

Configuration of Reserved Mac Addresses on the 300 Series Managed Switches

Objective

Reserved MAC addresses are a way to guarantee proper traffic to a specific MAC address destination. You can configure a MAC address to receive and forward packets, or discard specific packets. The 300 Series Managed Switches lets you assign MAC addresses as reserved MAC addresses with the purpose of filter packets that are destined to these reserved MAC addresses and decide whether to bridge and forward these packets, or to discard them.

The objective of this document is to explain how to configure reserved MAC addresses on the 300 Series Managed Switches.

Applicable Devices

- SF/SG 300 Series Managed Switches

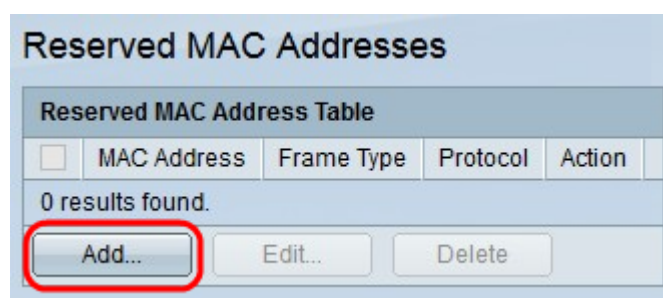
Software Version

- 1.3.0.62

Reserved MAC Address Configuration

Step 1. Log in to the web configuration utility and choose **MAC Address Tables > Reserved MAC Addresses**. The *Reserved MAC Addresses* page opens:

Step 2. Click **Add**. The *Add Reserved MAC Address* window appears.



Step 3. Choose from the MAC Address drop-down list the MAC address you wish to reserve.

MAC Address: 01:80:c2:00:00:00

Frame Type: Ethernet V2
 LLC
 LLC-SNAP
 All

Ethertype: 1000 (Range: 0x0600-0xFFFF)

Action: Bridge
 Discard

Apply Close

Step 4. Click one of the frame types in the *Frame Type* field to filter the packets that are destined to the chosen MAC address. The available options are:

- Ethernet V2 — This option applies for ETHERNET Version 2 frames for the specific MAC address.
- Ethertype — Enter in this field the protocol number in hexadecimal format you wish to filter from the ETHERNET V2 frame.

MAC Address: 01:80:c2:00:00:00

Frame Type: Ethernet V2
 LLC
 LLC-SNAP
 All

DSAP-SSAP: 5000 (Range: 0x0000-0xFFFF)

Action: Bridge
 Discard

Apply Close

- LLC — This option applies for Logical Link Control (LLC) packets for the specific MAC address. LLC acts as a bridge between the data link layer and the network layer.
- DSAP-SSAP — Enter in this field either the Destination Service Access Point (DSAP) address or the Source Service Access Point (SSAP) address in the hexadecimal format of the LLC packet you wish to filter.

MAC Address: 01:80:c2:00:00:03

Frame Type:

- Ethernet V2
- LLC
- LLC-SNAP
- All

PID: aabbccddee (Range: 0x00000000000-0xFFFFFFFF)

Action:

- Bridge
- Discard

Apply Close

- LLC-SNAP — This option applies for Logical Link Control/Sub-Network Access Protocol (LLC-SNAP) packets for the specific MAC address. SNAP is a protocol used for multiplexing and works along with LLC networks to bridge IP packets between the network layer and the data link layer.

– PID — Enter in this field the Protocol Identifier (PID) in a hexadecimal format of the LLC-SNAP packet you wish to filter.

MAC Address: 01:80:c2:00:00:00

Frame Type:

- Ethernet V2
- LLC
- LLC-SNAP
- All

Action:

- Bridge
- Discard

Apply Close

- All — This option applies for all frames for the specific MAC address.

Step 5. Click one of the actions the switch can take when a frame that matches the configured criteria arrives. The available options are:

- Discard — This option deletes the packet.
- Bridge — This option forwards the packet to all the VLANs members.

Step 6. Click **Apply**. A new MAC address is reserved.

The Reserved MAC Address Table should now display the configuration changes

Reserved MAC Addresses

Reserved MAC Address Table				
<input type="checkbox"/>	MAC Address	Frame Type	Protocol	Action
<input type="checkbox"/>	01:80:c2:00:00:00	Ethernet V2	0x1000	Bridge
<input type="checkbox"/>	01:80:c2:00:00:02	LLC	0x5000	Discard
<input type="checkbox"/>	01:80:c2:00:00:03	LLC-SNAP	0xaabbbccdee	Bridge
<input type="checkbox"/>	01:80:c2:00:00:04	All		Discard

Step 7. (Optional) To edit an entry in the Reserved MAC Address Table, check the check box of the entry you wish to edit, and then click **Edit**.

Reserved MAC Addresses

Reserved MAC Address Table				
<input type="checkbox"/>	MAC Address	Frame Type	Protocol	Action
<input checked="" type="checkbox"/>	01:80:c2:00:00:00	Ethernet V2	0x1000	Bridge
<input type="checkbox"/>	01:80:c2:00:00:02	LLC	0x5000	Discard
<input type="checkbox"/>	01:80:c2:00:00:03	LLC-SNAP	0xaabbbccdee	Bridge
<input type="checkbox"/>	01:80:c2:00:00:04	All		Discard

Step 8. (Optional) To delete an entry in the Reserved MAC Address Table, check the check box of the entry you wish to delete, and then click **Delete**.