Configure Simple Network Management Protocol (SNMP) Users on a 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. SNMP uses Management Information Bases (MIBs) to store available information in a hierarchical manner. An SNMP User is defined by login credentials such as username, password, and authentication method. It is operated in association with an SNMP group and an engine ID. For instructions on how to configure an SNMP Group, click here. Only SNMPv3 use SNMP users. Users with access privileges are associated with an SNMP view.

For example, SNMP users might be configured by a network manager to associate them to a group so that access rights can be assigned to a group of users in that particular group rather than to a single user. A user can only belong to one group. In order to create an SNMPv3 User, an Engine ID must be configured and an SNMPv3 Group must be available.

This document explains how to create and configure an SNMP user on a switch.

Applicable Devices

- Sx250 Series
- Sx300 Series
- Sx350 Series
- SG350X Series
- Sx500 Series
- Sx550X Series

Software Version

- 1.4.7.05 — Sx300, Sx500
- 2.2.8.04 — Sx250, Sx350, SG350X, Sx550X

Configure SNMP Users on a Switch

Add an SNMP User

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

Step 2. Change the Display Mode to **Advanced**.

Note: This option is not available on the SG300 Series and SG500 Series switch. If you have those models, skip to Step 3.

<u>Step 3.</u> Choose **SNMP > Users**.
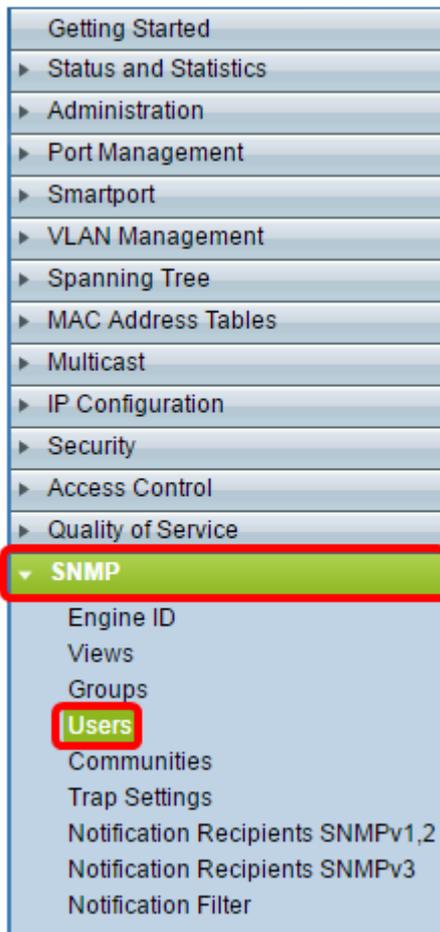
Step 4. Click **Add** to create a new SNMP user.

Step 5. Enter the name of the SNMP user in the *User Name* field.

Note: In this example, the user name is SNMP_User1.

Step 6. Click the Engine ID. The options are:

- Local – This option means that the user is connected to the local switch.
- Remote IP Address – This option means that the user is connected to a different SNMP entity besides the local switch. Choose a remote IP address from the IP address drop-down list. This remote IP address is the IP address configured for the SNMP engine ID.

Note: When the local SNMP Engine ID is changed or removed, it deletes the SNMPv3 User database. In order for the inform messages and request information to be received, both the local and the remote user must be defined. In this example, Local is chosen.

Step 7. Choose the SNMP group name where the SNMP user belongs from the Group Name drop-down list.

Note: In this example, SNMP_Group is chosen.

Step 8. Click the authentication method. The options are:

- None — This option means that there is no user authentication used.
- MD5 — This option means that the password entered by the user is encrypted with MD5. MD5 is a cryptographic function which has a 128-bit hash value. It is commonly used for data entry.
- SHA — This option means that the password entered by the user is encrypted with Secure Hash Algorithm (SHA) authentication method. Hash functions are used to convert an input of arbitrary size to an output of fixed size which would be a 160-bit hash value.

Note: In this example, SHA is chosen.

Step 9. Click the radio button for the Authentication Password. The options are:

- Encrypted — This option means that the password will be encrypted. It will not be shown as it is entered.
- Plaintext — This option means that the password will not be encrypted. It will be shown as it is being entered.

Note: In this example, Plaintext is chosen.

Step 10. Enter the password.

Note: In this example, the password is password1.

Step 11. Click a Privacy Method. The options are:

- None — This option means that the password is not encrypted.
- DES — This option means that the password is encrypted with Data Encryption Standard (DES). DES is a standard which takes a 64-bit input value and uses a 56-bit key for encryption and decryption of the messages. It is a symmetric encryption algorithm where the sender and the receiver use the same key.

Note: Privacy Methods can be configured only for groups with Authentication and Privacy configured. For more information, click here. In this example, DES is chosen.

Step 12. (Optional) If DES is chosen, choose the Privacy Password authentication. The options are:

- Encrypted — This option means that the password will be encrypted. It will not be shown as it is entered.
- Plaintext — This option means that the password will not be encrypted. It will be shown as it is being entered.

Note: In this example, Plaintext is chosen.

Step 13. Enter the DES Password.

Note: In this example, the DES password is password2.

Step 14. Click **Apply** then click **Close**.

Step 15. (Optional) Click **Save**.
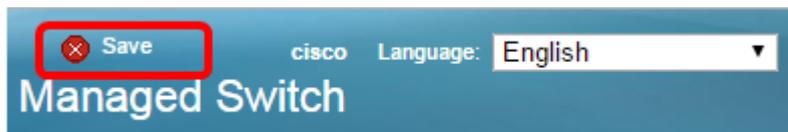
You should now have added an SNMP User to your switch.

Modify SNMP Users

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

Step 2. Change the Display Mode to **Advanced**.

Note: This option is not available on the SG300 Series and SG500 Series switch. If you have those models, skip to Step 3.
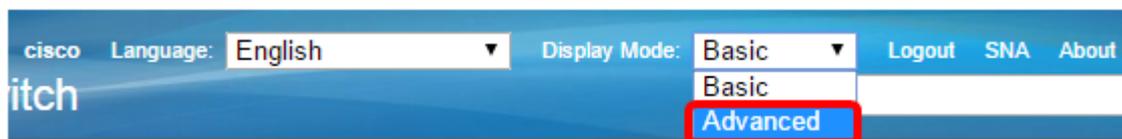

Step 3. Choose **SNMP > Users**.
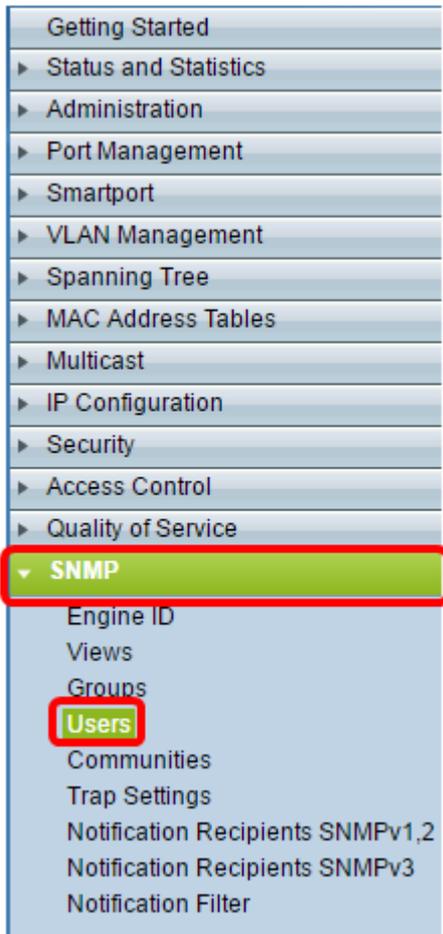
Step 4. Check the check box that corresponds to the User that you want to edit.
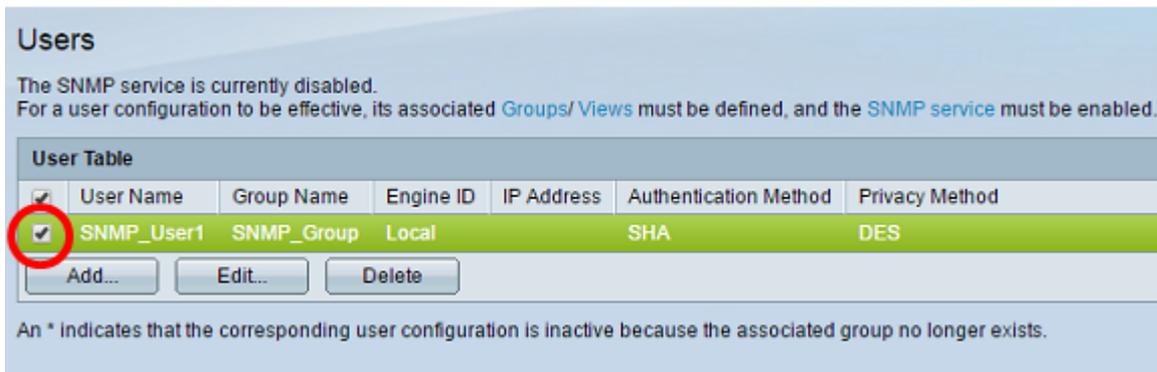
Step 5. Click **Edit**.
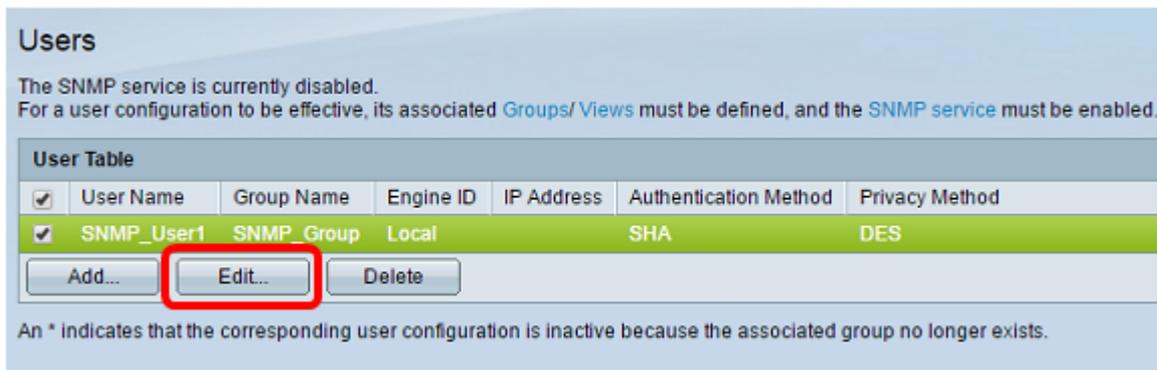
Step 6. Edit the settings that need to be changed.

Step 7. Click **Apply** then click **Close**.

Step 8. (Optional) Click **Save**.

You should now have successfully edited the SNMP User settings.