Configure Simple Network Management Protocol (SNMP) Notification Recipients on a Switch

Objective

Simple Network Management Protocol (SNMP) is a network management protocol which helps record, store, and share information about the devices in the network. This helps the administrator address network issues. SNMP notification messages, or traps, report system events such as the temperature of a remote device. Traps are sent from an SNMP-enabled network device to network management stations that help troubleshoot network issues easily. The system can generate traps in the Management Information Base (MIB) that it supports.

The following configurations are prerequisites of being able to configure SNMP notification recipients successfully:

- SNMP Communities — This is required for SNMPv1 and SNMPv2. For instructions on configuring SNMP Communities, click here.
- SNMP Users — This is required for SNMPv3. For instructions on configuring SNMP Users, click here.

This document aims to show you how to configure the destination (notification recipient) to which SNMP notifications (traps or informs) are sent, and the types of SNMP notifications that are sent to each destination on a switch.

Applicable Devices

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

Software Version

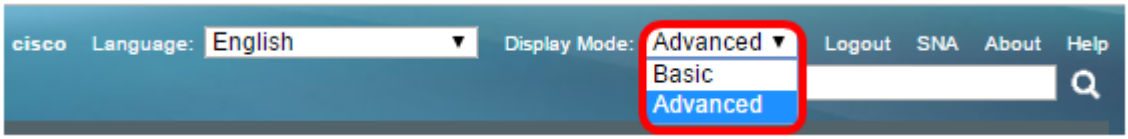
- 1.4.7.05 — Sx300, Sx500
- 2.2.8.04 — Sx250, Sx350, SG350X, Sx550X

Configure SNMP Notification Recipients

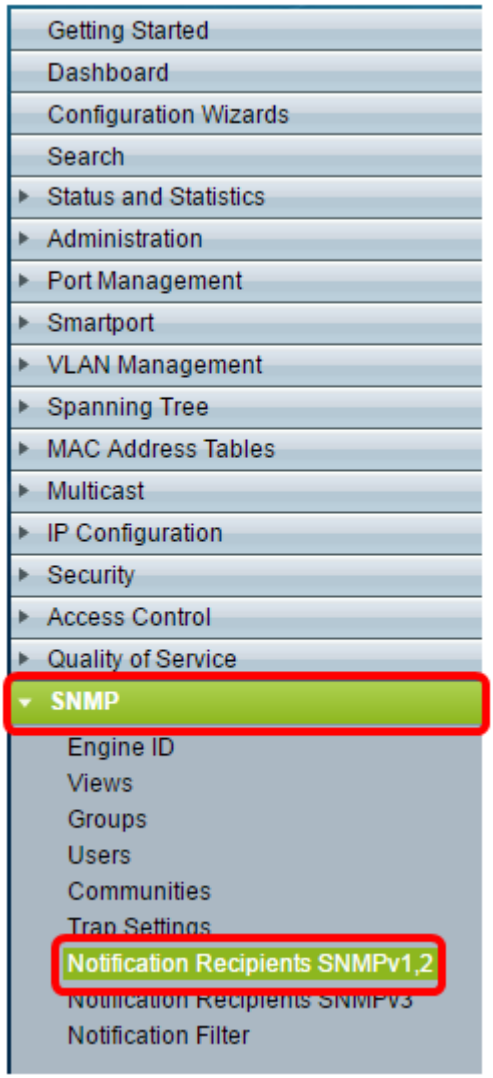
Configure SNMPv1,2 Notification Recipients

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

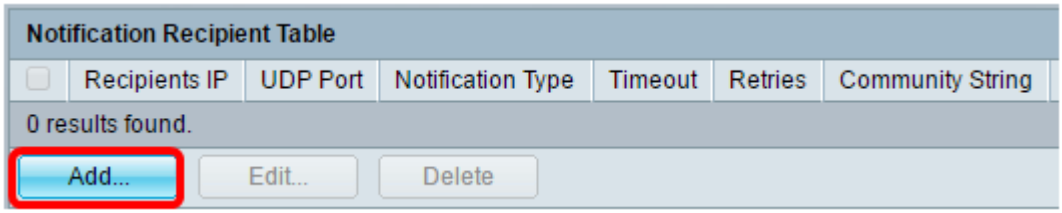
Step 2. Choose **Advanced** from the Display Mode drop-down list.



Step 3. Choose **SNMP > Notification Recipients SNMPv1,2**.

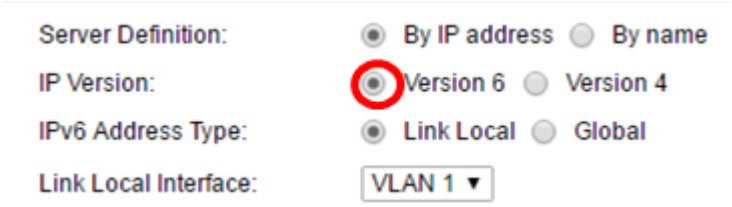


Step 4. Click **Add**.



Step 5. Choose an Internet Protocol (IP) version. The options are:

- Version 6 — Choose this option if the Management station has an IPv6 address type.
- Version 4 — Choose this option if the Management station has an IPv4 address type.



Note: In this example, Version 6 is chosen.

Step 6. (Optional) If Version 6 is chosen, choose an IPv6 address type. The options are:

- Link Local — This IPv6 address has a prefix of FE80, which identifies hosts on a single network link. Link Local address types can only be used for communication on the local network.
- Global — This IPv6 address type is visible to other networks.

Note: In this example, Link Local is chosen.

Step 7. (Optional) If the IPv6 address type is Link Local, choose the interface through which address is received from the Link Local Interface drop-down list.

Note: In this example, Link Local Interface is VLAN 1.

Step 8. Enter the IP address of the recipient device in the *Recipient IP Address/Name*field.

Note: In this example, the Recipient IP Address/Name is fe80:0::eebd:1dff:fe44:5719.

Step 9. Enter the User Datagram Protocol (UDP) port used for notification on the recipient

device in the *UDP Port* field.

Note: In this example, 162 is entered.

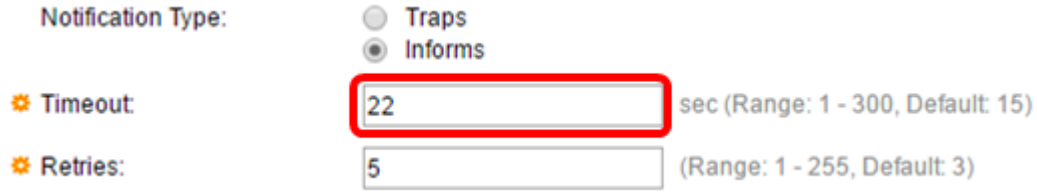
Step 10. Choose a Notification Type. The options are:

- Traps — This option reports system events. This type of notification is unacknowledged.
- Informs — This option is similar to a Trap. The main difference is that an Inform is an acknowledged form of Trap. This type of notification is available in SNMPv2.

Note: If Informs is chosen, proceed to Step 11. If Traps is chosen, proceed to Step 13.

Note: In this example, Informs is chosen.

Step 11. (Optional) Enter the number of seconds the device waits before resending Informs in the *Timeout* field. Valid values are from 1 to 300. The default value is 15.



Note: In this example, 22 is entered.

Step 12. (Optional) Enter the number of times that the device would attempt to send an Inform request in the *Retries* field. Valid values are from 1 to 255. The default value is 3 times.

Note: In this example, 5 is entered.

Step 13. Choose the community for the notification recipient from the Community String drop-down list.

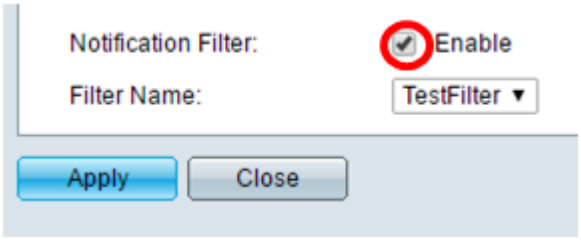
Note: In this example, TestCommunity is chosen.

Step 14. Choose a Notification Version. The options are:

- SNMPv1 — This option utilizes SNMPv1.
- SNMPv2 — This option utilizes SNMPv2.

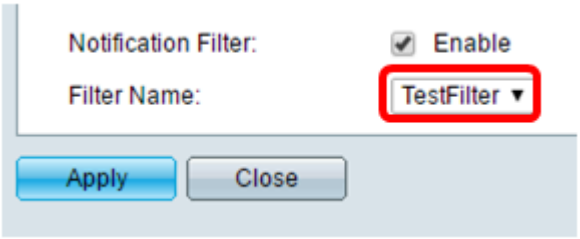
Note: In this example, SNMPv1 is chosen.

Step 15. (Optional) Check the Notification Filter **Enable** check box to filter the type of SNMP notifications sent to the management station.



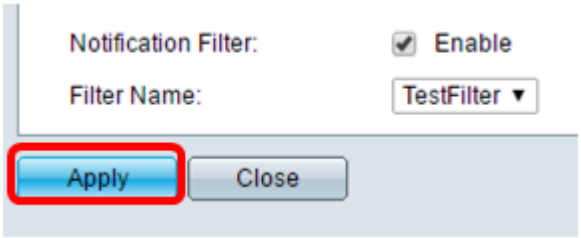
Note: In this example, the Notification Filter check box is checked.

Step 16. (Optional) If Notification Filter is enabled, choose the SNMP filter that defines the information contained in Traps from the Filter Name drop-down list.



Note: In this example, TestFilter is chosen.

Step 17. Click **Apply** to save the configuration.



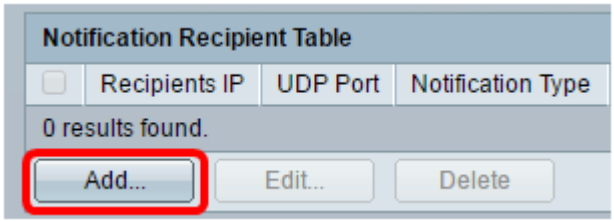
Step 18. Click **Save** to save to startup config file.

You should now have successfully added SNMP notifications on your switch.

Configure SNMPv3 Notification Recipients

Step 1. Log in to the web-based utility and choose **SNMP > Notification Recipients SNMPv3**.

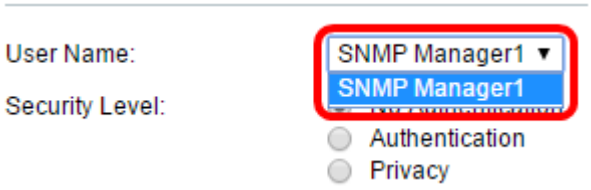
Step 2. Click **Add** to add a new notification recipient.



Step 3. Follow Step 5 to Step 10 of the Configuration of SNMPv1,2 Notification Recipients section of this article.

Step 4. Choose the User for the SNMPv3 notification recipient from the User Name drop-

down list.



Note: In this example, SNMP Manager1 is chosen.

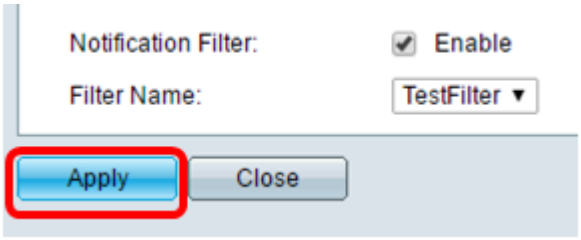
Step 5. Choose a Security Level. The options are:

- No Authentication — This indicates that the packet is neither authenticated nor encrypted.
- Authentication — This option indicates that the packet is authenticated but not encrypted.
- Privacy — This option indicates that the packet is both authenticated and encrypted.

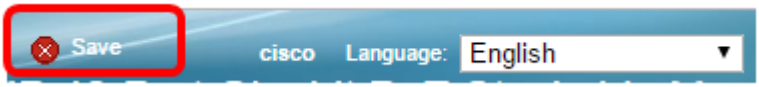
Note: The security level depends on the chosen User Name. If no authentication is configured for a User, the available Security Level would be No Authentication only.

Step 6. Follow Step 15 to Step 16 of the Configuration of SNMPv1,2 Notification Recipients section of this article.

Step 7. Click **Apply** to save the configuration.



Step 8. Click **Save**.



You should now have successfully added SNMPv3 Notification recipients on your switch.