



## Gatekeeper Configuration

A gatekeeper device, also known as a Cisco Multimedia Conference Manager (MCM), supports the H.225 Registration, Admission, and Status Protocol (RAS) message set that is used for call admission control, bandwidth allocation, and dial pattern resolution (call routing). The gatekeeper provides these services for communications between Cisco Unified CallManager clusters and H.323 networks. You can configure multiple gatekeeper devices per Cisco Unified CallManager cluster. You can configure alternate gatekeepers for redundancy. Refer to MCM documentation for alternate gatekeeper configuration details.

Gatekeeper configuration comprises two components:

- Cisco Unified CallManager configuration. Each Cisco Unified CallManager cluster can register with one or more gatekeepers. This chapter describes how to configure the gatekeeper in Cisco Unified CallManager. You also need to configure trunk devices on the Trunk Configuration window. See the [“Trunk Configuration” section on page 71-1](#).
- Gatekeeper configuration on the router. This type of configuration applies to a Cisco IOS Multimedia Conference Manager (MCM) that acts as the gatekeeper. Recommended platforms for the gatekeeper include Cisco 2600, 3600, or 7200 routers with Cisco IOS Release 12.1(3)T or higher. Refer to the MCM documentation for information on configuring the gatekeeper. Alternate gatekeeper configuration occurs in the MCM only, so no configuration is necessary in Cisco Unified CallManager.

The following topics cover gatekeeper configuration in Cisco Unified CallManager Administration:

- [Finding a Gatekeeper, page 68-1](#)
- [Configuring a Gatekeeper, page 68-3](#)
- [Gatekeeper Configuration Settings, page 68-3](#)
- [Deleting a Gatekeeper, page 68-4](#)
- [Resetting a Gatekeeper, page 68-5](#)

## Finding a Gatekeeper

Because you might have several gatekeepers in your network, Cisco Unified CallManager Administration lets you locate specific gatekeepers on the basis of specific criteria. Use the following procedure to locate gatekeepers.

**Note**

During your work in a browser session, Cisco Unified CallManager Administration retains your gatekeeper search preferences. If you navigate to other menu items and return to this menu item, Cisco Unified CallManager Administration retains your gatekeeper search preferences until you modify your search or close the browser.

**Procedure****Step 1** Choose **Device > Gatekeeper**.

The Find and List Gatekeeper window displays. Use the two drop-down list boxes to search for a gatekeeper.

**Step 2** From the first Find gatekeepers where drop-down list box, choose one of the following criteria:

- Name
- Description

**Note**

The criterion that you choose in this drop-down list box specifies how the list of gatekeepers that your search generates will be sorted. For example, if you choose Description, the Description column will display as the left column of the results list.

From the second Find gatekeepers where drop-down list box, choose one of the following criteria:

- begins with
- contains
- ends with
- is exactly
- is not empty
- is empty

**Step 3** Specify the appropriate search text, if applicable, and click **Find**. You can also specify how many items per page to display.**Tip**

To find all gatekeepers that are registered in the database, click **Find** without entering any search text.

A list of discovered gatekeepers displays by

- Gatekeeper name
- Description

**Note**

You can delete multiple gatekeepers from the Find and List Gatekeeper window by checking the check boxes next to the appropriate gatekeepers and clicking **Delete Selected**.

- Step 4** Click the Gatekeeper icon or name or the Description from the list of records that matches your search criteria.
- The window displays the gatekeeper that you choose.

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**Additional Information**

See the [“Related Topics” section on page 68-6](#).

## Configuring a Gatekeeper

Perform the following procedure to add or update a gatekeeper.

**Note**

You can configure multiple gatekeeper devices per Cisco Unified CallManager cluster.

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**Procedure**

- Step 1** Choose **Device > Gatekeeper**.
- The Find and List Gatekeepers window displays.
- Step 2** Perform one of the followings tasks:
- To add a new gatekeeper, click the **Add New** button and continue with [Step 3](#).
  - To update an existing gatekeeper, locate the appropriate gatekeeper as described in [“Finding a Gatekeeper” section on page 68-1](#) and continue with [Step 3](#).
- Step 3** Enter the appropriate settings as described in [Table 68-1](#).
- Step 4** Click **Save**.

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**Additional Information**

See the [“Related Topics” section on page 68-6](#).

## Gatekeeper Configuration Settings

[Table 68-1](#) describes the gatekeeper configuration settings. For related procedures, see the [“Related Topics” section on page 68-6](#).

**Table 68-1 Gatekeeper Configuration Settings**

| Field                         | Description                                                                                                                                                     |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gatekeeper Information</b> |                                                                                                                                                                 |
| Host Name/IP Address          | Enter the IP address or host name of the gatekeeper in this required field.<br><br>You can register multiple gatekeepers per Cisco Unified CallManager cluster. |

**Table 68-1 Gatekeeper Configuration Settings (continued)**

| Field                             | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Description                       | Enter a descriptive name for the gatekeeper.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Registration Request Time to Live | <p>Do not change this value unless a Cisco TAC engineer instructs you to do so. Enter the time in seconds. The default value specifies 60 seconds.</p> <p>The Registration Request Time to Live field indicates the time that the gatekeeper considers a registration request (RRQ) valid. The system must send a keepalive RRQ to the gatekeeper before the RRQ Time to Live expires.</p> <p>Cisco Unified CallManager sends an RRQ to the gatekeeper to register and subsequently to maintain a connection with the gatekeeper. The gatekeeper may confirm (RCF) or deny (RRJ) the request.</p> |
| Registration Retry Timeout        | <p>Do not change this value unless a Cisco TAC engineer instructs you to do so. Enter the time in seconds. The default value specifies 300 seconds.</p> <p>The Registration Retry Timeout field indicates the time that Cisco Unified CallManager waits before retrying gatekeeper registration after a failed registration attempt.</p>                                                                                                                                                                                                                                                          |
| Enable Device                     | This check box allows you to register this gatekeeper with Cisco Unified CallManager. By default, this check box remains checked. To unregister the gatekeeper from Cisco Unified CallManager gracefully, uncheck this check box. The gatekeeper unregisters within approximately 1 minute of updating this field.                                                                                                                                                                                                                                                                                |

## Deleting a Gatekeeper

Perform the following steps to delete a gatekeeper.

### Before You Begin

You cannot delete a gatekeeper that is assigned to one or more trunks. To find out which trunks are using the gatekeeper, click the **Dependency Records** link from the Gatekeeper Configuration window. If the dependency records are not enabled for the system, the dependency records summary window displays a message. For more information about dependency records, see the [“Accessing Dependency Records” section on page A-2](#). If you try to delete a gatekeeper that is in use, Cisco Unified CallManager displays an error message. Before deleting a gatekeeper that is currently in use, you must perform either or both of the following tasks:

- Assign a different gatekeeper to any trunks that are using the gatekeeper that you want to delete. See the [“Configuring a Trunk” section on page 71-2](#).
- Delete the trunks that are using the gatekeeper that you want to delete. See the [“Deleting a Trunk” section on page 71-27](#).

### Procedure

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- Step 1** Locate the gatekeeper by using the procedure in the [“Finding a Gatekeeper” section on page 68-1](#).
- Step 2** From the list of matching records, choose the gatekeeper that you want to delete.
- Step 3** Click **Delete Selected**.  
A confirmation dialog box displays.
- Step 4** To delete the gatekeeper, click **OK**.
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### Additional Information

See the [“Related Topics” section on page 68-6](#).

## Resetting a Gatekeeper

Resetting a gatekeeper does not mean that the physical device is reset; instead, resetting forces the Cisco Unified CallManager to reset the logical connection to the gatekeeper and to reregister with the gatekeeper. During this time of reregistering and until successful registration, new calls that are made by using this trunk, which uses this gatekeeper, fail. Perform the following procedure to reset a gatekeeper.



### Note

Resetting a gatekeeper does not cause all active calls that this gatekeeper controls to be dropped; however, new call attempts fail.

### Procedure

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- Step 1** Locate the gatekeeper by using the procedure in the [“Finding a Gatekeeper” section on page 68-1](#).
- Step 2** From the list of matching records, choose the gatekeeper that you want to reset.
- Step 3** If you changed any settings for the Gatekeeper Device, click **Reset**.  
The Reset Device dialog displays.
- Step 4** Click one of the following choices:
- **Restart**—Restarts the chosen devices without shutting them down (reregisters the phones and trunks with Cisco Unified CallManager).
  - **Reset**—Shuts down, then restarts, the internal gatekeeper device. The Cisco Unified CallManager cluster unregisters (URQ) and then reregisters (RRQ) with the gatekeeper.
  - **Close**—Closes the Reset Device dialog without performing any action.
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### Additional Information

See the [“Related Topics” section on page 68-6](#).

## Related Topics

- [Gatekeeper Configuration](#), page 68-1
- [Finding a Gatekeeper](#), page 68-1
- [Configuring a Gatekeeper](#), page 68-3
- [Gatekeeper Configuration Settings](#), page 68-3
- [Deleting a Gatekeeper](#), page 68-4
- [Resetting a Gatekeeper](#), page 68-5
- [Trunk Configuration](#), page 71-1
- [Gatekeepers and Trunks](#), *Cisco Unified CallManager System Guide*

### Additional Cisco Documentation

- *Cisco Unified Communications Solution Reference Network Design*
- Cisco IOS Multimedia Conference Manager (Command Reference) documentation