



Route Group Configuration

A route group allows you to designate the order in which gateways and trunks are selected. It allows you to prioritize a list of gateways and ports for outgoing trunk selection.

For example, if you use two long-distance carriers, you could add a route group, so long-distance calls to the less expensive carrier are given priority. Calls only route to the more expensive carrier if the first trunk is unavailable.

Use the following topics to add or delete a route group or to add devices to or to remove devices from a route group:

- [Finding a Route Group, page 33-1](#)
- [Configuring a Route Group, page 33-2](#)
- [Route Group Configuration Settings, page 33-3](#)
- [Adding Devices to a Route Group, page 33-5](#)
- [Removing Devices from a Route Group, page 33-6](#)
- [Deleting a Route Group, page 33-6](#)

Finding a Route Group

Because you might have several route groups in your network, Cisco CallManager lets you locate specific route groups based on specific criteria. Use the following procedure to locate route groups.



Note

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

Procedure

- Step 1** Choose **Call Routing > Route/Hunt > Route Group**.
- The Find and List Route Groups window displays.
- Step 2** From the drop-down list box, choose one of the following criteria:
- begins with
 - contains

- ends with
- is exactly
- is empty
- is not empty

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



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

A list of discovered route groups displays by route group name.



Tip To search for route groups within the search results, click the **Search Within Results** check box and enter your search criteria as described in this step.



Note You can delete multiple route groups from the Find and List Route Groups window by checking the check boxes next to the appropriate route groups and clicking **Delete Selected**. You can delete all the route groups in the window by clicking **Select All** and then clicking **Delete Selected**.

Step 4 From the list of records, click the route group that matches your search criteria.
The window displays the route group that you choose.

Additional Information

See the [“Related Topics” section on page 33-7](#).

Configuring a Route Group

The following procedure describes how to configure a route group.

Procedure

Step 1 Choose **Call Routing > Route/Hunt > Route Group**.

Step 2 Perform one of the followings tasks:

- To copy an existing route group, locate the appropriate route group as described in the [“Finding a Route Group” section on page 33-1](#), click the **Copy** button next to the route group that you want to copy, and continue with [Step 3](#).
- To add a new route group, click the **Add New** button, and continue with [Step 3](#).
- To update an existing route group, locate the appropriate route group as described in the [“Finding a Route Group” section on page 33-1](#), and continue with [Step 3](#).

- Step 3** In the Route Group Configuration window that displays, enter a name in the Route Group Name field. The name can contain up to 50 alphanumeric characters and can contain any combination of spaces, periods (.), hyphens (-), and underscore characters (_). Ensure that each route group name is unique to the route plan.

**Timesaver**

Use concise and descriptive names for your route groups. The CompanynameLocationGroup format usually provides a sufficient level of detail and is short enough to enable you to quickly and easily identify a route group. For example, CiscoDallasAA1 identifies a Cisco Access Analog route group for the Cisco office in Dallas.

- Step 4** Choose the appropriate settings as described in [Table 33-1](#).



Note You must choose at least one device for a new route group before adding the new route group.

- Step 5** To add or update this route group, click **Save**.

Additional Information

See the [“Related Topics” section on page 33-7](#).

Route Group Configuration Settings

[Table 33-1](#) describes the route group configuration settings.

Table 33-1 *Route Group Configuration Settings*

Field	Description
Route Group Information	
Route Group Name	Enter a name for this route group. The name can comprise up to 50 alphanumeric characters and can contain any combination of spaces, periods (.), hyphens (-), and underscore characters (_). Ensure that each route group name is unique to the route plan.

Table 33-1 **Route Group Configuration Settings (continued)**

Field	Description
Distribution Algorithm	Choose a distribution algorithm from the options in the drop-down list box: • Top Down—If you choose this distribution algorithm, Cisco CallManager distributes a call to idle or available members starting from the first idle or available member of a route group to the last idle or available member. • Circular—If you choose this distribution algorithm, Cisco CallManager distributes a call to idle or available members starting from the $(n+1)^{\text{th}}$ member of a route group, where the n^{th} member is the member to which Cisco CallManager most recently extended a call. If the n^{th} member is the last member of a route group, Cisco CallManager distributes a call starting from the top of the route group. The default value specifies <i>Circular</i>.
Route Group Member Information	
Find Devices to Add to Route Group	
Device Name contains	Enter the character(s) that are found in the device name that you are seeking and click the Find button. Device names that match the character(s) that you entered display in the Available Devices box. Note To find all available devices, leave the text box blank and click the Find button.
Available Devices (select device, then select port below)	Choose a device in the Available Devices list box and add it to the Selected Devices list box by clicking Add to Route Group. If the route group contains a gateway that uses the QSIG protocol, only gateways that use the QSIG protocol display in the list. If the route group contains a gateway that uses the non-QSIG protocol, gateways that use the controlled intercluster trunks, which are QSIG protocol do not display in the list. If you included the route group in a route list that contains QSIG gateways, the H.323 gateways do not display in the list.
Port(s)	If this device supports individually configurable ports, choose the port. (Devices that allow you to choose individual ports include Cisco Access Analog and Cisco MGCP Analog gateways and T1 CAS.) Otherwise, choose the default value (<i>All</i> or <i>None Available</i>, depending upon the device that is chosen). For a device that has no ports available (<i>None Available</i>), the device may be already added to the Route Group, or cannot be added to the route group.

Table 33-1 **Route Group Configuration Settings (continued)**

Field	Description
Current Route Group Members	
Selected Devices (ordered by highest priority)	To change the priority of a device, choose a device name in the Selected Devices list box. Move the device up or down in the list by clicking the arrows on the right side of the list box. To reverse the priority order of the devices in the Selected Devices list box, click Reverse Order of Selected Devices. For more information about the order of devices in a route group, see “Route Plan Overview” in the <i>Cisco CallManager System Guide</i>.
Removed Devices (to be removed from Route Group when you click Update)	Choose a device in the Selected Devices list box and add it to the Removed Devices list box by clicking the down arrow button between the two list boxes. Note You must leave at least one device in a route group.

Additional Information

See the [“Related Topics”](#) section on page 33-7.

Adding Devices to a Route Group

You can add devices to a new route group or to an existing route group. You can add gateways to multiple route groups. Once you add a gateway to any route group, the gateway does not display in the Route Pattern configuration window. The following procedure describes adding a device to an existing route group.

Before You Begin

You must define one or more gateway and trunk devices before performing this procedure. A device can reside in only one route group.

Procedure

-
- | | |
|---------------|--|
| Step 1 | Choose Call Routing > Route/Hunt > Route Group . |
| Step 2 | Locate the route group to which you want to add a device. See the “Finding a Route Group” section on page 33-1. |
| Step 3 | In the Available Devices list box, choose a device to add and click Add to Route Group to move it to the Selected Devices list box. Repeat this step for each device that you want to add to this route group. |
| Step 4 | In the Selected Devices list box, choose the order in which the new device or devices are to be accessed in this route group. To change the order, click on a device and use the Up and Down arrows to the right of the list box to change the order of devices. |
| Step 5 | To add the new device(s) and to update the device order for this route group, click Save . |
-

Additional Information

See the [“Related Topics”](#) section on page 33-7.

Removing Devices from a Route Group

You can remove devices from a new route group or from an existing route group. The following procedure describes removing a device from an existing route group.

Procedure

- Step 1** Choose **Call Routing > Route/Hunt > Route Group**.
- Step 2** Locate the route group from which you want to remove a device. See the [“Finding a Route Group” section on page 33-1](#).
- Step 3** In the Selected Devices list box, choose a device to be removed and click the Down arrow below the Selected Devices list box to move the device to the Removed Devices list box. Repeat this step for each device that you want to remove from this route group.



Note You must leave at least one device in a route group.

- Step 4** To remove the devices, click **Save**.

Additional Information

See the [“Related Topics” section on page 33-7](#).

Deleting a Route Group

The following procedure describes how to delete a route group.

Before You Begin

You cannot delete a route group that a route/hunt list references. To find out which route lists are using the route group, in the Route Group Configuration window, choose **Dependency Records** from the Related Links drop-down list box and click **Go**. If the dependency records are not enabled for the system, the Dependency Records Summary window displays a message. For more information about dependency records, refer to the [“Accessing Dependency Records” section on page A-2](#). If you try to delete a route group that is in use, Cisco CallManager displays an error message. Before deleting a route group that is currently in use, you must perform the following task:

- Remove the route group from all route lists to which it belongs before deleting the route group. See the [“Removing Route Groups from a Route List” section on page 34-5](#).



Tip

To delete route groups and route patterns, first delete the route pattern; second, delete the route list; and finally, delete the route group.

Procedure

- Step 1** Choose **Call Routing > Route/Hunt > Route Group**.
- Step 2** Locate the route group that you want to delete. See the [“Finding a Route Group” section on page 33-1](#).

- Step 3** Check the check box next to the route group that you want to delete and click **Delete Selected**. A dialog box displays to warn you that you cannot undo deletion of route groups.
- Step 4** To delete the route group, click **OK** or to cancel the action, click **Cancel**. If you click **OK**, the Cisco CallManager removes the route group from the route group list.



Note You can delete multiple route groups from the Find and List Route Groups window by checking the check boxes next to the appropriate route groups and clicking **Delete Selected**. You can delete all the route groups in the window by click **Select All** and then clicking **Delete Selected**.

Additional Information

See the [“Related Topics” section on page 33-7](#).

Related Topics

Route Groups

- [Finding a Route Group, page 33-1](#)
- [Configuring a Route Group, page 33-2](#)
- [Route Group Configuration Settings, page 33-3](#)
- [Adding Devices to a Route Group, page 33-5](#)
- [Removing Devices from a Route Group, page 33-6](#)
- [Deleting a Route Group, page 33-6](#)
- [Understanding Route Plans, Cisco CallManager System Guide](#)

Route Lists

- [Adding a Route List, page 34-3](#)
- [Adding Route Groups to a Route List, page 34-4](#)

