SIP Route Pattern Setup

This chapter provides information about SIP Route Pattern configuration.

About SIP Route Pattern Setup

In Cisco Unified Communications Manager Administration, use the **Call Routing** > **SIP Route Pattern** menu path to configure SIP route patterns.

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

The domain name or IP address provides the basis for routing. You 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

Because no default SIP route patterns exist in Cisco Unified Communications Manager, you must set them up.

Domain name examples are cisco.com, my-pc.cisco.com, *.com, rtp-ccm[1-5].cisco.com. Valid characters for domain names are [, -, ., 0-9, A-Z, a-z, *, and].

IPv4 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 /

SIP Route Patterns Configuration Tips

Before you begin, ensure at least one SIP Profile and SIP trunk are configured before you can configure a SIP route pattern.

SIP Route Pattern Deletion

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

SIP Route Pattern Settings

Field	Description
Pattern Definition	
Pattern Usage	(Required) From the drop-down list, choose either Domain Routing or IP Address Routing.
IPv4 Pattern	(Required) Enter the domain, sub-domain, IPv4 address, or IP subnetwork address.
	For Domain Routing pattern usage, enter a domain name IPv4 Pattern field that can resolve to an IPv4 address. The domain name can contain the following characters: [, -, ., 0-9, A-Z, a-z, *, and].
	For IP Address Routing pattern usage, enter an IPv4 address the IPv4 Pattern field that follows the format X.X.X.X, where X represents a number between 0 and 255.
	For the IP subnetwork address, in Classless Inter-Domain Routing (CIDR) notation, X.X.X.X/Y; where Y is the network prefix that denotes the number of bits in the address that will be the network address.
	Tip If the SIP trunk supports IPv6 or both IPv4 and IPv6, configure the IPv6 Pattern in addition to the IPv4 pattern.
IPv6 Pattern	Cisco Unified Communications Manager uses SIP route patterns to route or block both internal and external calls. The IPv6 address in this field provides the basis for routing internal and external calls to SIP trunks that support IPv6.
	Tip If the SIP trunk supports IPv6 or both IPv4 and IPv6, configure the IPv4 Pattern in addition to the IPv6 Pattern.
Description	For this optional entry, enter a description of the SIP Route Pattern. The description can include up to 50 characters in any language, but it cannot include double-quotes ("), percentage sign (%), ampersand (&), or angle brackets (<>).

Field	Description
Route Partition	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 <None> for the partition. 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 Find button displays next to the drop-down list box. Click the Find 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 Add Selected. **Note** To set the maximum list box items, choose **System** > **Enterprise Parameters** and choose CCMAdmin Parameters. Make sure that the combination of SIP route pattern, route filter, and partition is unique within the Cisco Unified Communications Manager cluster.
SIP Trunk/Route List	(Required) From the drop-down list choose the SIP trunk or route list to which the SIP route pattern should be associated. Click Edit to open the trunk or route list in the Trunk or Route List Configuration window. **Note** URI dialing is available over SIP trunks only. If you are using URI dialing and you select a route list from this drop-down list box, the route list must contain route groups with SIP trunks only.
Block Pattern	If you do not want this pattern to be used for routing calls, click the Block Pattern check box.
Calling Party Transformations	
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 and 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.
Prefix Digits (Outgoing Calls	Enter prefix digits in the Prefix Digits (Outgoing Calls) field. Valid entries include the digits 0 through 9 and the wildcard characters asterisk (*) and octothorpe (#). **Note** The appended prefix digit does not affect which directory numbers route to the assigned device.

Field	Description
Calling Line ID Presentation	Cisco Unified Communications Manager uses calling line ID presentation (CLIP/CLIR) as a supplementary service to allow or restrict the originating caller phone number on a call-by-call basis.
	Choose whether you want your system to allow or restrict the display of the calling party phone number on the called party phone display for this SIP route pattern.
	Choose Default if you do not want to change calling line ID presentation. Choose Allowed if you want Cisco Unified Communications Manager to allow the display of the calling number. Choose Restricted if you want Cisco Unified Communications Manager to block the display of the calling number.
Calling Line Name Presentation	Cisco Unified Communications Manager uses calling name presentation (CNIP/CNIR) as a supplementary service to allow or restrict the originating caller name on a call-by-call basis.
	Choose whether you want your system to allow or restrict the display of the calling party name on the called party phone display for this SIP route pattern.
	Choose Default if you do not want to change calling name presentation. Choose Allowed if you want your system to display the calling name information. Choose Restricted if you want your system to block the display of the calling name information.
Connected Party Transformations	
Connected Line ID Presentation	Cisco Unified Communications Manager uses connected line ID presentation (COLP/COLR) as a supplementary service to allow or restrict the called party phone number on a call-by-call basis.
	Choose whether you want your system to allow or restrict the display of the connected party phone number on the calling party phone display for this SIP route pattern.
	Choose Default if you do not want to change the connected line ID presentation. Choose Allowed if you want to display the connected party phone number. Choose Restricted if you want your system to block the display of the connected party phone number.
	If a call that originates from an IP phone on your system encounters a device, such as a trunk, gateway, or route pattern, that has the Connected Line ID Presentation set to Default, the presentation value is automatically set to Allowed.
Connected Line Name Presentation	Cisco Unified Communications Manager uses connected name presentation (CONP/CONR) as a supplementary service to allow or restrict the called party name on a call-by-call basis.
	Choose whether you want your system to allow or restrict the display of the connected party name on the calling party phone display for this SIP route pattern.
	Choose Default if you do not want to change the connected name presentation. Choose Allowed if you want your system to display the connected party name. Choose Restricted if you want your system to block the display of the connected party name.