# **Configure a VLAN on a Switch**

# Objective

Virtual Local Area Network (VLAN) creation allows you to make separate broadcast domains on a switch. The broadcast domains can associate with one another with the help of a Layer 3 device such as a router. A VLAN is mainly used to form groups among the hosts regardless of where the hosts are physically located. Thus, a VLAN improves security with the help of group formation among the hosts. When a VLAN is created, it has no effect until that VLAN is attached to at least one port either manually or dynamically. One of the most common reasons to set up a VLAN is to set up a separate VLAN for voice, and a separate VLAN for data. This directs the packets for both types of data despite using the same network.

This article aims to show how to create, edit, or delete a VLAN.

#### **Applicable Devices | Firmware Version**

- Sx200 Series | V 1.4.5.02 (Download latest)
- Sx300 Series | V 1.4.5.02 (<u>Download latest</u>)
- Sx250 Series | V 2.2.0.66 (<u>Download latest</u>)
- Sx350 Series | V 2.2.0.66 (<u>Download latest</u>)
- SG350X Series | V 2.2.0.66 (Download latest)
- Sx500 Series | V 1.4.5.02 (<u>Download latest</u>)
- Sx550X Series | V 2.2.0.66 (<u>Download latest</u>)

### **VLAN Settings**

#### **Create a VLAN**

Step 1. Log in to the web-based utility and choose VLAN Management > VLAN Settings.



Step 2. Under the VLAN Table area, click Add to create a new VLAN. A window will pop-up.

VLA	VLAN Settings					
VLA	VLAN Table					
	VLAN ID	VLAN Name	Originators	VLAN Interface State	Link Status SNMP Traps	
	1		Default	Enabled	Enabled	
	Add	Edit	Delete			

Step 3. VLAN can be added in two different methods as shown by the options below. Choose a radio button that corresponds to the desired method:

VLAN	
VLAN ID:	(Range: 2 - 4094)
VLAN Name:	(0/32 characters used)
VLAN Interface State: 🖉 Enable	
Link Status SNMP Traps: 🕢 Enable	
& VLAN Range:	- (Range: 2 - 4094)
Apply Close	

- VLAN  $\hat{a} \in$ " Use this method to create a specific VLAN.
- Range  $\hat{a} \in$  "Use this method to create a range VLANs.

Step 4. If you chose VLAN in Step 3, enter the VLAN ID in the VLAN ID field. The range must be between 2 to 4094. For this example, the VLAN ID will be 4.

VLAN			
VLAN ID:	4	(Range: 2 - 4094)	
VLAN Name:		(0/32 characters used)	
VLAN Interface	State: 🕑 Enable		
Link Status SN	MP Traps: 🕑 Enable		
Range			
✤ VLAN Range:		-	(Range: 2 - 4094)
Apply	Close		

Step 5.In the *VLAN Name* field, enter a name for the VLAN. For this example, the VLAN Name will be Accounting. Up to 32 characters may be used.

VLAN			
VLAN ID:	4	(Range: 2 - 4094)	
VLAN Name:	Accounting	(10/32 characters used)	
VLAN Interface	e State: 🕑 Enable		
Link Status SN	MP Traps: 🕑 Enable		
Range			
✤ VLAN Range:		•	(Range: 2 - 4094)
Apply	Close		

Step 6. Check the *VLAN Interface State* check box to enable the VLAN interface state; it is already checked by default. If not, the VLAN will be effectively shut down, and nothing will be able to be transmitted or received through the VLAN.

VLAN			
VLAN ID:	4	(Range: 2 - 4094)	
VLAN Name:	Accounting	(10/32 characters used)	
VLAN Interface	e State: 🕜 Enable		
Link Status SN	MP Traps: 🗹 Enable		
Range			
☆ VLAN Range:		-	(Range: 2 - 4094)
Apply	Close		

Step 7. Check the Link Status SNMP Traps check box if you want to enable the generation of SNMP traps. This is enabled by default.

VLAN			
VLAN ID: 4		(Range: 2 - 4094)	
VLAN Name: Ad	ccounting	(10/32 characters used)	
VLAN Interface St	ate: 🗹 Enable		
Link Status SNMP	P Traps: 🕢 Enable		
Range	-		
🛠 VLAN Range:		-	(Range: 2 - 4094)
Apply Clo	ose		

Step 8. If you chose Range in Step 3, enter the range of the VLANs in the VLAN Range field. The available range is 2–4094. For this example, the VLAN Range is from 3 to 52.

O VLAN				
✤ VLAN ID: 4	(Range: 2 - 4094)			
VLAN Name: Accounting	(10/32 characters used)			
VLAN Interface State: 🕑 Enable				
Link Status SNMP Traps: 🕑 Enable				
Range				
🗢 VLAN Range: 3	- 52 (Range: 2 - 4094)			
Apply Close				

Note: Up to 100 VLANs can be created at a time.

Step 9. Click Apply.

<ul> <li>VLAN</li> <li>VLAN ID: 4</li> <li>VLAN Name: Accounting</li> <li>VLAN Interface State:  Enable</li> <li>Link Status SNMP Traps:  Enable</li> </ul>	(Range: 2 - 4094) (10/32 characters used)
Range     XUAN Range:     Apply     Close	- (Range: 2 - 4094)

#### Edit a VLAN

Step 1. Log in to the web-based utility and choose VLAN Management > VLAN Settings. The VLAN Settings page opens.

VLAN Table					
	VLAN ID	VLAN Name	Originators	VLAN Interface State	Link Status SNMP Traps
	1		Default	Enabled	Enabled
•	4	Accounting	Static	Enabled	Enabled
	Add	Edit	Delete		

Step 2. Check the check box next to the VLAN you want to edit.

VLA	VLAN Table				
	VLAN ID	VLAN Name	Originators	VLAN Interface State	Link Status SNMP Traps
	1		Default	Enabled	Enabled
$\odot$	4	Accounting	Static	Enabled	Enabled
	Add	Edit	Delete		

Step 3. Click Edit to edit the selected VLAN. The Edit VLAN window appears.

VLA	VLAN Table					
	VLAN ID	VLAN Name	Originators	VLAN Interface State	Link Status	
					SNMP Traps	
	1		Default	Enabled	Enabled	
	4	Accounting	Static	Enabled	Enabled	
	Add	Edit	Delete			

Step 4. The current VLAN can be changed using the *VLAN ID* drop-down list. This is used to quickly switch between the VLANs you want to configure without returning to the VLAN Settings page.

VLAN ID: VLAN Name: VLAN Interface State: Link Status SNMP Traps: C Enable	(10/32 characters used)
Apply Close	

Step 5. Edit the name of the VLAN in the *VLAN Name* field. This name does not impact the performance of the VLAN, and is used for easy identification.

🖹 Edit VLAN - Google Chron	ne				
192.168.1.104/cs61cad552/Vmember/bridg_vlan_properties_e.h					
VLAN ID: VLAN Name: VLAN Interface State:	4 ▼ Accounting	10/32 characters used)			
Link Status SNMP Traps:	Enable				
Apply Close					

Step 6. Check the VLAN Interface State check box to enable the VLANâ€<sup>™</sup>s interface state; it is already checked by default. If not, the VLAN will be effectively shut down, and nothing will be able to be transmitted or received through the VLAN.

🖹 Edit VLAN - Google Chrome					
192.168.1.104/cs61cad552/Vmember/bridg_vlan_properties_e.h					
VLAN ID: 4  VLAN Name: Accounting VLAN Interface State: Enable Link Status SNMP Traps: Enable	(10/32 characters used)				
Apply Close					

Step 7. Check the Enable Link Status SNMP Traps check box to enable the generation of SNMP traps with link status information. This box is checked by default.

VLAN ID:	4 🔻	
VLAN Name:	Accounting	(10/32 characters used)
VLAN Interface State:	Enable	
Link Status SNMP Traps	Enable	
Apply Close		

Step 8. Click Apply.

VLAN ID:	4 🔻	
VLAN Name:	Accounting	(10/32 characters used)
VLAN Interface State:	Enable	
Link Status SNMP Traps:	Enable	
Apply Close		

#### **Delete a VLAN**

Step 1.Log in to the web-based utility and choose VLAN Management > VLAN Settings.

VL/	N Table				
	VLAN ID	VLAN Name	Originators	VLAN Interface State	Link Status SNMP Traps
	1		Default	Enabled	Enabled
•	4	Accounting	Static	Enabled	Enabled
	Add	Edit	Delete		

Step 2. Check the check box next to the VLAN you want to delete.

VLA	VLAN Table					
	VLAN ID	VLAN Name	Originators	VLAN Interface State	Link Status SNMP Traps	
	1		Default	Enabled	Enabled	
$\odot$	4	Accounting	Static	Enabled	Enabled	
	Add	Edit	Delete			

Step 3. Click **Delete** to delete the selected VLAN.

VL/	AN Table				
	VLAN ID	VLAN Name	Originators	VLAN Interface State	Link Status SNMP Traps
	1		Default	Enabled	Enabled
•	4	Accounting	Static	Enabled	Enabled
	Add	Edit	Delete	]	

You have now successfully deleted a VLAN.

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