

# Layer 3 InterVLAN Routing Configuration on 300 Series Managed Switch

## Objective

The objective of this document is to configure layer 3 InterVLAN routing on 300 switches.

## Applicable Devices

- 300 Series switches

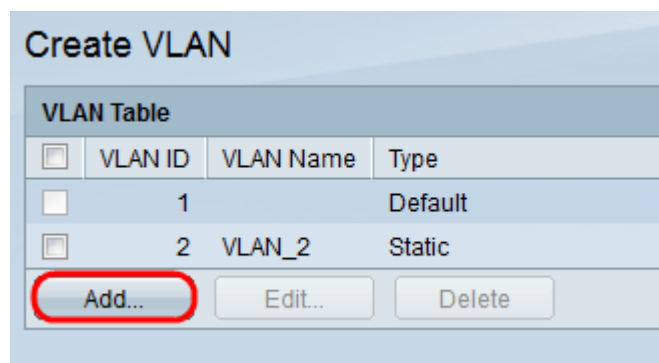
## Step-by-Step Procedure

### Prerequisites

1. Make sure Layer3 feature is enabled. For additional information on how to enable Layer 3 Mode on firmware version 1.2.7.76 or earlier, please refer to [How to configure Layer 3 mode for SX300](#). For later firmwares, please refer to [Switching to Layer 3 Mode on the SF/SG 300 Series Switches](#).
2. Make sure you have more than one VLAN configured.

## Create VLANs

Step 1. Use the switch GUI interface to choose **VLAN Management > Create VLAN**.

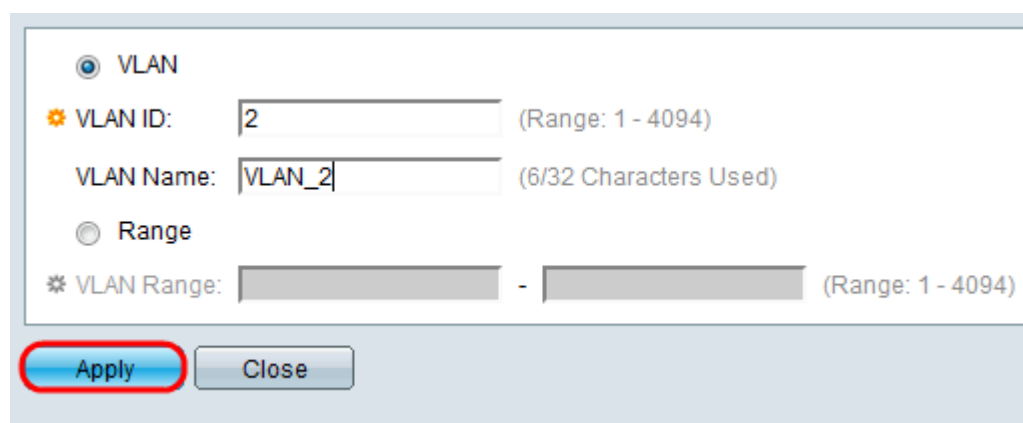


**Create VLAN**

VLAN Table			
<input type="checkbox"/>	VLAN ID	VLAN Name	Type
<input type="checkbox"/>	1		Default
<input type="checkbox"/>	2	VLAN_2	Static

**Add...** Edit... Delete

Step 2. Click **Add** to create new VLAN and enter VLAN parameters.



☒ VLAN

☒ VLAN ID:  (Range: 1 - 4094)

VLAN Name:  (6/32 Characters Used)

☐ Range

\* VLAN Range:  -  (Range: 1 - 4094)

**Apply** Close

Step 3. To add a single VLAN check **VLAN** radio button and enter the VLAN information. Repeat this step to create other VLANs.

- VLAN ID — VLAN number.
- VLAN Name — VLAN description.

Step 4. To add a range of VLAN check **Range** radio button and enter the range of IP address.

- VLAN Range — VLAN number range.

Step 5. Click **Apply** to save.

## Assign port to VLAN

Step 1. Use the switch GUI interface to choose **VLAN Management > Port to VLAN**.

Port to VLAN

Filter: VLAN ID equals to 2 AND Interface Type equals to Port Go

Interface	GE1	GE2	GE3	GE4	GE5	GE6	GE7	GE8	GE9	GE10	GE11	GE12	GE13	GE14	GE15	GE16
Access	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Trunk	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
General	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Customer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forbidden	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Excluded	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Tagged	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Untagged	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
PVID	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Interface	GE25	GE26	GE27	GE28
Access	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Trunk	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
General	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Customer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forbidden	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Excluded	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Tagged	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Untagged	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
PVID	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Apply Cancel Port VLAN Membership Table

Step 2. Choose the VLAN ID number from the VLAN ID drop-menu and Interface type from Interface Type menu.

Step 3. Click **Go** to see the VLAN membership status of the selected port.

Step 4. Choose from interface type from radio buttons.

- Access — The interface is untagged member of single VLAN.
- Trunk — The interface is not a member of specific tagged VLAN.
- General — The interface supports tagged and untagged one or more VLANs.

Step 5. Click **Apply** to save

## Configure InterVLAN routing

Step 1. Use the switch GUI interface choose **IP Configuration > Management and IP interfaces > IPv4 Interface**. IPv4 Interface pages opens.

IPv4 Interface

IPv4 Interface Table					
<input type="checkbox"/>	Interface	IP Address Type	IP Address	Mask	Status
<input type="checkbox"/>	VLAN 1	DHCP	0.0.0.0	255.255.255.255	Not received
<input type="checkbox"/>	VLAN 1	Default	192.168.1.254	255.255.255.0	Valid
<div><button>Add...</button><button>Edit...</button><button>Delete</button></div>					

Step 2. Click **Add** to assign IP address for VLANs.

Interface: ☐ Port ☐ LAG ☒ VLAN

IP Address Type: ☒ Dynamic IP Address ☐ Static IP Address

\* IP Address:

\* Mask: ☒ Network Mask  ☐ Prefix Length  (Range: 0 - 32)

Step 3. Check **VLAN** and select VLAN ID number from the drop down menu.

Step 4. Assign IP address for the VLANs.

- IP Address Type — How IP address will be assigned.
  - Dynamic IP Address — DHCP dynamic IP address assignment.
  - Static IP address — Manually configured IP address assignment.

Step 5. Click **Apply** to Save.