Configure Simple Network Management Protocol in Cisco Business Wireless Access Point

Objective

The objective of this document is to show you how to configure Simple Network Management Protocol (SNMP) settings on your Cisco Business Wireless (CBW) Access Point (AP).

Applicable Devices | Software Version

- 140AC (Data Sheet) | 10.0.1.0 (Download latest)
- 145AC (Data Sheet) | 10.0.1.0 (Download latest)
- 240AC (Data Sheet) | 10.0.1.0 (Download latest)

Introduction

The CBW APs support the latest 802.11ac Wave 2 standard for higher performance, greater access, and higher-density networks. They deliver industry-leading performance with highly secure and reliable wireless connections, for a robust, mobile end-user experience.

SNMP is a popular network management protocol used for collecting information from all the devices in the network and configuring and managing these devices. You can configure both SNMP v2c and SNMP v3 access modes using the Master AP web interface. SNMPv2c is the community string-based administrative framework for SNMPv2. Community string is a type of password, which is transmitted in cleartext. SNMP v3 feature provides secure access to devices by authenticating and encrypting data packets over the network.

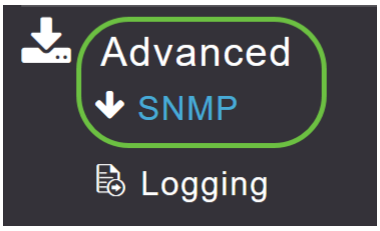
You can configure the following SNMP access modes for the Master AP:

- SNMP v2c only
- SNMP v3 only
- Both SNMP v2c and SNMP v3
- Neither SNMP v2c nor SNMP v3

Configure SNMP

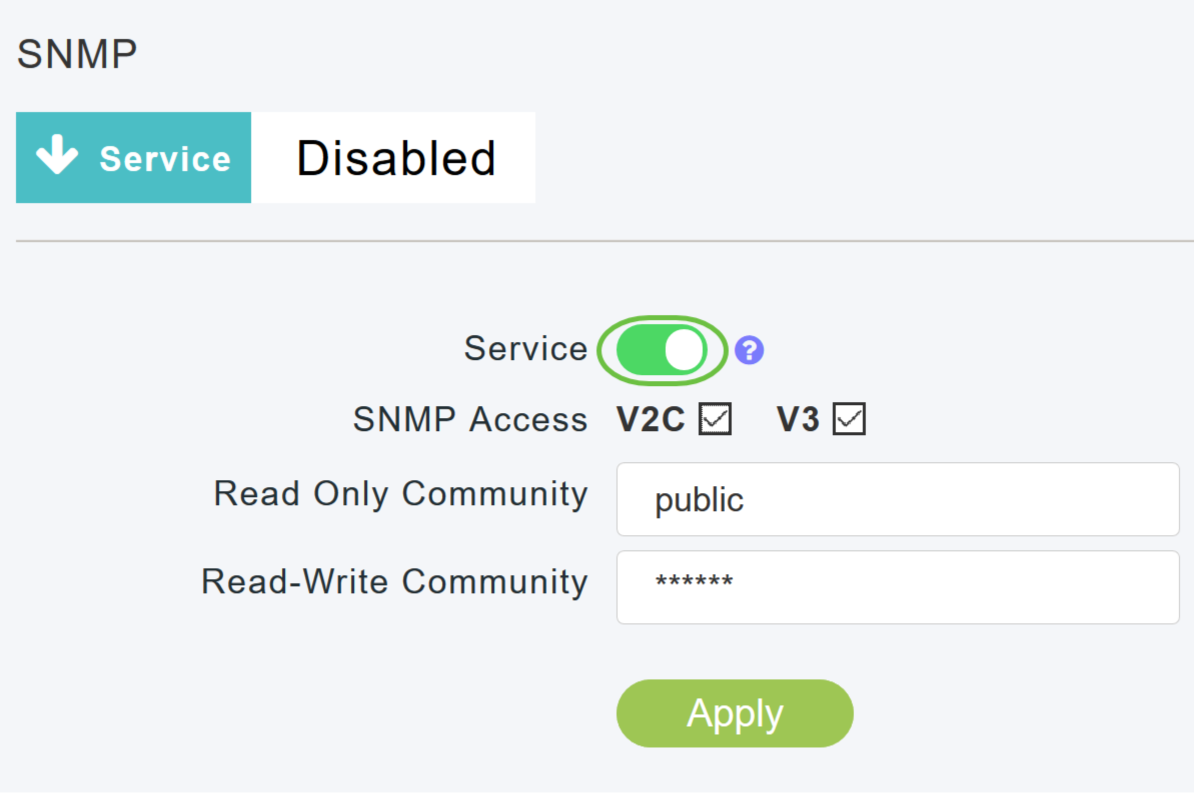
Step 1

Choose **Advanced > SNMP**.



Step 2

Enable SNMP service option for querying the configuration using MIB browser.



SNMP

Service: enabled

SNMP Access V2C ☑ V3 ☑

Read Only Community: public

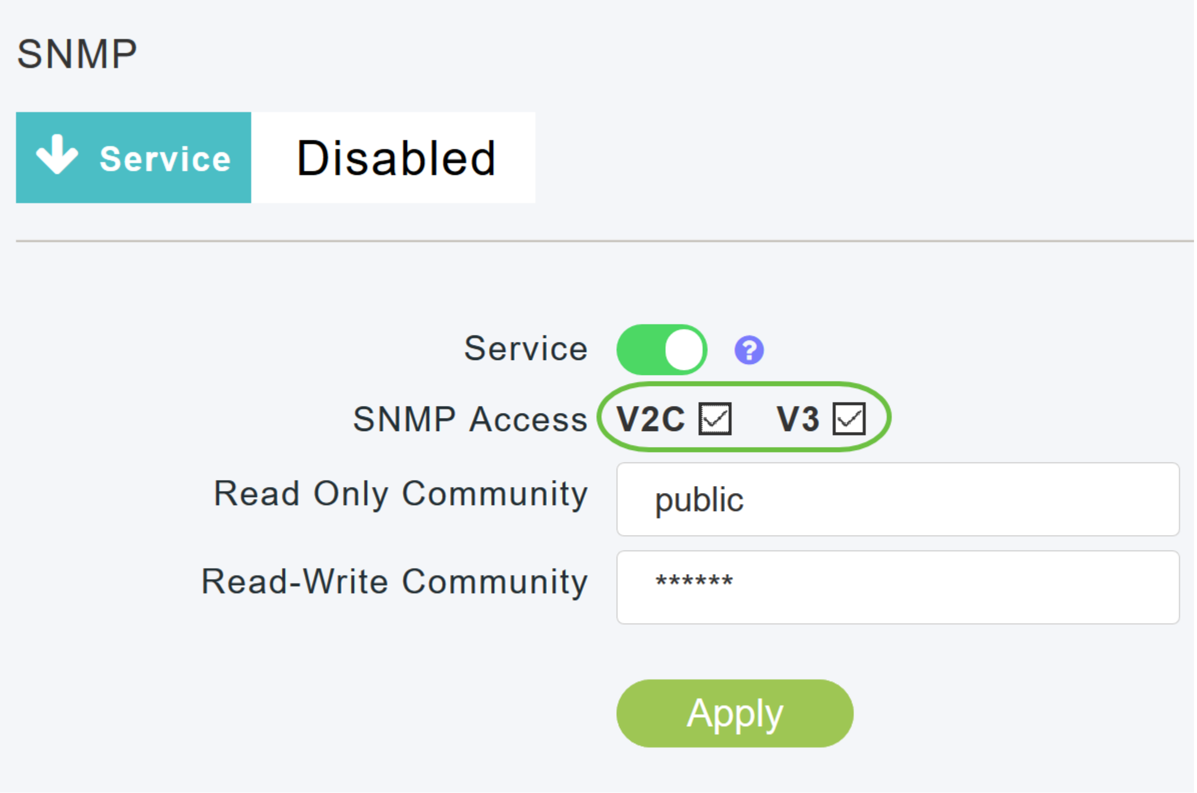
Read-Write Community: ******

Step 3

In the SNMP setup window, select the appropriate check box next to the *SNMP Access* to enable the desired SNMP mode.

The default mode is v2c (or by default, either both or neither of the SNMP access mode is selected).

The selected SNMP access mode is enabled.



SNMP

Service Disabled

Service

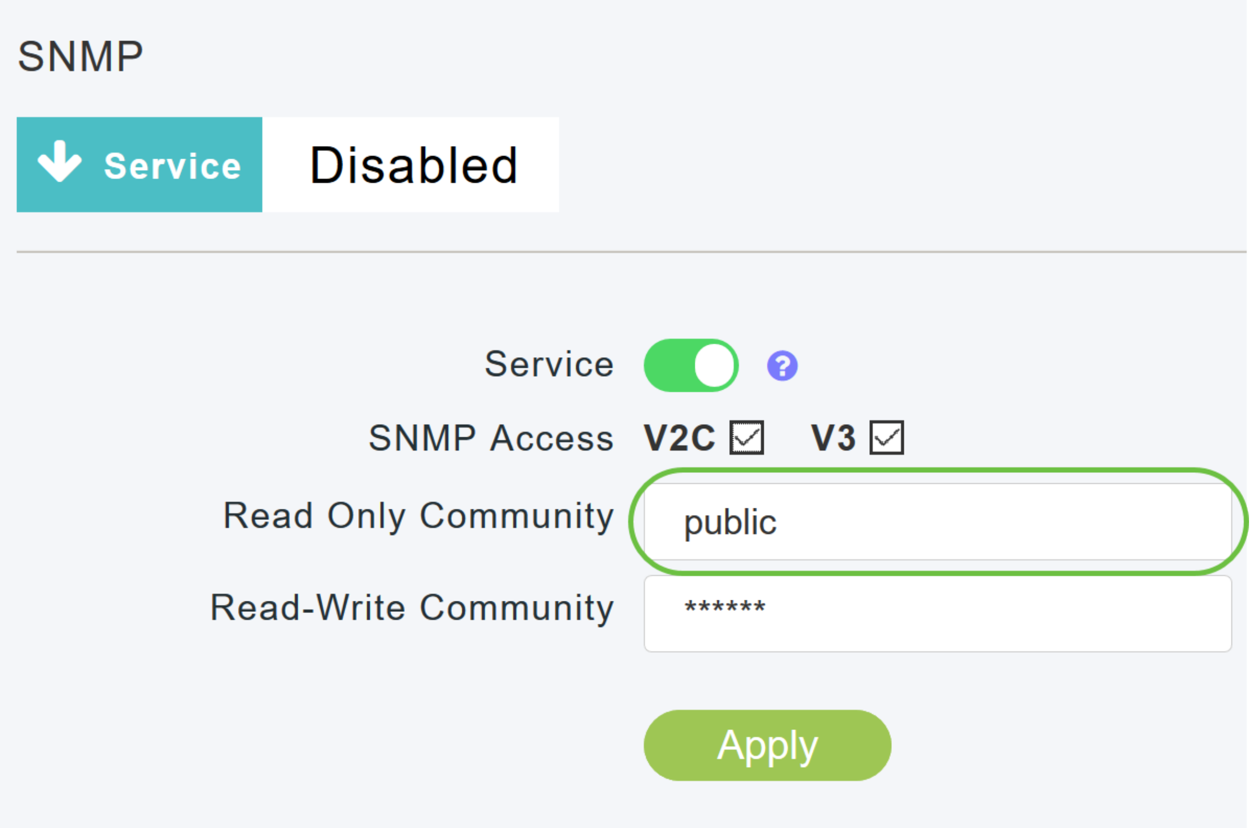
SNMP Access V2C ☑ V3 ☑

Read Only Community: public

Read-Write Community: ******

Step 4

In the *Read Only Community field*, enter the desired community name. The default name is **public** .



SNMP

Service Disabled

Service

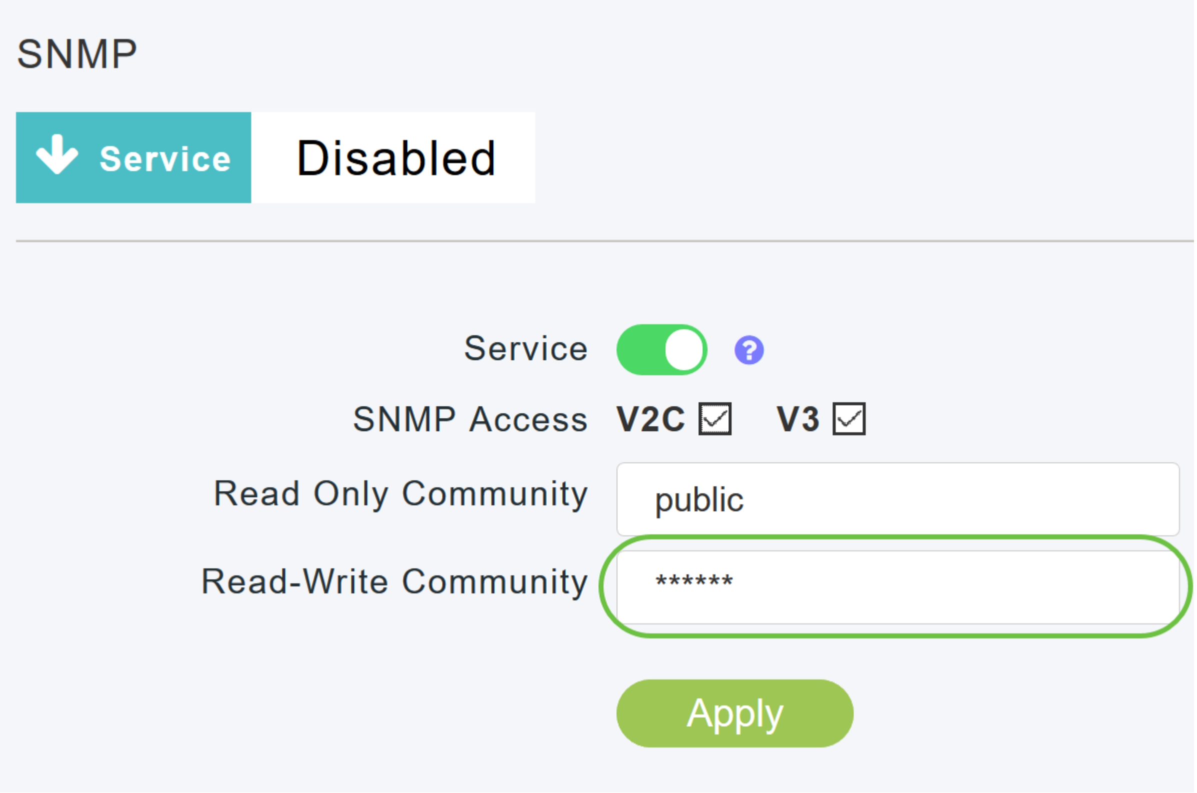
SNMP Access V2C ☑ V3 ☑

Read Only Community: public

Read-Write Community: ******

Step 5

In the *Read-Write Community* field, enter the desired community name. The default name is **private**.



SNMP

Service Disabled

Service ●

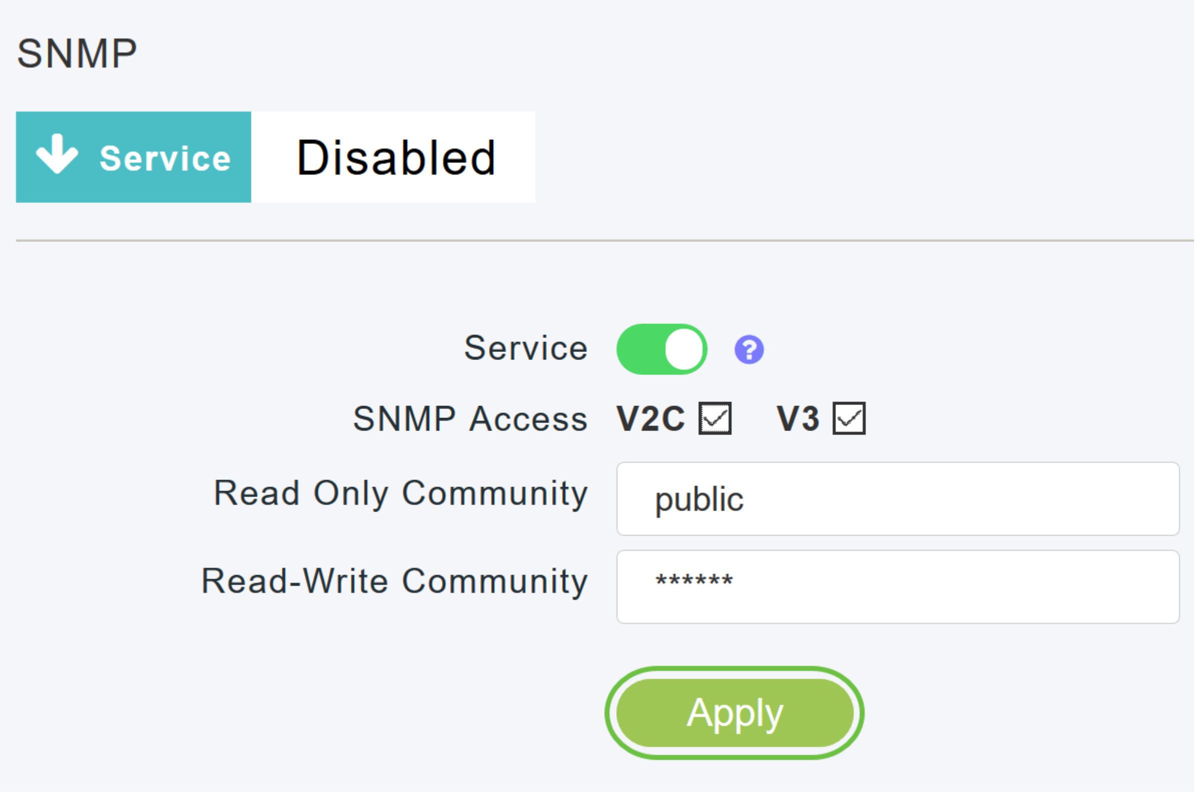
SNMP Access **V2C** ☑ **V3** ☑

Read Only Community: public

Read-Write Community: ******

Step 6

Click **Apply**.



SNMP

Service Disabled

Service ●

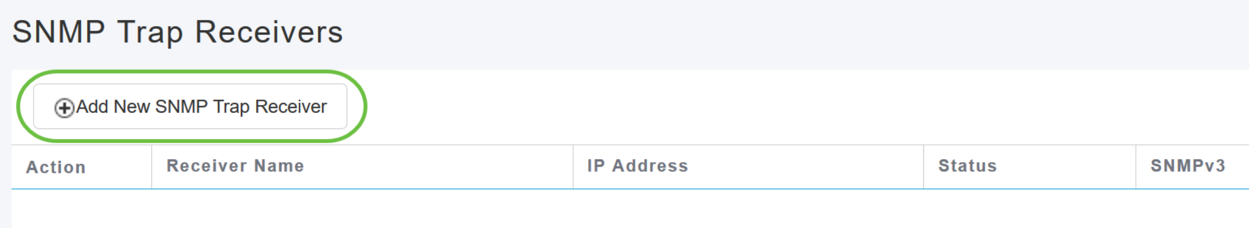
SNMP Access **V2C** ☑ **V3** ☑

Read Only Community: public

Read-Write Community: ******

Step 7

To configure SNMP Trap Receiver, click on **Add New SNMP Trap Receiver**. This tool receives, logs, and displays SNMP traps sent from network devices. The default setting is Disabled.



SNMP Trap Receivers

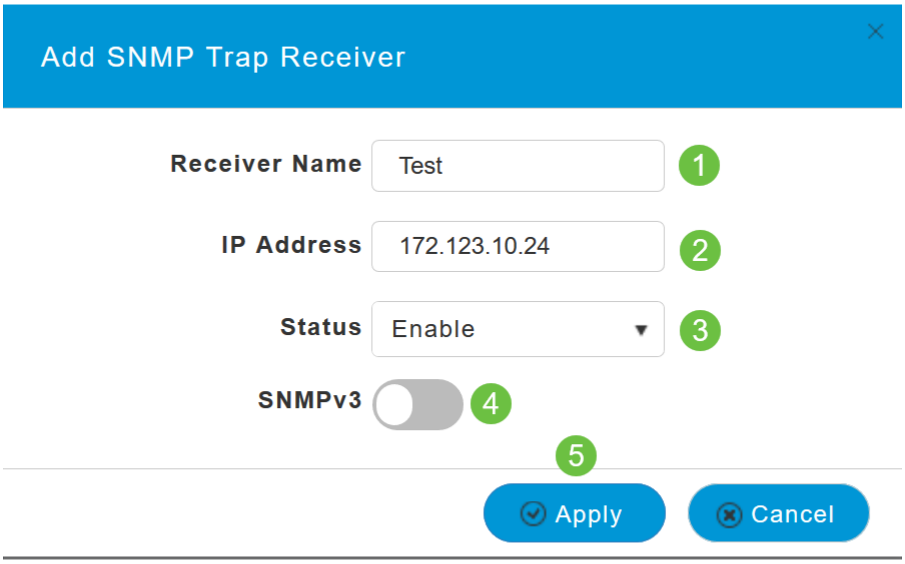
Action	Receiver Name	IP Address	Status	SNMPv3

Step 8

In the *Add SNMP Trap Receiver* window, configure the following:

- Receiver Name
- IP address of the server you wish to connect to
- Status
- Option to enable SNMPv3

Click **Apply**.



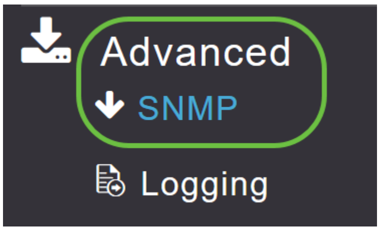
Add SNMP Trap Receiver

Receiver Name	Test	1
IP Address	172.123.10.24	2
Status	Enable	3
SNMPv3		4

Add an SNMPv3 User

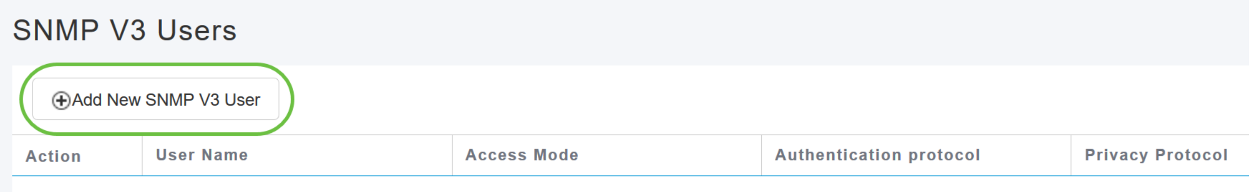
Step 1

Choose **Advanced > SNMP**.



Step 2

In the SNMP Setup window, under the *SNMPv3 Users* section, click the **Add New SNMPv3 User** button.



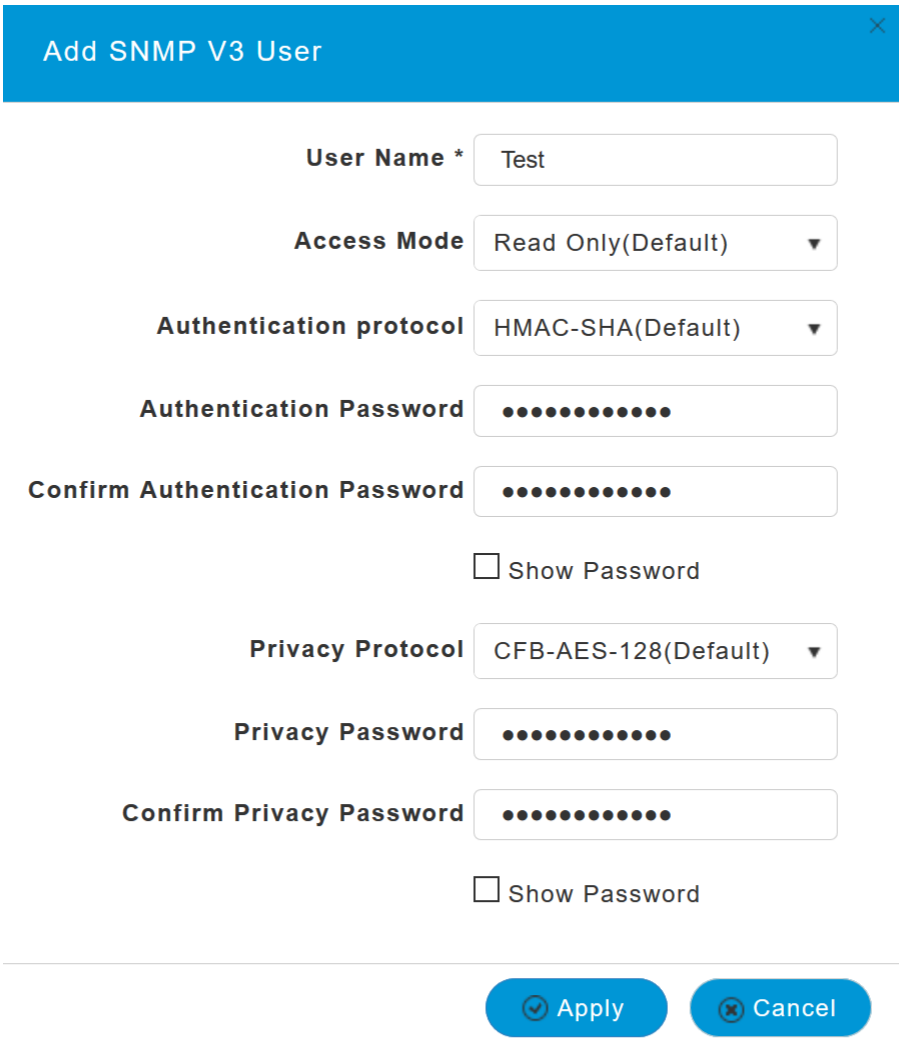
SNMP V3 Users

Action	User Name	Access Mode	Authentication protocol	Privacy Protocol

Step 3

In the *Add SNMP v3 User* window, enter the following details:

- *User Name* - Enter the desired username for the new SNMPv3 user.
- *Access Mode* - From the drop-down list, choose one of the desired modes: *Read Only* or *Read/Write.* The default is **Read Only***.*
- *Authentication protocol* - From the *Authentication Protocol* drop-down list, choose one of the options: HMAC-MD5, HMAC-SHA, or None. The default authentication protocol is **HMAC-SHA**.
- *Authentication Password* - Enter the desired authentication password. Use a minimum password length of 12-31 characters.
- *Confirm Authentication Password* - Confirm the authentication password specified above. You can select the Show Password checkbox to display the entries in the Authentication Password and the Confirm Authentication Password fields and verify if the characters match.
- *Privacy Protocol* - From the drop-down list, select one of the options: CBC-DES, CFB-AES-128, or None. The default privacy protocol is **CFB-AES-128**.
- *Privacy Password* - Enter the desired privacy password. Use a minimum password length of 12-31 characters.
- *Confirm Privacy Password* - Confirm the privacy password specified above. You can select the Show Password checkbox to display the entries in the Privacy Password and the Confirm Privacy Password fields and verify if the characters match.



Add SNMP V3 User

User Name * Test

Access Mode Read Only(Default)

Authentication protocol HMAC-SHA(Default)

Authentication Password ●●●●●●●●●●●●

Confirm Authentication Password ●●●●●●●●●●●●

□ Show Password

Privacy Protocol CFB-AES-128(Default)

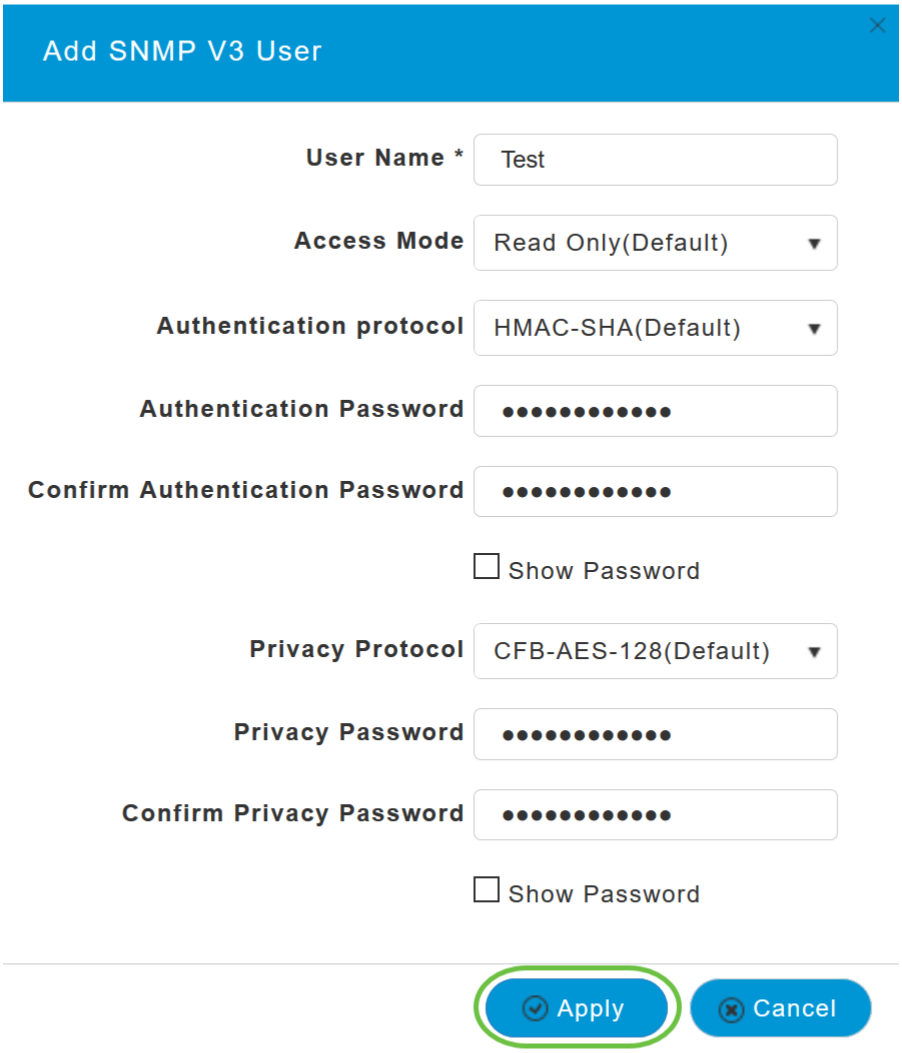
Privacy Password ●●●●●●●●●●●●

Confirm Privacy Password ●●●●●●●●●●●●

□ Show Password

Step 4

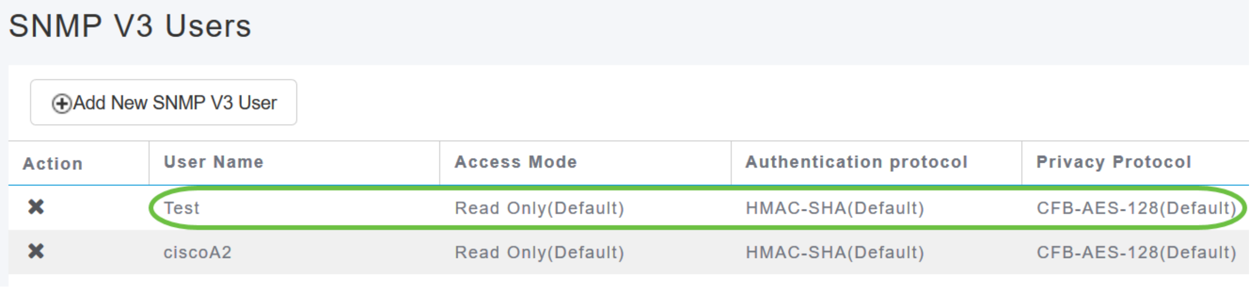
Click **Apply** to create a new SNMPv3 user.



Add SNMP V3 User

User Name *	Test
Access Mode	Read Only(Default) ▾
Authentication protocol	HMAC-SHA(Default) ▾
Authentication Password	●●●●●●●●●●●●
Confirm Authentication Password	●●●●●●●●●●●●
	□ Show Password
Privacy Protocol	CFB-AES-128(Default) ▾
Privacy Password	●●●●●●●●●●●●
Confirm Privacy Password	●●●●●●●●●●●●
	□ Show Password

The newly added SNMPv3 User appears in the *SNMP V3 Users* table on the SNMP Setup window.



SNMP V3 Users

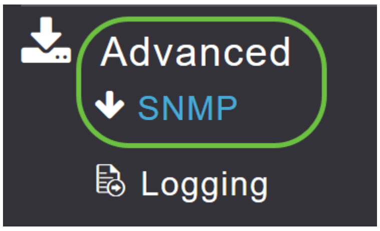
Action	User Name	Access Mode	Authentication protocol	Privacy Protocol
✖	Test	Read Only(Default)	HMAC-SHA(Default)	CFB-AES-128(Default)
✖	ciscoA2	Read Only(Default)	HMAC-SHA(Default)	CFB-AES-128(Default)

You can add up to a maximum of 7 SNMPv3 users.

Delete SNMPv3 User

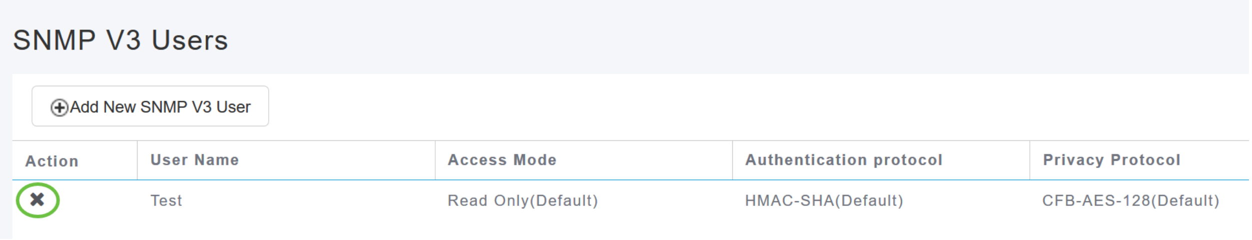
Step 1

Choose **Advanced > SNMP**.



Step 2

In the *SNMP Setup*, click the **X** icon in the row containing the SNMPv3 user you wish to delete.

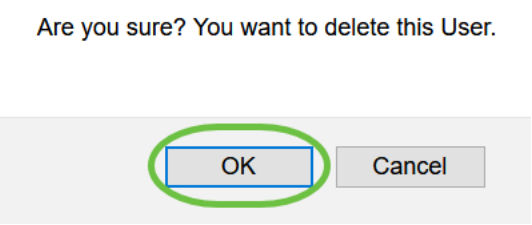


SNMP V3 Users

Action	User Name	Access Mode	Authentication protocol	Privacy Protocol
✖	Test	Read Only(Default)	HMAC-SHA(Default)	CFB-AES-128(Default)

Step 3

A pop-up window appears to confirm the action. Click **OK**.



Are you sure? You want to delete this User.

The SNMPv3 Users table is refreshed and the deleted entry is removed from the table.

Conclusion

You are all set! You have now successfully configured SNMP in your CBW AP. To learn more, read the articles below and manage your network with ease.

Frequently Asked Questions Firmware Upgrade RLANs Application Profiling Client Profiling Master AP Tools Umbrella WLAN Users Logging Traffic Shaping Rogues Interferers Configuration Management Port Configuration Mesh Mode