



CHAPTER 17

Configuring SNMP V3

This chapter, which describes how to configure SNMP v3, so the network management system can monitor Cisco Unified Communications Manager or Cisco Unity Connection, contains the following topics:

- [Finding the SNMP User, page 17-1](#)
- [Configuring the SNMP User, page 17-2](#)
- [SNMP User Configuration Settings, page 17-3](#)
- [Deleting the SNMP User, page 17-4](#)
- [Finding a Notification Destination for SNMP V3, page 17-5](#)
- [Configuring a Notification Destination for SNMP V3, page 17-6](#)
- [Notification Destination Configuration Settings for SNMP V3, page 17-7](#)
- [Where to Find More Information, page 17-9](#)



Tip

If you use SNMP v1 or v2c, see the “[Configuring SNMP V1/V2c](#)” section on [page 16-1](#).

Finding the SNMP User



Tip

The Add New button does not display in the SNMP User Configuration window until you click the Find button. If no users exist and you want to add a user, click the **Find** button and wait for the window to refresh. The Add New button displays.

To find a SNMP user, perform the following procedure:

Procedure

- Step 1** Choose **Snmip > V3 > User**.
The SNMP User Configuration window displays.
- Step 2** From the Find User where Name list box, choose the specific search criteria that you want to use to find the user; for example, begins with.
- Step 3** Enter the user name for which you want to search.

- Step 4** From the Server drop-down list box, choose the hostname or IP address of the server where you access the user.
- Step 5** Click **Find**.
After you click the Find button, the Add New button displays. After the search results display, the Apply to All Nodes check box displays.
- Step 6** *Unified CM clusters only:* If you want to apply the configuration from one of the options in the search results to all nodes in the cluster, check the check box next to the name of the option and check the **Apply to All Nodes** check box.
- Step 7** From the list of results, click the user that you want to view.
- Step 8** To add or update a user, see the [“Configuring the SNMP User” section on page 17-2](#).
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Additional Information

See the [“Related Topics” section on page 17-9](#).

Configuring the SNMP User

To configure user(s) for SNMP, perform the following procedure:

Procedure

- Step 1** Perform the procedure in the [“Finding a Notification Destination for SNMP V3” section on page 17-5](#).
- Step 2** Perform one of the following tasks:
- To add a new SNMP user, click the **Add New** button in the SNMP User Configuration Find/List window and go to [Step 3](#).
 - To modify an existing SNMP user, locate the user, as described in the [“Finding a Notification Destination for SNMP V3” section on page 17-5](#); click the name of the SNMP user that you want to edit and go to [Step 3](#).
 - To delete an SNMP user, see the [“Deleting the SNMP User” section on page 17-4](#).
- Step 3** Enter the configuration settings, as described in [Table 17-1](#).



Tip

Before you save the configuration, you can click the **Clear All** button at any time to delete all information that you entered for all settings in the window.

- Step 4** To add a new user, click **Insert**, or click **Save** to save changes to an existing user.
- Step 5** A message indicates that changes will not take effect until you restart the SNMP master agent. To continue the configuration without restarting the SNMP master agent, click **Cancel**. To restart the SNMP master agent service, click **OK**.



Tip

Cisco recommends that you wait until you finish the SNMP configuration before you restart the SNMP master agent service. For information on how to restart the service, see the [“Configuring Services” section on page 11-1](#).

**Note**

To access this server that has the user that you configure, make sure that you configure this user on the NMS with the appropriate authentication and privacy settings.

Additional Information

See the [“Related Topics” section on page 17-9](#).

SNMP User Configuration Settings

Table 17-1 describes the SNMP user configuration settings for V3. For related procedures, see the [“Related Topics” section on page 17-9](#).

Table 17-1 *SNMP User Configuration Settings for V3*

Field	Description
Server	This setting displays as read only because you specified the server when you performed the procedure in the “Finding a Notification Destination for SNMP V3” section on page 17-5. To change the server where you want to provide access, perform the procedure in the “Finding the SNMP User” section on page 17-1.
User Name	In the field, enter the name of the user for which you want to provide access. The name can contain up to 32 characters and can contain any combination of alphanumeric characters, hyphens (-), and underscore characters (_).  Tip Enter users that you have already configured for the network management system (NMS). For existing SNMP users, this setting displays as read only.
Authentication Required	To require authentication, check the check box, enter the password in the Password and Reenter Password fields, and choose the appropriate protocol. The password must contain at least 8 characters.
Privacy Required	If you checked the Authentication Required check box, you can specify privacy information. To require privacy, check the check box, enter the password in the Password and Reenter Password fields, and check the protocol check box. The password must contain at least 8 characters. Tip After you check the Privacy Required check box, the DES (Data Encryption Standard) check box automatically appears checked. The DES protocol prevents packets from being disclosed.
Accept SNMP Packets from any host	To accept SNMP packets from any host, click the radio button.

Table 17-1 *SNMP User Configuration Settings for V3 (continued)*

Field	Description
Accept SNMP Packets only from these hosts	To accept SNMP packets from specific hosts, click the radio button. In the Host IP Address field, enter a host from which you want to accept SNMP packets and click Insert . Repeat this process for each host from which you want to accept SNMP packets. To delete a host, choose that host from the Host IP Addresses pane and click Remove .
Access Privileges	From the drop-down list box, choose one of the following options for the access level: • ReadOnly—The user can only read the values of MIB objects. • ReadWrite—The user can read and write the values of MIB objects. • ReadWriteNotify—The user can read and write the values of MIB objects and send MIB object values for a trap and inform messages. • NotifyOnly—The user can only send MIB object values for trap and inform messages. • ReadNotifyOnly—The user can read values of MIB objects and also send the values for trap and inform messages. • None—The user cannot read, write, or send trap information. Tip To change the trap configuration parameters, you need to configure a user with NotifyOnly, ReadNotifyOnly, or ReadWriteNotify privileges.
<i>Unified CM clusters only:</i> Apply To All Nodes	To apply the user configuration to all nodes in the cluster, check this check box.

Deleting the SNMP User

To delete a user for SNMP, perform the following procedure:

Procedure

- Step 1** Locate the SNMP user, as described in the [“Finding the SNMP User”](#) section on page 17-1.
- Step 2** From the list of matching records, check the check box next to the user that you want to delete.
- Step 3** Click **Delete Selected**.
- Step 4** A message indicates that the system will delete notification entries that relate to this user. To continue the deletion, click **OK**.
- Step 5** A message indicates that changes will not take effect until you restart the SNMP master agent. To continue the configuration without restarting the SNMP master agent, click **Cancel**. To restart the SNMP master agent service, click **OK**.

**Tip**

Cisco recommends that you wait until you finish all the SNMP configuration before you restart the SNMP master agent service. For information on how to restart the service, see the [“Configuring Services” section on page 11-1](#).

After the window refreshes, the user that you deleted no longer displays in the results.

Additional Information

See the [“Related Topics” section on page 17-9](#).

SNMP Notification Destination

The following sections apply to SNMP V3 notification destination configuration.

- [Finding a Notification Destination for SNMP V3, page 17-5](#)
- [Configuring a Notification Destination for SNMP V3, page 17-6](#)
- [Notification Destination Configuration Settings for SNMP V3, page 17-7](#)
- [Deleting a Notification Destination for SNMP V3, page 17-8](#)

Finding a Notification Destination for SNMP V3

**Tip**

The Add New button does not display in the SNMP Notification Destination Configuration window until you click the Find button. If no users exist and you want to add a user, click the **Find** button and wait for the window to refresh. The Add New button displays.

To find a notification destination for V3, perform the following procedure:

Procedure

- Step 1** Choose **Snmip > V3 > Notification Destination**.
- Step 2** From the Find Notification where Destination IP drop-down list box, choose the specific search criteria that you want to use to find the notification destination; for example, begins with.
- Step 3** Enter the IP address/hostname of notification destination for which you want to search.
- Step 4** In the Server field, choose the hostname or IP address of the server that supports the notification destination.
- Step 5** Click **Find**.
After you click the Find button, the Add New button displays. After the search results display, the Apply to All Nodes check box displays.
- Step 6** *Unified CM clusters only:* If you want to apply the configuration from one of the options in the search results to all nodes in the cluster, check the check box next to the name of the option and check the **Apply to All Nodes** check box.

- Step 7** From the list of results, click the notification destination that you want to view.
- Step 8** To add or update a notification destination, see the [“Configuring a Notification Destination for SNMP V3” section on page 17-6](#).
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Additional Information

See the [“Related Topics” section on page 17-9](#).

Configuring a Notification Destination for SNMP V3

To configure the trap/Inform receiver, perform the following procedure:

Procedure

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- Step 1** Perform the procedure in the [“Finding a Notification Destination for SNMP V3” section on page 17-5](#).
- Step 2** Perform one of the following tasks:
- To add a new SNMP notification destination, click the **Add New** button in the search results window and go to [Step 3](#).
 - To modify an existing SNMP notification destination, locate the notification destination in the search results window; click the name of the SNMP notification destination that you want to edit and go to [Step 3](#).
 - To delete an SNMP notification destination, see the [“Deleting a Notification Destination for SNMP V3” section on page 17-8](#).
- Step 3** Configure the settings, as described in [Table 17-2](#).



Tip Before you save the configuration, you can click the **Clear** button at any time to delete all information that you entered for all settings in the window.

- Step 4** To save a notification destination, click **Insert**, or click **Save** to save changes to an existing notification destination.
- Step 5** A message indicates that changes will not take effect until you restart the SNMP master agent. To continue the configuration without restarting the SNMP master agent, click **Cancel**. To restart the SNMP master agent service, click **OK**.



Tip Cisco recommends that you wait until you finish the SNMP configuration before you restart the SNMP master agent service. For information on how to restart the service, see the [“Configuring Services” section on page 11-1](#).

Additional Information

See the [“Related Topics” section on page 17-9](#).

Notification Destination Configuration Settings for SNMP V3

Table 17-2 describes the notification destination configuration settings for V3. For related procedures, see the “[Related Topics](#)” section on page 17-9.

Table 17-2 Notification Destination Configuration Settings for V3

Field	Description
Server	This setting displays as read only because you specified the server when you performed the procedure in the “Finding a Notification Destination for SNMP V3” section on page 17-5. To change the server for the notification destination, perform the procedure in the “Finding a Notification Destination for SNMP V3” section on page 17-5.
Host IP Addresses	From the drop-down list box, choose the Host IP address or choose Add New . If you chose Add New, enter the IP address for the host.
Port Number	In the field, enter the notification-receiving port number on the destination server.
Notification Type	From the drop-down list box, choose Inform or Trap. Tip Cisco recommends that you choose the Inform option. The Inform function retransmits the message until it is acknowledged, thus, making it more reliable than traps.
Remote SNMP Engine Id	This setting displays if you chose Inform from the Notification Type drop-down list box. From the drop-down list box, choose the engine ID or choose Add New. If you chose Add New, enter the ID in the Remote SNMP Engine Id field, which requires a hexadecimal value.
Security Level	From the drop-down list box, choose the appropriate security level for the user. • noAuthNoPriv—No authentication or privacy configured. • authNoPriv—Authentication configured, but no privacy configured. • authPriv—Authentication and privacy configured.

Table 17-2 Notification Destination Configuration Settings for V3 (continued)

Field	Description
User Information pane	From the pane, perform one of the following tasks to associate or disassociate the notification destination with the user. - To create a new user, click the Create New User button and see the “Configuring the SNMP User” section on page 17-2. - To modify an existing user, click the radio button for the user and click Update Selected User; then, see the “Configuring the SNMP User” section on page 17-2. - To delete a user, click the radio button for the user and click Delete Selected User. The users that display vary depending on the security level that you configured for the notification destination.
<i>Unified CM clusters only:</i> Apply To All Nodes	To apply the notification destination configuration to all nodes in the cluster, check this check box.

Deleting a Notification Destination for SNMP V3

To delete a notification destination, perform the following procedure:

Procedure

- Step 1** Locate the SNMP notification destination, as described in the [“Finding a Notification Destination for SNMP V3”](#) section on page 17-5.
- Step 2** From the list of matching records, check the check box next to the notification destination that you want to delete.
- Step 3** Click **Delete Selected**.
- Step 4** A message asks you if you want to delete the notification destination. To continue the deletion, click **OK**.
- Step 5** A message indicates that changes will not take effect until you restart the SNMP master agent. To continue the configuration without restarting the SNMP master agent, click **Cancel**. To restart the SNMP master agent service, click **OK**.



Tip Cisco recommends that you wait until you finish all the SNMP configuration before you restart the SNMP master agent service. For information on how to restart the service, see the [“Configuring Services”](#) section on page 11-1.

After the window refreshes, the notification destination that you deleted no longer displays in the search results window.

Additional Information

See the [“Related Topics”](#) section on page 17-9.

Where to Find More Information

Related Topics

- [Understanding Simple Network Management Protocol, page 15-1](#)
- [Finding the SNMP User, page 17-1](#)
- [Configuring the SNMP User, page 17-2](#)
- [SNMP User Configuration Settings, page 17-3](#)
- [Deleting the SNMP User, page 17-4](#)
- [Finding a Notification Destination for SNMP V3, page 17-5](#)
- [Configuring a Notification Destination for SNMP V3, page 17-6](#)
- [Notification Destination Configuration Settings for SNMP V3, page 17-7](#)
- [Deleting a Notification Destination for SNMP V3, page 17-8](#)
- [Configuring SNMP V1/V2c, page 16-1](#)
- [Configuring SNMP System Group, page 18-1](#)

