



## SIP Route Pattern Configuration

---

Cisco Unified CallManager uses SIP route patterns to route or block both internal and external calls.

The domain name or IP address provides the basis for routing. The administrator can add domains, IP addresses, and IP network (subnet) addresses and associate them to SIP trunks (only). This method allows requests that are destined for these domains to be routed through particular SIP trunk interfaces.



### Note

Since there are no default SIP route patterns in Cisco Unified CallManager, they must be set up by the Administrators.

**Domain name examples:** cisco.com, my-pc.cisco.com, \*.com, rtp-ccm[1-5].cisco.com

**Valid characters for domain names:** [, -, ., 0-9, A-Z, a-z, \*, and ].

**IP address examples:** 172.18.201.119 or 172.18.201.119/32 (explicit IP host address); 172.18.0.0/16 (IP subnet); 172.18.201.18.21 (IP subnet).

**Valid characters for IP addresses:** 0-9, ., and /.

## Finding a SIP Route Pattern

Because you can have several SIP route patterns in your network, Cisco Unified CallManager lets you locate specific SIP route patterns on the basis of specific criteria. Use the following procedure to locate SIP route patterns.



### Note

During your work in a browser session, the cookies on the client machine store your find/list search preference. If you navigate to other menu items and return to this menu item, or if you close the browser and then reopen a new browser window, the machine retains your Cisco Unified CallManager search preferences until you modify your search.

### Procedure

---

**Step 1** Choose **Call Routing > SIP Route Pattern**.

The Find and List SIP Route Patterns window displays. Use the two drop-down list boxes to search for a SIP route pattern.

**Step 2** From the first Find SIP Route Patterns window drop-down list box, choose one of the following criteria:

- Pattern
- Description
- Route Partition

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

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

**Step 3** Specify the appropriate search text, if applicable, and click **Find**.



**Tip**

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

A list of discovered SIP route patterns displays by

- Pattern
- Description
- Route Partition



**Note**

You can delete multiple SIP route patterns from the Find and List Servers window by checking the check boxes next to the appropriate servers and clicking **Delete Selected**. You can delete all SIP route patterns in the window by checking the check box in the Matching records title bar and clicking **Delete Selected**.



**Note**

If the search returns too many results for you to easily locate the SIP route pattern for which you are searching, check the **Search Within Results** check box and click **Find**. If the check box is checked, when you click the Find button, the system searches results from the previous query. If you no longer want to search within the results, uncheck the check box and the next query will search as a new search.

**Step 4** From the list of records, click the SIP route pattern that matches your search criteria.

The window displays the SIP route pattern that you choose.

**Additional Information**

See the [“Related Topics” section on page 39-7](#).

# Configuring a SIP Route Pattern

This section describes how to add, update or copy a SIP route pattern.

## Procedure

- 
- Step 1** Perform one of the following tasks:
- To add a SIP route pattern, choose **Call Routing > SIP Route Pattern** and click **Add New**.
  - To update a SIP route pattern, find the pattern by using the procedure in the [“Finding a SIP Route Pattern” section on page 39-1](#)
  - To copy a SIP route pattern, find the pattern you wish to copy by using the procedure in the [“Finding a SIP Route Pattern” section on page 39-1](#). Click the Copy icon associated with the pattern you wish to copy.
- The SIP Route Pattern Configuration window displays.
- Step 2** Enter the appropriate settings as described in [Table 39-1](#).
- Step 3** To save the data and to add the server to the database, click the **Save** icon that displays in the tool bar in the upper, left corner of the window (or click the **Save** button that displays at the bottom of the window).
- 

## Additional Information

See the [“Related Topics” section on page 39-7](#).

# SIP Route Pattern Configuration Settings

## Before you begin:

At least one SIP Profile and SIP Trunk must be configured before you can configure a SIP route pattern. [Table 39-1](#) describes the SIP route pattern configuration settings. For related procedures, see the [“Related Topics” section on page 39-7](#).

**Table 39-1 SIP Route Pattern Configuration Settings**

| Field                     | Description                                                                                                                                                                                                                                                                                               |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Pattern Definition</b> |                                                                                                                                                                                                                                                                                                           |
| Pattern Usage             | (Required) From the drop-down list, choose either Domain Routing or IP Address Routing.                                                                                                                                                                                                                   |
| Pattern                   | (Required) Enter the domain, sub-domain, IP address, or IP subnetwork address.<br><br><b>Note</b> For the IP subnetwork address, in Classless Inter-Domain Routing (CIDR) notation, X.X.X.X/Y; where Y is the network prefix denoting the number of bits in the address that will be the network address. |
| Description               | For this optional entry, enter a description of the SIP Route Pattern.                                                                                                                                                                                                                                    |

**Table 39-1 SIP Route Pattern Configuration Settings (continued)**

| Field                                   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Pattern Definition</b>               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Route Partition                         | <p>If you want to use a partition to restrict access to the SIP route pattern, choose the desired partition from the drop-down list box. If you do not want to restrict access to the SIP route pattern, choose &lt;None&gt; for the partition. See the <a href="#">“Partition Configuration”</a> section on page 42-1 for more information on how to use partitions.</p> <p>You can configure the number of partitions that display in this drop-down list box by using the Max List Box Items enterprise parameter. If more than 250 partitions are specified by using the Max List Box Items enterprise parameter, the ellipsis button (...) displays next to the drop-down list box. Click the ... button to display the Select Partition window. Enter a partial partition name in the List items where Name contains field. Click the desired partition name in the list of partitions that displays in the Select item to use box and click OK.</p> <p><b>Note</b> To set the maximum list box items, choose System &gt; Enterprise Parameters and choose CCMAAdmin Parameters.</p> <p><b>Note</b> Make sure the combination of SIP route pattern, route filter, and partition is unique within the Cisco Unified CallManager cluster.</p> |
| SIP Trunk List                          | (Required) Use the drop-down list to choose the SIP trunk to which the SIP route pattern should be associated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Block Pattern                           | If you do not want this pattern to be used for routing calls, choose the Block pattern radio button.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Calling Party Transformations</b>    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Use Calling Party's External Phone Mask | Check the check box if you want the full, external phone number to be used for calling line identification (CLID) on outgoing calls. You may also configure an External Phone Number Mask on all phone devices.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Calling Party Transformation Mask       | Enter a transformation mask value. Valid entries include the digits 0 through 9, the wildcard characters X, asterisk (*), and octothorpe (#). If this field is blank and the preceding field is not checked, no calling party transformation takes place. See the <a href="#">“Calling Party Number Transformations Settings”</a> section in the <i>Cisco Unified CallManager System Guide</i> for more information.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Prefix Digits (Outgoing Calls)          | <p>Enter prefix digits in the Prefix Digits (Outgoing Calls) field. Valid entries include the digits 0 through 9, the wildcard characters asterisk (*) and octothorpe (#).</p> <p><b>Note</b> The appended prefix digit does not affect which directory numbers route to the assigned device.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

**Table 39-1 SIP Route Pattern Configuration Settings (continued)**

| Field                          | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Pattern Definition</b>      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Calling Line ID Presentation   | <p>Cisco Unified CallManager uses calling line ID presentation (CLIP/CLIR) as a supplementary service to allow or restrict the originating caller's phone number on a call-by-call basis.</p> <p>Choose whether you want the Cisco Unified CallManager to allow or restrict the display of the calling party's phone number on the called party's phone display for this SIP route pattern.</p> <p>Choose Default if you do not want to change calling line ID presentation. Choose Allowed if you want Cisco Unified CallManager to allow the display of the calling number. Choose Restricted if you want Cisco Unified CallManager to block the display of the calling number.</p> <p>For more information about this field, see <a href="#">Table 17-6</a> in the “<a href="#">Calling Party Number Transformations Settings</a>” section in the <i>Cisco Unified CallManager System Guide</i>.</p> |
| Calling Line Name Presentation | <p>Cisco Unified CallManager uses calling name presentation (CNIP/CNIR) as a supplementary service to allow or restrict the originating caller's name on a call-by-call basis.</p> <p>Choose whether you want the Cisco Unified CallManager to allow or restrict the display of the calling party's name on the called party's phone display for this SIP route pattern.</p> <p>Choose Default if you do not want to change calling name presentation. Choose Allowed if you want Cisco Unified CallManager to display the calling name information. Choose Restricted if you want Cisco Unified CallManager to block the display of the calling name information.</p> <p>For more information about this field, see <a href="#">Table 17-6</a> in the “<a href="#">Calling Party Number Transformations Settings</a>” section in the <i>Cisco Unified CallManager System Guide</i>.</p>                |

**Table 39-1** SIP Route Pattern Configuration Settings (continued)

| Field                                  | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Pattern Definition</b>              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Connected Party Transformations</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Connected Line ID Presentation         | <p>Cisco Unified CallManager uses connected line ID presentation (COLP/COLR) as a supplementary service to allow or restrict the called party's phone number on a call-by-call basis.</p> <p>Choose whether you want Cisco Unified CallManager to allow or restrict the display of the connected party's phone number on the calling party's phone display for this SIP route pattern.</p> <p>Choose Default if you do not want to change the connected line ID presentation. Choose Allowed if you want to display the connected party's phone number. Choose Restricted if you want Cisco Unified CallManager to block the display of the connected party's phone number.</p> <p>For more information about this field, see <a href="#">Table 17-9</a> in the “<a href="#">Connected Party Presentation and Restriction Settings</a>” section in the <i>Cisco Unified CallManager System Guide</i>.</p> |
| Connected Line Name Presentation       | <p>Cisco Unified CallManager uses connected name presentation (CONP/CONR) as a supplementary service to allow or restrict the called party's name on a call-by-call basis.</p> <p>Choose whether you want Cisco Unified CallManager to allow or restrict the display of the connected party's name on the calling party's phone display for this SIP route pattern.</p> <p>Choose Default if you do not want to change the connected name presentation. Choose Allowed if you want to display the connected party's name. Choose Restricted if you want Cisco Unified CallManager to block the display of the connected party's name.</p> <p>For more information about this field, see <a href="#">Table 17-9</a> in the “<a href="#">Connected Party Presentation and Restriction Settings</a>” section in the <i>Cisco Unified CallManager System Guide</i>.</p>                                       |

## Deleting a SIP Route Pattern

This section describes how to delete a SIP route pattern from the Cisco Unified CallManager database.

### Procedure

- 
- Step 1** Find the SIP route pattern by using the procedure in the “[Finding a SIP Route Pattern](#)” section on [page 39-1](#).
- Step 2** From the list of matching records, choose the SIP route pattern that you want to delete.

**Step 3** To delete the SIP route pattern, click the **Delete Selected Item** icon that displays in the tool bar in the upper, left corner of the window (or click the **Delete Selected** button that displays at the bottom of the window).

If the SIP route pattern is not in use, Cisco Unified CallManager deletes it. If it is in use, a message displays.

---

#### Additional Information

See the [“Related Topics” section on page 39-7](#).

## Related Topics

- [Finding a SIP Route Pattern, page 39-1](#)
- [Configuring a SIP Route Pattern, page 39-3](#)
- [Deleting a SIP Route Pattern, page 39-6](#)
- [SIP Route Pattern Configuration Settings, page 39-3](#)

**■ Related Topics**