



Configuring Route Patterns

A route pattern is a string of digits (an address) and a set of associated digit manipulations that can be assigned to a route list or a gateway. Route patterns provide flexibility in network design. They work in conjunction with route filters and route lists to direct calls to specific devices and to include, exclude, or modify specific digit patterns.

Refer to the “Understanding Route Patterns” section on page 6-24 for more detailed route pattern information.

Use the following procedures to add, update, copy, or delete a route pattern:

- Adding a Route Pattern, page 26-1
- Updating a Route Pattern, page 26-4
- Copying a Route Pattern, page 26-5
- Deleting a Route Pattern, page 26-6

Adding a Route Pattern

This section describes how to add a route pattern.

Before You Begin

The following Cisco CallManager applications must be configured first in order to select them:

- Gateway
- Route List

- Partition
- Route Filter

Procedure

- Step 1** Open Cisco CallManager Administration.
- Step 2** Select **Route Plan > Route Pattern**.
- Step 3** Enter the route pattern, including numbers and wildcards (do not use spaces) in the Route Pattern field, for example, 9.@ for typical local access, or 8XXX for a typical private network numbering plan.



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Assigning 8XXX to a gateway routes all directory numbers 8000 to 8999 out the gateway. Similarly, 82XX routes directory numbers 8200 to 8299.

Refer to the “Understanding Route Pattern Wildcards and Special Characters” section on page 6-7 for more information about wildcards.




Note The directory route pattern, using the selected partition, route filter, and numbering plan combination, must be unique. Check the route pattern, translation pattern, directory number, call park number, call pickup number, or Meet Me number if you receive an error indicating duplicate entries.

- Step 4** Select a partition from the Partition drop-down list box, or None if you don't want to assign a partition. Refer to the “Configuring Partitions” section on page 21-1 for more information on how to use partitions.
- Step 5** Select a numbering plan from the Numbering Plan drop-down list box.
- Step 6** If your route pattern includes the @ wildcard, select a route filter from the Route Filter drop-down list box. Selecting a route filter restricts certain number patterns. Route filters are optional.
- Step 7** Select the gateway or route list for which you are adding a route pattern from the Gateway/Route List drop-down list box.



Note If there is at least one port of the defined gateway included in a route group, or that has an assigned DN, that gateway will not be included in this drop-down list box. No ports can be used in order to include the gateway. When a gateway is selected in the drop-down list box, all the ports are being used to route/block this route pattern.

- Step 8** The Route Option designation indicates whether you want this route pattern used for routing calls (such as 9.@ or 8[2-9]XX) or for blocking calls. Select “Route this pattern” or “Block this pattern” in the Route Option fields.
- Step 9** Check the boxes for Provide Outside Dial Tone and Urgent Priority accordingly.
- Step 10** Check the box for Use Calling Party’s External Phone Number Mask if you want the full, external phone number used for CLID on outgoing calls. You must also configure an External Mask on all phone devices.
- Step 11** Enter a transformation mask value in the Calling Party Transform Mask field. Valid entries include the digits 0 through 9, the wildcard character X, and blank. If this field is blank and the preceding field is not checked, no calling party transformation takes place. Refer to the “Understanding Calling Party Transform Settings” section on page 25-2 for more information.
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- Note** The calling party transformation settings assigned to the route groups in a route list override any calling party transformation settings assigned to a route pattern associated with that route list.
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- Step 12** Select the discard digits instructions you want associated with this route pattern from the Discard Digits drop-down list box. Refer to the “Understanding Discard Digits Instructions” section on page 6-12 for more information.
- Step 13** Enter a transformation mask value in the Called Party Transform Mask field. Valid entries include the digits 0 through 9, the wildcard character X, and blank. If the field is blank, no transformation takes place. The dialed digits are sent exactly as dialed. Refer to the “Understanding Called Party Transform Settings” section on page 25-4 for more information.
- Step 14** Enter prefix digits in the Prefix Digits (Outgoing Calls) field. Valid entries include the digits 0 through 9, #, *, and blank.



Note The appended prefix digit does not affect which directory numbers route to the assigned device.

Step 15 Click **Insert**. The route pattern appears in the list on the left side of the page.



Note Once you click **Insert** and the page refreshes, an (**Edit**) link appears on the page next to the Gateway/Route List field. This link takes you to the MGCP Member Configuration page for reference so you can see the route group(s) included in that route list.

Step 16 Click **New** and repeat Steps 1 through 15 to add more route patterns.

Related Topics

- Route Plan Overview, page 6-1
- Understanding Route Pattern Wildcards and Special Characters, page 6-7
- Understanding Closest-Match Routing, page 6-11
- Adding a Route Filter, page 23-5
- Updating a Route Pattern, page 26-4
- Copying a Route Pattern, page 26-5
- Deleting a Route Pattern, page 26-6

Updating a Route Pattern

This section describes how to update a route pattern.

Procedure

Step 1 Open Cisco CallManager Administration.

Step 2 Click **Route Plan > Route Pattern**.

Step 3 Select the route pattern you want to update from the Route Pattern list on the left side of the page.



Note The directory route pattern, using the selected partition, route filter, and numbering plan combination, must be unique. Check the route pattern, translation pattern, directory number, call park number, call pickup number, or Meet Me number if you receive an error indicating duplicate entries.

Step 4 Make the desired changes to the route pattern and click **Update**. The page displays the updated route pattern.

Step 5 Repeat Steps 3 and 4 to update more route patterns.

Related Topics

- Route Plan Overview, page 6-1
- Understanding Route Pattern Wildcards and Special Characters, page 6-7
- Understanding Closest-Match Routing, page 6-11
- Adding a Route Filter, page 23-5
- Adding a Route Pattern, page 26-1
- Copying a Route Pattern, page 26-5
- Deleting a Route Pattern, page 26-6

Copying a Route Pattern

This section describes how to copy a route pattern.

Procedure

Step 1 Open Cisco CallManager Administration.

Step 2 Click **Route Plan > Route Pattern**.

- Step 3** Select the route pattern you want to copy from the Route Pattern list on the left side of the page.
- Step 4** Click **Copy**. The page displays the route pattern with a Copy of... name in the Route Pattern field.
- Step 5** Replace the name for this route pattern in the Route Pattern field.
- Step 6** Make appropriate changes to customize the new route pattern and click **Insert**. The new route pattern appears in the route pattern list on the left side of the page.
- Step 7** To build another route pattern that is similar to the current route pattern, click **Copy**, enter a new route pattern name, and repeat Steps 3 through 6.
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Related Topics

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- Updating a Route Pattern, page 26-4
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Deleting a Route Pattern

This section describes how to delete a route pattern.

Procedure

- Step 1** Open Cisco CallManager Administration.
- Step 2** Click **Route Plan > Route Pattern**.
- Step 3** Select the route pattern you want to delete from the Route Pattern list on the left side of the page.
- Step 4** Click **Delete**. A message displays stating that you are about to delete the selected route pattern and that this action cannot be undone.

Step 5 Click **OK** to continue, or **Cancel** to cancel the deletion.

Step 6 Repeat Steps 3 through 5 to delete more route patterns.

Related Topics

- [Route Plan Overview](#), page 6-1
- [Understanding Route Pattern Wildcards and Special Characters](#), page 6-7
- [Understanding Closest-Match Routing](#), page 6-11
- [Adding a Route Filter](#), page 23-5
- [Adding a Route Pattern](#), page 26-1
- [Updating a Route Pattern](#), page 26-4
- [Copying a Route Pattern](#), page 26-5

■ Deleting a Route Pattern