Configure Simple Network Management Protocol (SNMP) Communities on a Cisco Business Switch

Objective

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. Access rights in SNMPv1 and SNMPv2 are managed by the definition of communities. Community names are shared keys between the SNMP management stations and the devices.

This document aims to show you how to configure an SNMP community on a Cisco Business Switch. It assumes that SNMP Views has already been configured for the device. For more information, click <u>here</u>. To learn more about SNMP Groups, click <u>here</u>.

Applicable Devices | Software Version

- CBS250 (Data Sheet) | 3.0.0
- CBS350 (Data Sheet) | 3.0.0
- CBS350-2X (Data Sheet) | 3.0.0
- CBS350-4X (Data Sheet) | 3.0.0

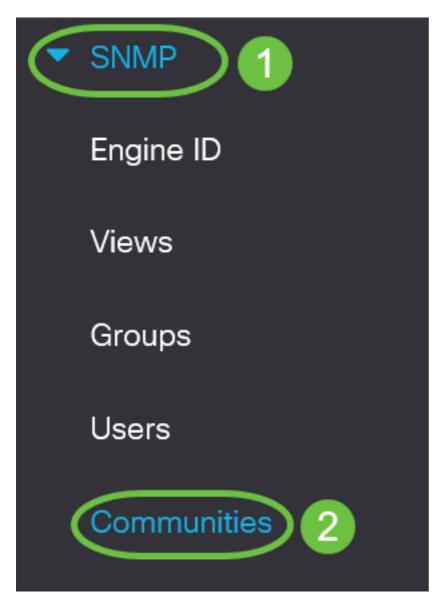
Configure SNMP Community on a Cisco Business Switch

Step 1. Log in to the web-based utility of the switch.

Step 2. Change the Display Mode to Advanced.



<u>Step 3.</u> Choose **SNMP > Communities**.

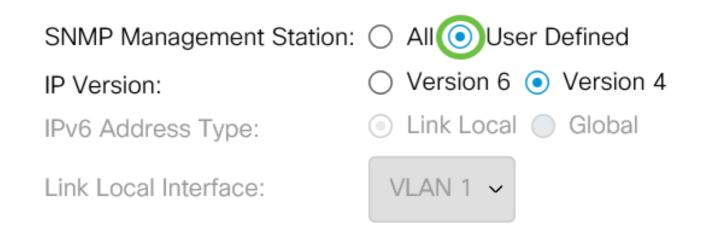


Step 4. Click Add to create a new SNMP community.

Communities					
The SNMP service is currently disabled. For a community configuration to be effective, the SNMP service must be enable					
Community Table					
SNMP Management Station Community Type Community String A					
0 results found.					

Step 5. Click the radio button for the SNMP Management Station. The options are:

- All This option gives any IP device the ability to access the SNMP community.
- User Defined This option lets you enter the management station IP address manually.



Note: In this example, User Defined is chosen. If All is chosen, skip to Step 8.

Step 6. Click the radio button of the desired IP Version. The options are:

- Version 6 Choose this option if the Management Station IP address is an IPv6 address.
- Version 4 Choose this option if the Management Station IP address is an IPv4 address.

Add SNMP Community

 SNMP Management Station:
 All
 User Defined

 IP Version:
 IPv6 Address Type:
 Version 6
 Version 4

 Link Local Interface:
 VLAN 1
 VLAN 1

Note: In this example, Version 6 is chosen. If version 4 is chosen, proceed to <u>Step 8</u>.

Step 7. Choose the IPv6 Address Type. The options are:

- Link Local This option is chosen when the Address starts with FE80, uniquely identified on a single network link, and used for local network communication.
- Global This option is chosen when the Address used is reachable from other networks.

SNMP Management Station: 🔘 All 💿 User Defined

IP Version:

IPv6 Address Type:

Link Local Interface:

● Version 6 ○ Version 4

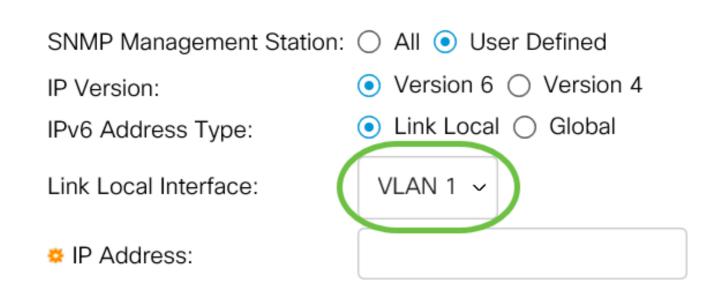
💿 Link Local 🔘 Global

VLAN 1 🗸

Note: In this example, Link Local is chosen. If Global is chosen, skip to Step 10.

<u>Step 8.</u> Choose the Interface through which the address is received from the Link Local Interface drop-down list. The options are:

- VLAN This option uses a Virtual Local Area Network (VLAN) as the interface through which the address is received. VLANs help create logical broadcast domains that can span a single switch or multiple switches across the network.
- ISATAP This option uses the Intra-Site Automatic Tunnel Addressing Protocol (ISATAP) to provide tunneling in three ways, the host-to-router, the router-to-host, and the host-to-host configuration. It helps provide automatic tunnels of IPv6 over IPv4. ISATAP is a point to multipoint tunneling mechanism which connects dual stack nodes in an IPv4 network, and is used in linking IPv4 and IPv6 networks.



Note: In this example, VLAN 1 is chosen.

Step 9. Enter the IP address of the SNMP management station in the IP Address field.

Add SNMP Community

SNMP Management Station:	🔘 All 💿 User Defined	
IP Version:	● Version 6 ○ Version 4	
IPv6 Address Type:	💿 Link Local 🔘 Global	
Link Local Interface:	VLAN 1 🗸	
• IP Address:	fe80::200:f8ff:fe21:67cf	
Community String:		(0/20 char

Note: In this example, the IP Address is fe80::200:f8ff:fe21:67cf.

<u>Step 10.</u> Enter the community name that is used to authenticate the management station to the device in the *Community String* field.

SNMP Management Station: 🔘 All 💿 User Defined				
IP Version:	● Version 6 ○ Version 4			
IPv6 Address Type:	💿 Link Local 🔘 Global			
Link Local Interface:	VLAN 1 ~			
IP Address:	fe80::200:f8ff:fe21:67cf			
Community String:	Test_Community	(14/20 characters used)		

Note: In this example, the community string is Test_Community.

Step 11. Choose one of the radio buttons for the given community.

- Basic Basic mode helps choose the community access level. The options are:
- Read Only Users are only allowed to read.
- Read Write Users can read, write and can change the device configuration. However they will not be able to modify the community.
- SNMP Admin All users can access all device configuration and can modify the community.
- Advanced This option is available only if IPv6 Link Local is chosen in Step 7. It gives access
 rights to group members associated with the group name. Choose the group name from the
 Group Name drop-down list.

SNMP Management Station:	🔘 All 💿 User Defined	
IP Version:	● Version 6 ○ Version 4	
IPv6 Address Type:	💿 Link Local 🔘 Global	
Link Local Interface:	VLAN 1 ~	
IP Address:	fe80::200:f8ff:fe21:67cf	
Community String:	Test_Community	(14/20 characters used)
Basic	Access Mode () Read Only Read Write () SNMP Admi	✓ View Name Default ~

Note: In this example, Basic is chosen.

Step 12. (Optional) Check the View Name check box and choose the name of the SNMP view from the View Name drop-down list that specifies the collection of MIB subtrees to which access is granted. This allows you to give appropriate permissions based on the option chosen from the Basic mode.

Add SNMP Community

SNMP Management Station:	🔿 All 💿 User Defined	
IP Version:	● Version 6 ○ Version 4	
IPv6 Address Type:	💿 Link Local 🔘 Global	
Link Local Interface:	VLAN 1 🗸	
IP Address:	fe80::200:f8ff:fe21:67cf	
Community String:	Test_Community	(14/20 characters used)
 Basic 	Access Mode O Read Only Read Write SNMP Adm	View Name Default ~

Note: The View Name option is not available when in SNMP Admin or in Advanced mode. In this example, Default is chosen.

Step 13. Click Apply.

SNMP Management Station: IP Version:	 All User Defined Version 6 Version 4 	
IPv6 Address Type:	● Link Local ○ Global	
Link Local Interface:	VLAN 1 ~	
IP Address:	fe80::200:f8ff:fe21:67cf	
Community String:	Test_Community	(14/20 characters used)
• Basic	Access Mode O Read Only Read Write SNMP Admi	View Name Default ~
Advanced	Group Name	
		Apply Close

Step 14. (Optional) Click Save to save the settings to the startup configuration file.

E	ıılııılı. cisco	CBS350-8P-E-2G - switc	Q	English	~	Advanced ~

You should now have successfully added a community on the switch.

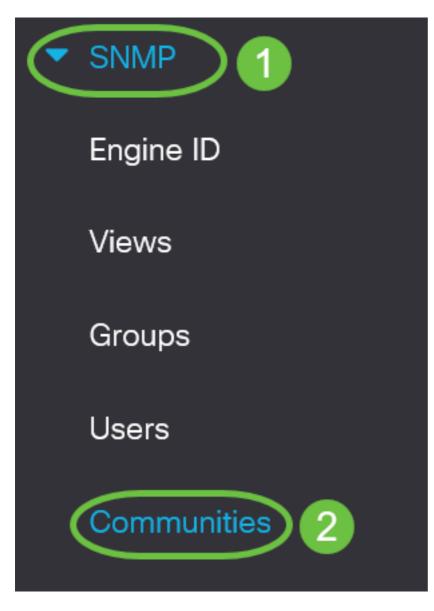
Manage SNMP Community

Step 1. Log in to the web-based utility of the switch.

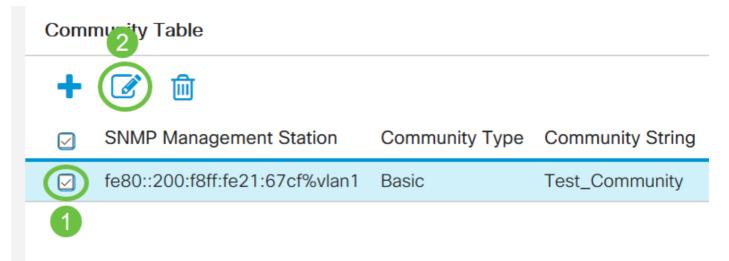
Step 2. Change the Display Mode to Advanced.



<u>Step 3.</u> Choose **SNMP > Communities**.



Step 4. Check the check box for the community that you need to edit and then click the **Edit** button.

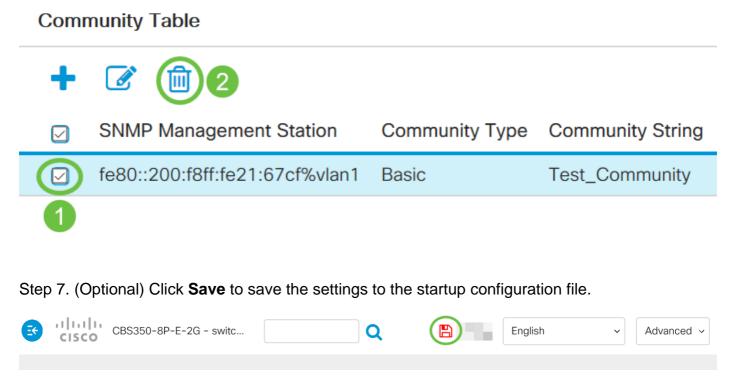


Step 5. Edit the desired fields and click **Apply**.

Edit SNMP Community

SNMP Management Station:	fe80::200:f8ff:fe21:67cf%vlan1 ~	
Community String:	Test_Community ~	
• Basic	Access Mode: Read Only View Name Read Write SNMP Admin Cefault	
⊖ Advanced	Group Name:	
		Close

Step 6. (Optional) In order to delete the communities from the Community Table, check the corresponding check box and click **Delete**.



You should now have successfully deleted an SNMP community from your switch.