

Configure Simple Network Management Protocol (SNMP) Groups 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. 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.

This document explains how to create and configure an SNMP group on a switch. It assumes that SNMP Views has already been configured for the device. For more information, click [here](#).

Applicable Devices

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

Software Version

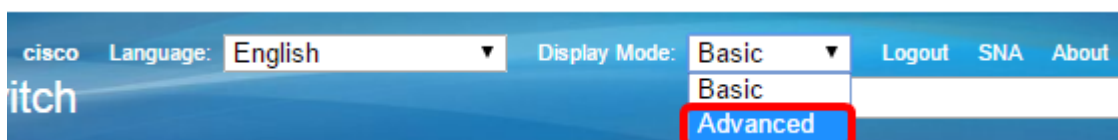
- 1.4.7.05 — Sx300, Sx500
- 2.2.8.04 — Sx250, Sx350, SG350X, Sx550X

Configure SNMP Groups on a Switch

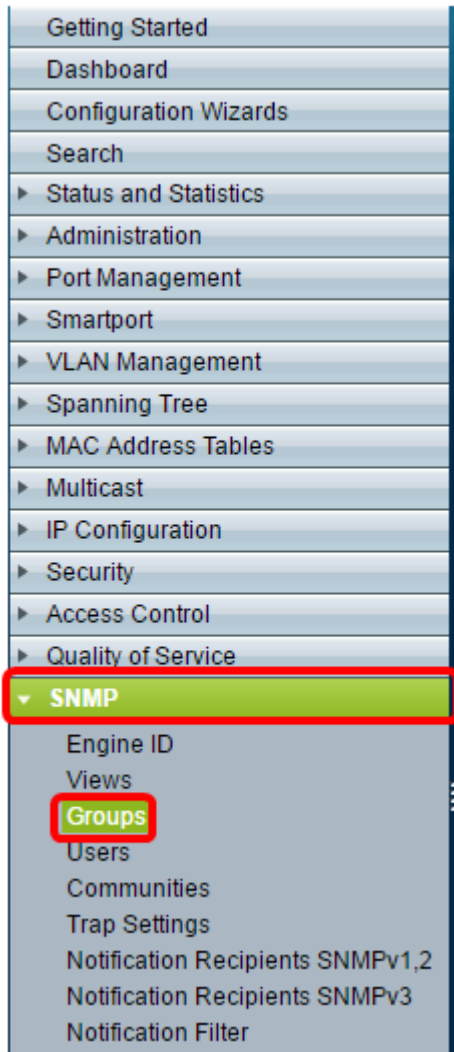
Step 1. Log in to the web-based utility of the switch.

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

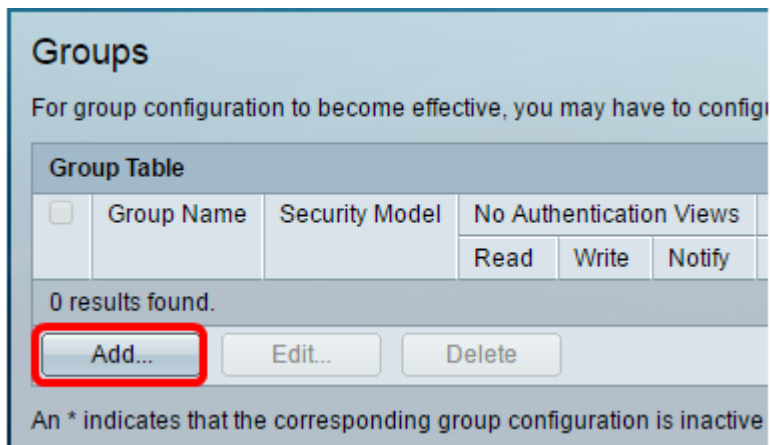
Note: This option is not available on the SG300 Series and SG500 Series switch. If you have those models, skip to [Step 3](#).



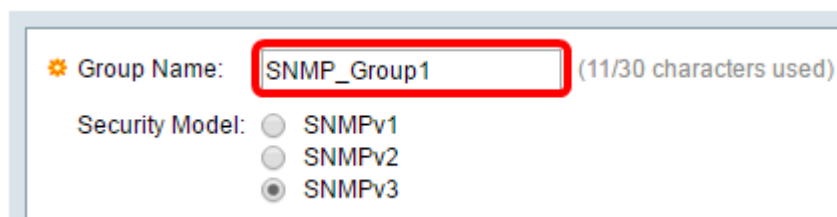
[Step 3](#). Choose **SNMP > Groups**.



Step 4. Click **Add** to create a new SNMP group.



Step 5. Enter the name of the SNMP group in the *Group Name* field.



Note: 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.

Group Name: (11/30 characters used)

Security Model: SNMPv1
 SNMPv2
 SNMPv3

Note: 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.

Group Name: (11/30 characters used)

Security Model: SNMPv1
 SNMPv2
 SNMPv3

| Enable | Security Level | View |
|-------------------------------------|----------------------------------|---|
| <input type="checkbox"/> | No Authentication and No Privacy | <input type="checkbox"/> Read <input type="text" value="Default"/> <input type="checkbox"/> Write |
| <input type="checkbox"/> | Authentication and No Privacy | <input type="checkbox"/> Read <input type="text" value="Default"/> <input type="checkbox"/> Write |
| <input checked="" type="checkbox"/> | Authentication and Privacy | <input checked="" type="checkbox"/> Read <input type="text" value="Default"/> <input checked="" type="checkbox"/> Write |

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 | | | | | | | | |
|-------------------------------------|----------------------------------|-------------------------------------|------|---------|-------------------------------------|-------|---------|-------------------------------------|--------|--------------|
| <input type="checkbox"/> | No Authentication and No Privacy | <input type="checkbox"/> | Read | Default | <input type="checkbox"/> | Write | Default | <input type="checkbox"/> | Notify | Default |
| <input type="checkbox"/> | Authentication and No Privacy | <input type="checkbox"/> | Read | Default | <input type="checkbox"/> | Write | Default | <input type="checkbox"/> | Notify | Default |
| <input checked="" type="checkbox"/> | Authentication and Privacy | <input checked="" type="checkbox"/> | Read | Default | <input checked="" type="checkbox"/> | Write | Default | <input checked="" type="checkbox"/> | Notify | DefaultSuper |

Step 9. Click **Apply** to save the SNMP group to the running configuration file.

Group Name: (11/30 characters used)

Security Model: SNMPv1
 SNMPv2
 SNMPv3

| Enable | Security Level | View | | | | | | | | |
|-------------------------------------|----------------------------------|-------------------------------------|------|---------|-------------------------------------|-------|---------|-------------------------------------|--------|--------------|
| <input type="checkbox"/> | No Authentication and No Privacy | <input type="checkbox"/> | Read | Default | <input type="checkbox"/> | Write | Default | <input type="checkbox"/> | Notify | Default |
| <input type="checkbox"/> | Authentication and No Privacy | <input type="checkbox"/> | Read | Default | <input type="checkbox"/> | Write | Default | <input type="checkbox"/> | Notify | Default |
| <input checked="" type="checkbox"/> | Authentication and Privacy | <input checked="" type="checkbox"/> | Read | Default | <input checked="" type="checkbox"/> | Write | Default | <input checked="" type="checkbox"/> | Notify | DefaultSuper |

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.

| Enable | Security Level | View | | | | | | | | |
|-------------------------------------|----------------------------------|-------------------------------------|------|---------|-------------------------------------|-------|---------|-------------------------------------|--------|--------------|
| <input type="checkbox"/> | No Authentication and No Privacy | <input type="checkbox"/> | Read | Default | <input type="checkbox"/> | Write | Default | <input type="checkbox"/> | Notify | Default |
| <input type="checkbox"/> | Authentication and No Privacy | <input type="checkbox"/> | Read | Default | <input type="checkbox"/> | Write | Default | <input type="checkbox"/> | Notify | Default |
| <input checked="" type="checkbox"/> | Authentication and Privacy | <input checked="" type="checkbox"/> | Read | Default | <input checked="" type="checkbox"/> | Write | Default | <input checked="" type="checkbox"/> | Notify | DefaultSuper |

Step 11. (Optional) In order to delete the groups from the Group Table, check the corresponding check box and then click **Delete**.

Groups

For group configuration to become effective, you may have to configure the corresponding parameters on the [Views](#) page.

| Group Table | | | | | | | | | | | |
|-------------------------------------|-------------|----------------|-------------------------|-------|--------|----------------------|-------|--------|---------------|---------|--------------|
| | Group Name | Security Model | No Authentication Views | | | Authentication Views | | | Privacy Views | | |
| | | | Read | Write | Notify | Read | Write | Notify | Read | Write | Notify |
| <input type="checkbox"/> | SNMP_Group | SNMPv3 | | | | | | | Default | Default | DefaultSuper |
| <input checked="" type="checkbox"/> | SNMP_Group1 | SNMPv3 | | | | | | | Default | Default | DefaultSuper |

Step 12. (Optional) Click **Save** to save the settings to the startup configuration file.

cisco Language:

Managed Switch

You should now have successfully configured SNMP Groups on your switch.