Configure SNMP Groups on a Cisco Business Switch

Objective

This document explains how to create and configure an SNMP group on a Cisco Business switch.

Introduction

Simple Network Management Protocol (SNMP) is a network management protocol which helps to record, store, and share information about the devices in the network. This helps the administrator address network issues. SNMP uses Management Information Bases (MIBs) to store available information in a hierarchical manner. SNMP Groups are used to combine the SNMP users based on access privileges and authorization to different SNMP views at the MIBs. Each SNMP group is uniquely identified by a combination of group name and the security levels. It assumes that SNMP Views has already been configured for the device.

For information on configuring SNMP views, check out:

- <u>Configure SNMP Views on a CBS250 or 350 Series Switch</u>
- <u>Configure SNMP Views on CBS220</u>

Applicable Devices | Software Version

- CBS220 (Data Sheet) | 2.0.1.5 (Download latest)
- CBS250 (DataSheet) | 3.0.0.69 (Download latest)
- CBS350 (Data Sheet) | 3.0.0.69 (Download latest)
- CBS350-2X (Data Sheet) | 3.0.0.69 (Download latest)
- CBS350-4X (Data Sheet) | 3.0.0.69 (Download latest)

Configure SNMP Groups on a Switch

Step 1

Log in to the web user interface (UI) of the switch.

The UI options may be different based on your switch model. In this article, CBS350 switch is used.

Step 2

If you have a CBS250 or CBS350 switch, change the Display Mode to Advanced.



If you have a CBS220 switch, skip this step and go to Step 3.

Step 3

Choose **SNMP > Groups**.



Step 4

Click Add to create a new SNMP group.

Groups

For group configuration to become effective, you may have to configure the corresponding parameters on the Views page.

Group Table



Step 5

Enter the name of the SNMP group in the Group Name field.

```
Add Group
```

😅 Group Name	SNMP_Group1	(11/30 characters used)
Security Model:		
	○ SNMPv2	
	○ SNMPv3	

In this example, the group name is SNMP_Group1.

Step 6

Choose the radio button for the SNMP Version in the Security Model area. The options are:

- SNMPv1 This option means that there is no authentication and no privacy.
- SNMPv2 This option includes most of the SNMPv1 features. It also provides authentication to ensure the SNMP messages are exchanged between authorized entities.
- SNMPv3 This option incorporates the SNMPv2 features and offers authentication together with privacy to ensure that only authorized entities can view the SNMP messages.

Add Group

🜣 Group Name:	SNMP_Group1	(11/30 characters used)
Security Model:	⊖ SNMPv1	
	○ SNMPv2	
(SNMPv3	

In this example, SNMPv3 is chosen.

Step 7

Check the **Enable** check boxes that correspond to the desired security level for the newly created SNMP group. The options are:

- No Authentication and No Privacy This option means that no authentication and no data encryption are assigned to the group.
- Authentication and No Privacy This option authenticates SNMP messages and ensures that their origin is authenticated.
- Authentication and Privacy This option authenticates SNMP messages and encrypts them.



Step 8

The SNMP views are the subset of MIB objects that can be assigned to an SNMP group to control write, read, and notification privileges of SNMP users over MIB object information. Check the desired access privileges such as Read, Write, and Notify check boxes and choose the desired view from the drop-down list for the newly created SNMP group. The drop-down list contains both default views and the user defined views.

- Read The management access is read-only for the chosen view.
- Write The management access is write for the chosen view.
- Notify A notification message is sent to the SNMP users when an event occurs on the chosen view. This is available only on SNMPv3.

Enable	Security Level	view									
	No Authentication and No Privacy		Read	Default	~	Writ	Default	~	Notify		~
	Authentication and No Privacy		Read		~	Writ	Default	~	Notify		~
	Authentication and Privacy		Read	Default	~	🕑 Writ	e Default	~ .	Notify	Default	~

Step 9

Click Apply to save the SNMP group to the running configuration file.

Group Name: ecurity Model:	SNMP_Group1 SNMPv1 SNMPv2 SNMPv3	(11/30 cł	haracters	used)							
Enable S	ecurity Level	View									
	No Authentication and No Privacy		Read		~	Write		~	Notify		~
	Authentication and No Privacy		Read		~	Write		~	Notify		~
I	Authentication and Privacy		Read	Default	~	Write	Default	~	Notify	Default	~

Step 10

(Optional) If the security model or security level of the configured group needs to be changed, check the corresponding check box and click **Edit** to implement the changes.

Group	Table										
+	I										
			No Authentication Views		Auther	Authentication Views			Privacy Views		
1	Group Name	Security Model	Read	Write	Notify	Read	Write	Notify	Read	Write	Notify
	SNMP_Group1	SNMPv3							Default	Default	Default

Step 11

(Optional) In order to delete the groups from the Group Table, check the corresponding check box and then click **Delete**.



Step 12

(Optional) Click Save to save the settings to the startup configuration file.



You have now successfully configured SNMP Groups on your switch.

Check out any of the links below for more information!

<u>SNMP Settings SNMP Views DHCP Image Upgrade Password Strength TCP and UDP Settings</u> <u>Port Security Time Settings Upgrade Firmware Smartport Best Practices Troubleshoot: No IP</u> <u>Address Troubleshoot Smartports Troubleshoot Link Flapping Create VLANs</u>