

# VLAN Configuration on the 200/300 Series Managed Switches

For a video showing how to configure VLANs, visit <https://youtu.be/bPBAnRLuco4>

## Objective

In scenarios where the division of traffic and security are priority, VLANs can be created to enhance the security of your network with the separation of traffic. Only users that belong to a VLAN are able to access and manipulate data traffic in the VLAN. This is also needed in scenarios where multiple subnets need to pass through an uplink for the device. This article explains how to configure a VLAN on the 200/300 Managed Switches.

## Applicable Devices

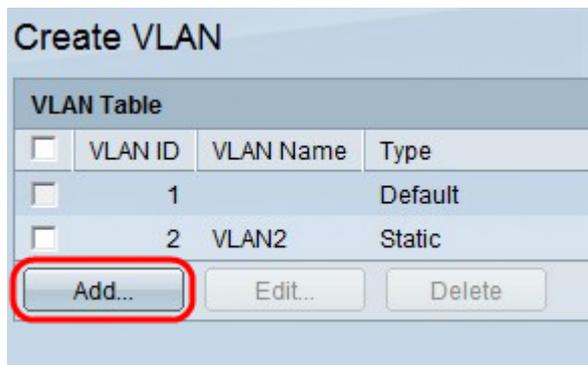
- SF/SG 200 and SF/SG 300 Series Managed Switches

## Software Version

- 1.3.0.62

## VLAN Configuration

Step 1. Log in to the web configuration utility and choose **VLAN Management > Create VLAN**. The *Create VLAN* page opens:



Step 2. Click **Add**. The *Add VLAN* window appears.

VLAN  
 \* VLAN ID:  (Range: 2 - 4094)  
 VLAN Name:  (0/32 Characters Used)  
 Range  
 \* VLAN Range:  -  (Range: 2 - 4094)

There are two ways to create a VLAN. You can create a single VLAN or you can set a range of new VLANs.

VLAN  
 \* VLAN ID:  (Range: 2 - 4094)  
 VLAN Name:  (8/32 Characters Used)  
 Range  
 \* VLAN Range:  -  (Range: 2 - 4094)

Step 3. To create a single VLAN, click the **VLAN** radio button. Then enter the following information:

- VLAN ID — The ID of the new VLAN.
- VLAN Name — The name of the new VLAN.

VLAN  
 \* VLAN ID:  (Range: 2 - 4094)  
 VLAN Name:  (8/32 Characters Used)  
 Range  
 \* VLAN Range:  -  (Range: 2 - 4094)

Step 4. To create a range of VLANs, click the **Range** radio button. Then enter the following information:

- **VLAN Range** — The range, according to the number of VLANs you want to create. For example, if you want to create 10 VLANs, then enter a range that will fit your needs (In this case, from 10 to 20)

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

## Configuration of Port to VLAN

Once the VLANs are created, you need to assign the ports you wish to the appropriate VLAN. The next steps explain how to assign ports to VLANs on the 200/300 Series Managed Switches.

Step 1. Log in to the web configuration utility and choose **VLAN Management > Port to VLAN**. The *Port to VLAN* page opens:

Port to VLAN

Filter: VLAN ID equals to  AND Interface Type equals to

Interface	GE1	GE2	GE3	GE4	GE5	GE6	GE7	GE8	GE9	GE10	GE11	GE12	GE13	GE14	GE15	GE16	GE17	GE18	GE19	GE20
Access	<input type="radio"/>																			
Trunk	<input type="radio"/>																			
General	<input type="radio"/>																			
Customer	<input type="radio"/>																			
Forbidden	<input type="radio"/>																			
Excluded	<input type="radio"/>																			
Tagged	<input type="radio"/>																			
Untagged	<input checked="" type="radio"/>																			
Multicast TV VLAN	<input type="radio"/>																			
PVID	<input checked="" type="checkbox"/>																			

Port to VLAN

Filter: VLAN ID equals to  AND Interface Type equals to

Interface	GE1	GE2	GE3	GE4	GE5	GE6	GE7	GE8	GE9	GE10	GE11	GE12	GE13	GE14	GE15	GE16	GE17	GE18	GE19	GE20
Access	<input type="radio"/>																			
Trunk	<input type="radio"/>																			
General	<input type="radio"/>																			
Customer	<input type="radio"/>																			
Forbidden	<input type="radio"/>																			
Excluded	<input checked="" type="radio"/>																			
Tagged	<input type="radio"/>																			
Untagged	<input type="radio"/>																			
Multicast TV VLAN	<input type="radio"/>																			
PVID	<input type="checkbox"/>																			

Step 2. In the Filter field, from the VLAN ID Equals To drop-down list, choose the appropriate VLAN.

Port to VLAN

Filter: VLAN ID equals to 10 AND Interface Type equals to Port Go

Interface	GE1	GE2	GE3	GE4	GE5	GE6	GE7	GE8	GE9	GE10	GE11	GE12	GE13	GE14	GE15	GE16	GE17	GE18	GE19	GE20
Access	<input type="radio"/>																			
Trunk	<input checked="" type="radio"/>																			
General	<input type="radio"/>																			
Customer	<input type="radio"/>																			
Forbidden	<input type="radio"/>																			
Excluded	<input checked="" type="radio"/>																			
Tagged	<input type="radio"/>																			
Untagged	<input type="radio"/>																			
Multicast TV VLAN	<input type="radio"/>																			
PVID	<input type="checkbox"/>																			

Apply Cancel Port VLAN Membership Table

Step 3. In the Filter field, from the Interface Type Equals To drop-down list, choose the type of interface you would like to add to the VLAN. The available options are either a port or a LAG (Link Aggregation Group).

Port to VLAN

Filter: VLAN ID equals to 10 AND Interface Type equals to Port Go

Interface	GE1	GE2	GE3	GE4	GE5	GE6	GE7	GE8	GE9	GE10	GE11	GE12	GE13	GE14	GE15	GE16	GE17	GE18	GE19	GE20
Access	<input type="radio"/>																			
Trunk	<input checked="" type="radio"/>																			
General	<input type="radio"/>																			
Customer	<input type="radio"/>																			
Forbidden	<input type="radio"/>																			
Excluded	<input checked="" type="radio"/>																			
Tagged	<input type="radio"/>																			
Untagged	<input type="radio"/>																			
Multicast TV VLAN	<input type="radio"/>																			
PVID	<input type="checkbox"/>																			

Apply Cancel Port VLAN Membership Table

Step 4. Click **Go**.

Step 5. For each interface, click the radio button of the desired interface type. The available options are:

- Forbidden — The interface won't join the chosen VLAN manually, or through GVRP. Instead, the interface joins the internally used VLAN 4095 if the interface is not a member of any other VLANs.
- Excluded — The interface is not a member of the chosen VLAN. If the chosen VLAN is the Default VLAN for this device, the Excluded radio button is not available. If every untagged VLAN is excluded from an interface, the interface joins automatically the Default VLAN.
- Tagged — The interface is a member of the chosen VLAN and packets sent from this interface destined to the chosen VLAN will have the packet tagged with the VLAN ID. The Tagged radio button is not enabled for interfaces in Access mode if the chosen VLAN is the Default VLAN. If there are no untagged VLANs on an interface, the interface automatically joins the internally used VLAN 4095.
- Untagged — The interface is a member of the chosen VLAN and packets sent from this interface destined to the chosen VLAN will not be tagged with the VLAN ID. If the interface is in Access or Trunk mode, the Default VLAN is automatically excluded when the interface joins the VLAN as Untagged.
- Multicast TV VLAN — This option enables multicast transmission to users who are not in the

same data VLAN. The users, which are connected to the switch with different VLAN ID, can share the same multicast stream if they join the ports to the same multicast VLAN ID.

Step 6 (Optional) The Port VLAN Identifier (PVID) identifies the Default VLAN for the interface. To set the PVID of the interface to the chosen VLAN, for each interface, check the **PVID** check box. If the interface is in Access or Trunk mode, the interface changes from Tagged to Untagged mode. On the other hand, if you uncheck the **PVID** check box and the interface is in Access or Trunk mode, the interface changes the tag mode of the VLAN to Tagged. Also if the interface is in Access or Trunk mode and if you click the **Untagged** radio button, then the **PVID** check box is checked, and if you click the **Tagged** radio button, then the **PVID** check box is unchecked.

Step 7. Click **Apply** save the settings for the chosen VLAN and interface type.

**Note:** The Port VLAN Membership Table button takes you to the *Port VLAN Membership* configuration page. Port VLAN Membership displays the VLAN membership information of the ports. You can edit each interface to add or remove VLAN membership. For more information, please refer to the article *Configuration of VLAN Membership of an Interface on the 200/300 Series Managed Switches*.