IP Format: Version 4

VLAN ID:

MAC Address:

IP Address:

Interface:  Unit/Slot  Port   LAG

Type:  Dynamic  Static

Lease Time:  Infinite  User Defined  Sec (Range: 10 - 4294967294, Default: Infinite)

Step 7. In the Type field, click the **Dynamic** radio button if the DHCP snooping entry is dynamic or click the **Static** radio button if the DHCP snooping entry is static.

Step 8. In the Lease Time field, enter the amount of time the leased IP address remains valid. Click the **Infinite** radio button if you want the IP address to remain valid forever, or click the **User Defined** radio button if you wish to enter a value.

**Note:** The User Defined field is available only if the Dynamic radio button is clicked in the Type field.

Step 9. Click **Apply**. The DHCP entry is added.

Step 10. Click **Close** to return to the *DHCP Snooping Binding Database* page.

## Query DHCP Snooping Database

Step 1. Log in to the web configuration utility and choose **IP Configuration > DHCP > DHCP Binding Database**. The *DHCP Binding Database* page opens:

**Binding Database Table**

Filter:  VLAN ID equals to  (Range: 1 - 4094)

MAC Address equals to

IP Address equals to

Interface equals to  Unit/Slot  Port   LAG

	VLAN ID	MAC Address	IP Address	Interface	Type	Lease Time	IP Source Guard	
							Status	Reason
<input type="checkbox"/>	1	XXXXXXXXXX	192.168.1.100	GE 1	Static	Infinite	Inactive	No Snoop VLAN

Step 2. In the Filter field, check the desired check box(es) and the related information is displayed in the Binding Database Table. The available options are:

- VLAN ID equals to — Enter the VLAN ID.
- MAC address equals to — Enter the MAC address of the device.
- IP address equals to — Enter the IP address of the device.
- Interface equals to — Click the desired interface radio button.

Step 3. Click **Go** to query. The query results appear.

**Binding Database Table**

Filter:  VLAN ID equals to  (Range: 1 - 4094)

MAC Address equals to

IP Address equals to

Interface equals to  Unit/Slot  Port   LAG

	VLAN ID	MAC Address	IP Address	Interface	Type	Lease Time	IP Source Guard	
							Status	Reason
<input type="checkbox"/>	1	XXXXXXXXXX	192.168.1.100	GE 1	Static	Infinite	Inactive	No Snoop VLAN

Step 4. (Optional) Click **Clear Filter** after the results are displayed to clear the results of the filter you just made.

**Binding Database Table**

Filter:  VLAN ID equals to  (Range: 1 - 4094)

MAC Address equals to

IP Address equals to

Interface equals to  Unit/Slot  Port   LAG

	VLAN ID	MAC Address	IP Address	Interface	Type	Lease Time	IP Source Guard	
							Status	Reason
<input type="checkbox"/>	1	XXXXXXXXXX	192.168.1.100	GE 1	Static	Infinite	Inactive	No Snoop VLAN

Step 5. (Optional) Click **Clear Dynamic** if you wish to show only static results.