



CHAPTER 16

Configuring SNMP V1/V2c

This chapter, which describes how to configure SNMP versions 1 and 2c, so the network management system can monitor Cisco Unified Communications Manager, contains the following topics:

- [Finding a Community String, page 16-1](#)
- [Configuring a Community String, page 16-2](#)
- [Community String Configuration Settings, page 16-3](#)
- [Deleting a Community String, page 16-4](#)
- [SNMP Notification Destination, page 16-5](#)
- [Finding a Notification Destination for SNMP V1/V2c, page 16-5](#)
- [Configuring a Notification Destination for SNMP V1/V2c, page 16-6](#)
- [Notification Destination Configuration Settings for SNMP V1/V2c, page 16-7](#)
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Tip

If you use SNMP version 3, see the [“Configuring SNMP V3” section on page 17-1](#).

Finding a Community String



Tip

The Add New button does not display in the SNMP Community String Configuration window until you click the Find button. If no community strings exist and you want to add a community string, click the **Find** button and wait for the window to refresh. The Add New button displays.

To find a community string, perform the following procedure:

Procedure

Step 1 Choose **Snmp > V1/V2c > Community String**.

The Find/List window displays.

Step 2 From the Find Community Strings where Name drop-down list box, choose the specific search criteria that you want to use for the community string.

- Step 3** Enter the community string for which you want to search.
- Step 4** In the Server field, enter the hostname or IP address of the server where the community string exists.
- 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 community string that you want to view.
- Step 8** To add or update a community string, see the [“Configuring a Community String” section on page 16-2](#).

Additional Information

See the [“Where to Find More Information” section on page 16-8](#).

Configuring a Community String

Because the SNMP agent provides security by using community strings, you must configure the community string to access any management information base (MIB) in a Cisco Unified Communications Manager system. Change the community string to limit access to the Cisco Unified Communications Manager system. To add, modify, and delete community strings, access the SNMP Community String configuration window.

Procedure

- Step 1** Perform the procedure in the [“Finding a Community String” section on page 16-1](#).
- Step 2** Perform one of the following tasks:
- To add a new community string, click the **Add New** button and go to [Step 3](#).
 - To modify an existing community string, locate the community string, as described in the [“Finding a Community String” section on page 16-1](#); click the name of the community string that you want to edit and go to [Step 3](#).
You cannot change the name of the community string or the server.
 - To delete a community string, see the [“Deleting a Community String” section on page 16-4](#).
- Step 3** Enter the configuration settings, as described in [Table 16-1](#).
-  **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** After you complete the configuration, click **Add New** to save a new community string or click **Save** to save changes to an existing community string.
- 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**.

**Note**

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](#).

The system refreshes and displays the SNMP Community String Configuration window. The community string that you created displays in the window.

Additional Information

See the [“Where to Find More Information” section on page 16-8](#).

Community String Configuration Settings

[Table 16-1](#) describes the community string configuration settings. For related procedures, see the [“Where to Find More Information” section on page 16-8](#).

Table 16-1 *Community String Configuration Settings*

Field	Description
Server	This setting in the Community String configuration window displays as read only because you specified the server choice when you performed the procedure in the “Finding a Community String” section on page 16-1. To change the server for the community string, perform the procedure in the “Finding a Community String” section on page 16-1.
Community String	Enter a name for the community string. The name can contain up to 32 characters and can contain any combination of alphanumeric characters, hyphens (-), and underscore characters (_). Tip Choose community string names that will be hard for outsiders to figure out. When you edit a community string, you cannot change the name of the community string.
Accept SNMP Packets from any host	To accept SNMP packets from any host, click this radio button.
Accept SNMP Packets only from these hosts	To accept SNMP only from specified hosts, click this radio button. Tip In the Host IP Address field, enter a host from which you want to accept packets and click Insert. Repeat this process for each host from which you want to accept packets. To delete a host, choose that host from the Host IP Addresses list box and click Remove.

Table 16-1 Community String Configuration Settings (continued)

Field	Description
Access Privileges	From the drop-down list box, choose the appropriate access level from the following list: • ReadOnly—The community string can only read the values of MIB objects. • ReadWrite—The community string can read and write the values of MIB objects. • ReadWriteNotify—The community string can read and write the values of MIB objects and send MIB object values for a trap and inform messages. • NotifyOnly—The community string can only send MIB object values for a trap and inform messages. • ReadNotifyOnly—The community string can read values of MIB objects and also send the values for trap and inform messages. • None—The community string cannot read, write, or send trap information. Tip To change the trap configuration parameters, you need to configure a community string with NotifyOnly, ReadNotifyOnly, or ReadWriteNotify privileges.
Unified CM clusters only: Apply To All Nodes	To apply the community string to all nodes in the cluster, check this check box.

Deleting a Community String

To delete a community string, perform the following procedure:

Procedure

- Step 1** Locate the community string, as described in the [“Finding a Community String”](#) section on page 16-1.
- Step 2** From the list of matching records, check the check box next to the community string 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 community string. 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 [“Starting, Stopping, Restarting, and Refreshing Status of Services in Control Center”](#) section on page 11-4.

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

Additional Information

See the [“Where to Find More Information”](#) section on page 16-8.

SNMP Notification Destination

The following sections apply to SNMP V1/V2c notification destination configuration.

- [Finding a Notification Destination for SNMP V1/V2c, page 16-5](#)
- [Configuring a Notification Destination for SNMP V1/V2c, page 16-6](#)
- [Notification Destination Configuration Settings for SNMP V1/V2c, page 16-7](#)
- [Deleting a Notification Destination for SNMP V1/V2c, page 16-8](#)

Finding a Notification Destination for SNMP V1/V2c



Tip

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

To find a notification destination for V1/V2c, perform the following procedure:

Procedure

- Step 1** Choose **Snmp > V1/V2c > Notification Destination**.
The Find/List window displays.
- 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.
- Step 3** Enter the notification destination for which you want to search.
- Step 4** In the Server field, enter 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** To view the configuration for one of the items in the search results, click the item.

- Step 8** To add or update a notification string, see the [“Configuring a Notification Destination for SNMP V1/V2c” section on page 16-6](#).

Additional Information

See the [“Where to Find More Information” section on page 16-8](#).

Configuring a Notification Destination for SNMP V1/V2c

To configure the notification destination (trap/inform receiver) for V1/V2c, perform the following procedure.

Procedure

- Step 1** Perform the procedure in the [“Finding a Notification Destination for SNMP V1/V2c” section on page 16-5](#).
- Step 2** Perform one of the following tasks:
- To add a new SNMP notification destination, click the **Add New** button and go to [Step 3](#).
You configure the notification destination for the server that you choose in the Server drop-down list box in the Find/List window.
 - To modify an existing SNMP notification destination, locate the notification destination, as described in the [“Finding a Notification Destination for SNMP V1/V2c” section on page 16-5](#); 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 V1/V2c” section on page 16-8](#).
- Step 3** Enter the configuration settings, as described in [Table 16-2](#).



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, click **OK**.



Note 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 [“Where to Find More Information” section on page 16-8](#).

Notification Destination Configuration Settings for SNMP V1/V2c

Table 16-2 describes the notification destination configuration settings for V1/V2c. For related procedures, see the [“Where to Find More Information”](#) section on page 16-8.

Table 16-2 Notification Destination Configuration Settings for V1/V2

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 V1/V2c” section on page 16-5. To change the server for the notification destination, perform the procedure in the “Finding a Community String” section on page 16-1.
Host IP Addresses	From the drop-down list box, choose the Host IP address of the trap destination or choose Add New. If you choose Add New, enter the IP address of the trap destination. For existing notification destinations, you cannot modify the host IP address configuration.
Port Number	In the field, enter the notification-receiving port number on the destination server that receives SNMP packets.
V1 or V2c	From the SNMP Version Information pane, click the appropriate SNMP version radio button, either V1 or V2c, which depends on the version of SNMP that you are using. - If you choose V1, configure the community string setting. - If you choose V2c, configure the notification type setting and then configure the community string.
Community String	From the drop-down list box, choose the community string name to be used in the notification messages that this host generates. Only community strings with minimum notify privileges (ReadWriteNotify or Notify Only) display. If you have not configured a community string with these privileges, no options appear in the drop-down list box. If necessary, click the Create New Community String button to create a community string, as described in the “Configuring a Community String” section on page 16-2.
Notification Type	From the drop-down list box, choose the appropriate notification type.
<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 V1/V2c

To delete a notification destination, perform the following procedure:

Procedure

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- | | |
|---------------|--|
| Step 1 | Locate the notification destination, as described in the “Finding a Notification Destination for SNMP V1/V2c” section on page 16-5. |
| 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 whether you want to delete the notification entries. 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 results.

Additional Information

See the [“Where to Find More Information”](#) section on page 16-8.

Where to Find More Information

Related Topics

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