



CHAPTER 42

Translation Pattern Configuration

Use the following topics to add, update, copy, or delete a translation pattern:

- [Translation Pattern Configuration Settings, page 42-1](#)
- [Related Topics, page 42-10](#)

Translation Pattern Configuration Settings

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

Cisco Unified Communications Manager uses translation patterns to manipulate dialed digits before it routes a call. In some cases, the system does not use the dialed number. In other cases, the public switched telephone network (PSTN) does not recognize the dialed number.

Tips About Configuring Translation Patterns

Configure the following Cisco Unified Communications Manager items before configuring a translation pattern:

- Partition
- Route filter
- Calling search space
- Resource-Priority Namespace Network Domain



Note

Ensure that the translation pattern, that uses the selected partition, route filter, and numbering plan combination, is unique. Check the route pattern/hunt pilot, translation pattern, directory number, call park number, call pickup number, or meet-me number configuration windows if you receive an error that indicates duplicate entries.

Tips About Deleting Translation Patterns

Check carefully to ensure that you are deleting the correct translation pattern before you initiate this action. You cannot retrieve deleted translation patterns. If you accidentally delete a translation pattern, you must rebuild it.

Using the GUI

For instructions on how to use the Cisco Unified Communications Manager Administration Graphical User Interface (GUI) to find, delete, configure, or copy records, see the [“Navigating the Cisco Unified Communications Manager Administration Application”](#) section on page 1-13 and its subsections, which explain how to use the GUI and detail the functions of the buttons and icons.

Configuration Settings Table

Table 42-1 describes the available fields in the Translation Pattern Configuration window. For related procedures, see the [“Related Topics”](#) section on page 42-10.

Table 42-1 Translation Pattern Configuration Settings

Field	Description
Pattern Definition	
Translation Pattern	<p>Enter the translation pattern, including numbers and wildcards (do not use spaces), in the Translation Pattern field. For example, for the NANP, enter 9.@ for typical local access or 8XXX for a typical private network numbering plan. Valid characters include the uppercase characters A, B, C, and D and \+, which represents the international escape character +. If you leave this field blank, you must select a partition from the Partition drop-down list box.</p> <p>Note Ensure that the translation pattern, which uses the chosen partition, route filter, and numbering plan combination, is unique. Check the route pattern/hunt pilot, translation pattern, directory number, call park number, call pickup number, or meet-me number if you receive a message that indicates duplicate entries. Alternatively, check the route plan report if you receive a message that indicates duplicate entries.</p>
Partition	<p>Choose a partition. If you do not want to assign a partition, choose <None>. If you choose <None>, you must enter a value in the Translation Pattern field.</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 partitions exist than the Max List Box Items enterprise parameter specifies, the Find button displays next to the drop-down list box. Click the Find button to display the Find and List Partitions window. Find and choose a partition name by using the procedure in the “Searching for a Partition” section on page 40-4.</p> <p>Note To set the maximum list box items, choose System > Enterprise Parameters and choose CCMAdmin Parameters.</p> <p>Note Make sure that the combination of translation pattern, route filter, and partition is unique within the Cisco Unified Communications Manager cluster.</p>
Description	<p>Enter a description for the translation pattern. The description can include up to 50 characters in any language, but it cannot include double-quotes (“), percentage sign (%), ampersand (&), or angle brackets (<>).</p>
Numbering Plan	<p>Choose a numbering plan.</p> <p>If your translation pattern includes the @ wildcard, you may choose a numbering plan. The optional act of choosing a numbering plan restricts certain number patterns.</p>

Table 42-1 Translation Pattern Configuration Settings (continued)

Field	Description
Route Filter	<p>Choosing an optional route filter restricts certain number patterns. See the “Wildcards and Special Characters in Route Patterns and Hunt Pilots” section in the <i>Cisco Unified Communications Manager System Guide</i> and the “Route Filter Configuration Settings” section on page 30-1 for more information.</p> <p>The route filters that display depend on the numbering plan that you choose from the Numbering Plan drop-down list box.</p> <p>If more than 250 route filters exist, the Find button displays next to the drop-down list box. Click the Find button to display the Select Route Filters window. Enter a partial route filter name in the List items where Name contains field. Click the desired route filter name in the list of route filters that displays in the Select item to use box and click Add Selected.</p> <p>Note To set the maximum list box items, choose System > Enterprise Parameters and choose CCMAdmin Parameters.</p>
MLPP Precedence	<p>Choose an MLPP precedence setting for this translation pattern from the drop-down list box:</p> <ul style="list-style-type: none"> • Executive Override—Highest precedence setting for MLPP calls. • Flash Override—Second highest precedence setting for MLPP calls. • Flash—Third highest precedence setting for MLPP calls. • Immediate—Fourth highest precedence setting for MLPP calls. • Priority—Fifth highest precedence setting for MLPP calls. • Routine—Lowest precedence setting for MLPP calls. • Default—Does not override the incoming precedence level but rather lets it pass unchanged. <p>Note See the “Precedence” section in the “Multilevel Precedence and Preemption” chapter of the <i>Cisco Unified Communications Manager Features and Services Guide</i> for more information.</p>
Resource-Priority Namespace Network Domain	<p>Choose an already configured Resource-Priority Namespace Network Domain from the drop-down list box.</p>

Table 42-1 Translation Pattern Configuration Settings (continued)

Field	Description
Route Class	<p>Choose a route class setting for this translation pattern from the drop-down list box:</p> <ul style="list-style-type: none"> • Default • Voice • Data • Satellite Avoidance • Hotline voice • Hotline data <p>The route class is a DSN code that identifies the class of traffic for a call. The route class informs downstream devices about special routing or termination requirements. The Default setting uses the existing route class of the incoming call.</p> <p>You should only use non-default route class settings to translate an inbound T1 CAS route class digit into a Cisco Unified Communications Manager route class value (and strip off the digit). You should not need to assign a non-default route class setting to any other inbound calls that use pattern configuration.</p>
Calling Search Space	<p>From the drop-down list box, choose the calling search space for which you are adding a translation pattern, if necessary.</p> <p>You can configure the number of calling search spaces that display in this drop-down list box by using the Max List Box Items enterprise parameter. If more calling search spaces exist than the Max List Box Items enterprise parameter specifies, the Find button displays next to the drop-down list box. Click the Find button to display the Find and List Calling Search Space window. Find and choose a calling search space name (see the “Calling Search Space Configuration Settings” section on page 41-1).</p> <p>Note To set the maximum list box items, choose System > Enterprise Parameters and choose CCMAdmin Parameters.</p>
External Call Control Profile	<p>In Cisco Unified Communications Manager, you enable external call control by assigning an external call control profile to a translation pattern. If the translation pattern has an external call control profile assigned to it, when a call occurs that matches the translation pattern, Cisco Unified Communications Manager immediately sends a call-routing query to an adjunct route server, and the adjunct route server directs Cisco Unified Communications Manager on how to handle the call. For more information on external call control, see “External Call Control” in the <i>Cisco Unified Communications Manager Features and Services Guide</i>.</p> <p>From the drop-down list box, choose the external call profile that you want to assign to the translation pattern.</p>

Table 42-1 Translation Pattern Configuration Settings (continued)

Field	Description
Route Option	<p>The Route Option designation indicates whether you want this translation pattern to be used for routing calls (such as 9.@ or 8[2-9]XX) or for blocking calls. Choose the Route this pattern or Block this pattern radio button.</p> <p>If you choose the Block this pattern radio button, you must choose the reason for which you want this translation pattern to block calls. Choose a value from the drop-down list box:</p> <ul style="list-style-type: none"> • No Error • Unallocated Number • Call Rejected • Number Changed • Invalid Number Format • Precedence Level Exceeded
Provide Outside Dial Tone	<p>Outside dial tone indicates that Cisco Unified Communications Manager routes the calls off the local network. Check this check box for each translation pattern that you consider to be off network.</p>
Urgent Priority	<p>If the dial plan contains overlapping patterns, Cisco Unified Communications Manager does not route the call until the interdigit timer expires (even if it is possible to dial a sequence of digits to choose a current match). Check this check box to interrupt interdigit timing when Cisco Unified Communications Manager must route a call immediately.</p> <p>Tip By default, the Urgent Priority check box displays as checked. Unless your dial plan contains overlapping patterns or variable length patterns that contain !, Cisco recommends that you do not uncheck the check box.</p>
Route Next Hop By Calling Party Number	<p>Check this box to enable routing based on the calling party number, which is required for call screening based on caller ID information to work between clusters.</p>
Calling Party Transformations	
Use Calling Party's External Phone Number Mask	<p>Check the check box if you want the full, external phone number to be used for calling line identification (CLID) on outgoing calls.</p>
Calling Party Transform Mask	<p>Enter a transformation mask value. Valid entries for the NANP include the digits 0 through 9, and the wildcard characters asterisk (*) and octothorpe (#); the international escape character +; and blank. If this field is blank and the preceding field is not checked, no calling party transformation takes place. See the “Route List Configuration Settings” section on page 32-1 for more detailed information.</p>
Prefix Digits (Outgoing Calls)	<p>Enter prefix digits. Valid entries for the NANP include the digits 0 through 9, and the wildcard characters asterisk (*) and octothorpe (#); the international escape character +.</p> <p>Note The appended prefix digit does not affect which directory numbers route to the assigned device.</p>

Table 42-1 Translation Pattern Configuration Settings (continued)

Field	Description
Calling Line ID Presentation	<p>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.</p> <p>Choose whether you want the Cisco Unified Communications Manager to allow or restrict the display of the calling party phone number on the called party phone display for this translation pattern.</p> <p>Choose <i>Default</i> if you do not want to change calling line ID presentation. Choose <i>Allowed</i> if you want Cisco Unified Communications Manager to allow the display of the calling number. Choose <i>Restricted</i> if you want Cisco Unified Communications Manager to block the display of the calling number.</p> <p>For more information about this field, see Table 16-8 in the “Calling Party Number Transformations Settings” section in the <i>Cisco Unified Communications Manager System Guide</i>.</p> <p>Note Use this parameter and the Connected Line ID Presentation parameter, in combination with the Ignore Presentation Indicators (internal calls only) device-level parameter, to configure call display restrictions. Together, these settings allow you to selectively present or restrict calling and/or connected line display information for each call. See the “Device Profile Configuration Settings” section on page 72-1 and Table 67-1 in the “Configuring Speed-Dial Buttons or Abbreviated Dialing” section on page 67-36 for information about the Ignore Presentation Indicators (internal calls only) field. For more information about call display restrictions, see the Call Display Restrictions chapter in the <i>Cisco Unified Communications Manager Features and Services Guide</i>.</p>
Calling Name Presentation	<p>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.</p> <p>Choose whether you want the Cisco Unified Communications Manager to allow or restrict the display of the calling party name on the called party phone display for this translation pattern.</p> <p>Choose <i>Default</i> if you do not want to change calling name presentation. Choose <i>Allowed</i> if you want Cisco Unified Communications Manager to display the calling name information. Choose <i>Restricted</i> if you want Cisco Unified Communications Manager to block the display of the calling name information.</p> <p>For more information about this field, see Table 16-8 in the “Calling Party Number Transformations Settings” section in the <i>Cisco Unified Communications Manager System Guide</i>.</p>

Table 42-1 Translation Pattern Configuration Settings (continued)

Field	Description
Calling Party Number Type	<p>Choose the format for the number type in calling party directory numbers. Cisco Unified Communications Manager sets the calling directory number (DN) type. Cisco recommends that you do not change the default value unless you have advanced experience with dialing plans such as NANP or the European dialing plan. You may need to change the default in Europe because Cisco Unified Communications Manager does not recognize European national dialing patterns. You can also change this setting when you are connecting to a PBX that expects the calling directory number to be encoded to a non-national numbering plan type.</p> <p>Choose one of the following options:</p> <ul style="list-style-type: none"> • Cisco Unified Communications Manager—The Cisco Unified Communications Manager sets the directory number type. • Unknown—The dialing plan is unknown. • National—Use when you are dialing within the dialing plan for your country. • International—Use when you are dialing outside the dialing plan for your country. • Subscriber—Use when you are dialing a subscriber by using a shortened subscriber number.
Calling Party Numbering Plan	<p>Choose the format for the numbering plan in calling party directory numbers. Cisco Unified Communications Manager sets the calling DN numbering plan. Cisco recommends that you do not change the default value unless you have advanced experience with dialing plans such as NANP or the European dialing plan. You may need to change the default in Europe because Cisco Unified Communications Manager does not recognize European national dialing patterns. You can also change this setting when you are connecting to PBXs by using routing as a non-national type number.</p> <p>Choose one of the following options:</p> <ul style="list-style-type: none"> • Cisco Unified Communications Manager—Use when the Cisco Unified Communications Manager sets the Numbering Plan in the directory number. • ISDN—Use when you are dialing outside the dialing plan for your country. • National Standard—Use when you are dialing within the dialing plan for your country. • Private—Use when you are dialing within a private network. • Unknown—Use when the dialing plan is unknown.

Table 42-1 Translation Pattern Configuration Settings (continued)

Field	Description
Connected Party Transformations	
Connected Line ID Presentation	<p>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.</p> <p>Choose whether you want Cisco Unified Communications Manager to allow or restrict the display of the connected party phone number on the calling party phone display for this translation pattern.</p> <p>Choose <i>Default</i> if you do not want to change the connected line ID presentation. Choose <i>Allowed</i> if you want to display the connected party phone number. Choose <i>Restricted</i> if you want Cisco Unified Communications Manager to block the display of the connected party phone number.</p> <p>For more information about this field, see Table 16-11 in the “Connected Party Presentation and Restriction Settings” section in the <i>Cisco Unified Communications Manager System Guide</i>.</p>
Connected Name Presentation	<p>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.</p> <p>Choose whether you want Cisco Unified Communications Manager to allow or restrict the display of the connected party name on the calling party phone display for this translation pattern.</p> <p>Choose <i>Default</i> if you do not want to change the connected name presentation. Choose <i>Allowed</i> if you want to display the connected party name. Choose <i>Restricted</i> if you want Cisco Unified Communications Manager to block the display of the connected party name.</p> <p>For more information about this field, see Table 16-11 in the “Connected Party Presentation and Restriction Settings” section in the <i>Cisco Unified Communications Manager System Guide</i>.</p>
Called Party Transformations	
Discard Digits	<p>Choose the discard digits instructions that you want to be associated with this translation pattern. See the “Discard Digits Instructions” section in the <i>Cisco Unified Communications Manager System Guide</i> for more information.</p> <p>Note The discard digits that display depend on the numbering plan that you choose from the Numbering Plan drop-down list box.</p>
Called Party Transform Mask	<p>Enter a transformation mask value. Valid entries for the NANP include the digits 0 through 9, and the wildcard characters asterisk (*) and octothorpe (#); the international escape character +; and blank. If the field is blank, no transformation takes place. The dialed digits get sent exactly as dialed.</p>
Prefix Digits (Outgoing Calls)	<p>Enter prefix digits. Valid entries for the NANP include the digits 0 through 9, and the wildcard characters asterisk (*) and octothorpe (#); the international escape character +; and blank.</p> <p>Note The appended prefix digit does not affect which directory numbers route to the assigned device.</p>

Table 42-1 Translation Pattern Configuration Settings (continued)

Field	Description
Called Party Number Type	<p>Choose the format for the number type in called party directory numbers.</p> <p>Cisco Unified Communications Manager sets the called directory number (DN) type. Cisco recommends that you do not change the default value unless you have advanced experience with dialing plans such as NANP or the European dialing plan. You may need to change the default in Europe because Cisco Unified Communications Manager does not recognize European national dialing patterns. You can also change this setting when you are connecting to a PBX that expects the called directory number to be encoded to a non-national type numbering plan.</p> <p>Choose one of the following options:</p> <ul style="list-style-type: none"> • Cisco Unified Communications Manager—Use when the Cisco Unified Communications Manager sets the directory number type. • Unknown—Use when the dialing plan is unknown. • National—Use when you are dialing within the dialing plan for your country. • International—Use when you are dialing outside the dialing plan for your country. • Subscriber—Use when you are dialing a subscriber by using a shortened subscriber number.
Called Party Numbering Plan	<p>Choose the format for the numbering plan in called party directory numbers.</p> <p>Cisco Unified Communications Manager sets the called DN numbering plan. Cisco recommends that you do not change the default value unless you have advanced experience with dialing plans such as NANP or the European dialing plan. You may need to change the default in Europe because Cisco Unified Communications Manager does not recognize European national dialing patterns. You can also change this setting when you are connecting to PBXs by using routing as a non-national type number.</p> <p>Choose one of the following options:</p> <ul style="list-style-type: none"> • Cisco Unified Communications Manager—Use when the Cisco Unified Communications Manager sets the Numbering Plan in the directory number. • ISDN—Use when you are dialing outside the dialing plan for your country. • National Standard—Use when you are dialing within the dialing plan for your country. • Private—Use when you are dialing within a private network. • Unknown—Use when the dialing plan is unknown.

Additional Information

See the [“Related Topics”](#) section on page 42-10.

Related Topics

- [Translation Pattern Configuration](#), page 42-1
- [Translation Pattern Configuration Settings](#), page 42-1
- [Understanding Route Plans](#), *Cisco Unified Communications Manager System Guide*
- [Resource Priority Namespace Network Domain Configuration Settings](#), page 18-1
- [Resource Priority Namespace List Configuration Settings](#), page 19-1