



## Gatekeeper Configuration

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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 CallManager clusters and H.323 networks. You can configure multiple gatekeeper devices per Cisco CallManager cluster. You can configure alternate gatekeepers for redundancy. Refer to MCM documentation for alternate gatekeeper configuration details.

Gatekeeper configuration comprises two components:

- Cisco CallManager configuration. Each Cisco CallManager cluster can register with one or more gatekeepers. This chapter describes how to configure the gatekeeper in Cisco CallManager. You also need to configure trunk devices on the Trunk Configuration window. See the [Trunk Configuration](#) chapter.
- 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 CallManager.

The following topics cover gatekeeper configuration in Cisco CallManager Administration:

- [Finding a Gatekeeper, page 55-2](#)
- [Adding a Gatekeeper, page 55-4](#)

- [Deleting a Gatekeeper, page 55-5](#)
- [Modifying a Gatekeeper, page 55-6](#)
- [Resetting a Gatekeeper, page 55-7](#)
- [Gatekeeper Configuration Settings, page 55-8](#)

The following topics contain additional information that is related to gatekeepers:

- [Gatekeepers and Trunks, \*Cisco CallManager System Guide\*](#)
- [Cisco IP Telephony Network Design Guide](#)
- [Cisco IOS Multimedia Conference Manager \(Command Reference\) documentation](#)

## Finding a Gatekeeper

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



### Note

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

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### Procedure

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#### 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



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**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.

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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.



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

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A list of discovered gatekeepers displays by

- Gatekeeper icon
- Gatekeeper name
- Description



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**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**. You can delete all gatekeepers in the window by checking the check box in the Matching records title bar and clicking **Delete Selected**.

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**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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#### Related Topics

- [Adding a Gatekeeper, page 55-4](#)
- [Deleting a Gatekeeper, page 55-5](#)
- [Modifying a Gatekeeper, page 55-6](#)
- [Resetting a Gatekeeper, page 55-7](#)
- [Gatekeeper Configuration Settings, page 55-8](#)

## Adding a Gatekeeper

Perform the following procedure to add a gatekeeper device.



#### Note

You can configure multiple gatekeeper devices per Cisco CallManager cluster.

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#### Procedure

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

The Find and List Gatekeeper Configuration window displays.

In the upper, right corner of the window, click the **Add a New Gatekeeper** link.

The Gatekeeper Configuration window displays.

**Step 2** Enter the appropriate settings as described in [Table 55-1](#).

**Step 3** To add the new gatekeeper, click **Insert**.

The gatekeeper is added to the database.

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### Related Topics

- [Finding a Gatekeeper, page 55-2](#)
- [Deleting a Gatekeeper, page 55-5](#)
- [Modifying a Gatekeeper, page 55-6](#)
- [Resetting a Gatekeeper, page 55-7](#)
- [Gatekeeper Configuration Settings, page 55-8](#)

## 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-3](#). If you try to delete a gatekeeper that is in use, Cisco 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 [“Modifying a Trunk” section on page 58-6](#).
- Delete the trunks that are using the gatekeeper that you want to delete. See the [“Deleting a Trunk” section on page 58-4](#).

### Procedure

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- Step 1** Locate the gatekeeper by using the procedure in the [“Finding a Gatekeeper” section on page 55-2](#).
- Step 2** From the list of matching records, choose the gatekeeper that you want to delete.

- Step 3** Click the **Delete** button.  
A confirmation dialog box displays.
- Step 4** To delete the gatekeeper, click **OK**.
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**Related Topics**

- [Finding a Gatekeeper, page 55-2](#)
- [Adding a Gatekeeper, page 55-4](#)
- [Modifying a Gatekeeper, page 55-6](#)
- [Resetting a Gatekeeper, page 55-7](#)
- [Gatekeeper Configuration Settings, page 55-8](#)

## Modifying a Gatekeeper

Perform the following steps to modify gatekeeper settings:

**Procedure**

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- Step 1** Locate the gatekeeper by using the procedure in the [“Finding a Gatekeeper” section on page 55-2](#).
- Step 2** From the list of matching records, choose the gatekeeper that you want to modify.
- Step 3** Update the appropriate settings as described in [Table 55-1](#).
- Step 4** To save the changes, click **Update**.  
The page refreshes to display the new settings.
- Step 5** Reset the gatekeeper as needed to activate the changes. See the [“Resetting a Gatekeeper” section on page 55-7](#) for details.
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**Related Topics**

- [Finding a Gatekeeper, page 55-2](#)
- [Adding a Gatekeeper, page 55-4](#)

- [Deleting a Gatekeeper, page 55-5](#)
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## Resetting a Gatekeeper

Resetting a gatekeeper does not mean that the physical device is reset; instead, resetting forces the Cisco 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

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

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### Procedure

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- Step 1** Locate the gatekeeper by using the procedure in the [“Finding a Gatekeeper” section on page 55-2](#).
  - 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 Gatekeeper**. The Reset Device dialog displays.
  - Step 4** Click one of the following choices:
    - **Restart**—Restarts the internal gatekeeper device to update it with the new gatekeeper configuration without dropping calls.
    - **Reset**—Shuts down, then restarts, the internal gatekeeper device. The Cisco 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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**Related Topics**

- [Finding a Gatekeeper, page 55-2](#)
- [Adding a Gatekeeper, page 55-4](#)
- [Deleting a Gatekeeper, page 55-5](#)
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# Gatekeeper Configuration Settings

[Table 55-1](#) describes the gatekeeper configuration settings.

**Table 55-1 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.  You can register multiple gatekeepers per Cisco CallManager cluster.
Description	Enter a descriptive name for the gatekeeper.
Registration Request Time to Live	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.  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.  Cisco 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.

**Table 55-1 Gatekeeper Configuration Settings (continued)**

Field	Description
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 CallManager waits before retrying gatekeeper registration after a failed registration attempt.</p>
Enable Device	<p>This check box allows you to register this gatekeeper with Cisco CallManager. By default, this check box remains checked. To unregister the gatekeeper from Cisco CallManager gracefully, uncheck this check box. The gatekeeper unregisters within approximately 1 minute of updating this field.</p>

**Related Topics**

- [Finding a Gatekeeper, page 55-2](#)
- [Adding a Gatekeeper, page 55-4](#)
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- [Modifying a Gatekeeper, page 55-6](#)

