



## Directory Number Setup

This chapter provides information about working with and configuring directory numbers (DNs) in Cisco Unified Communications Manager Administration.

For additional information, see topics related to directory numbers, Cisco Unified IP Phones, and phone features in the *Cisco Unified Communications Manager Administration System Guide*; as well as topics related to Cisco Unity connection configuration.

Additional information can also be found in *User Moves, Adds, and Changes Guide for Cisco Unity Connection* and topics related to presence in the *Cisco Unified Communications Manager Administration Features and Services Guide*.

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## About Directory Number Setup

In Cisco Unified Communications Manager Administration, use the **Call Routing > Directory Number** menu path to configure directory numbers (DNs).

Using Cisco Unified Communications Manager Administration, you configure and modify directory numbers (DNs) that are assigned to specific phones. Use the Directory Number Configuration window to perform the following tasks:

- Add or remove directory numbers.
- Assign directory URIs to a directory number
- Configure call forward, call pickup, call waiting, and multilevel precedence and preemption (MLPP) options.
- Set the display text that appears on the called party phone when a call is placed from a line.
- Configure ring settings.
- Configure Cisco Unity Connection voice mailboxes.

Shared lines always have identical DN settings, except for the field sections in the Directory Number Configuration window that contain the naming convention “on Device SEPXXXXXXXXXXXX,” which are maintained/mapped to a specific device. If you add a shared line to a device, the shared DN configuration settings, such as Calling Search Space and Call Forward and Pickup, will display. If these DN configuration settings get changed, the new settings apply to all the shared lines.

### Assign Directory URIs to a Directory Number

Use the Directory Number Configuration window to associate directory URIs to a directory number. This allows Cisco Unified Communications Manager to support dialing using either the directory number or the directory URI. Each directory URI address must resolve to a single directory number in a partition.

### Directory Number Configuration Tips

You can configure the directory number configuration settings by choosing **Call Routing > Directory Number**; you can configure these settings after you add a phone under **Call Routing > Phone**; or, you can configure these settings after you add a CTI route point under **Device > CTI Route Point**.

If you configure the directory number via **Device > Phone** or **Device > CTI Route Point**, be aware that only the configuration settings that apply to your phone model or CTI route point display. If you configure the directory number via **Call Routing > Directory Number**, all of the directory number settings do not display at the same time; for example, after you configure the directory number and click Save, more configuration settings may display.



#### Note

The Phone Configuration window provides an alternate method for adding a directory number. Use the **Device > Phone** menu option and create a new phone or search for an existing phone. After you create the new phone or display the existing phone, click either the Line [1] - Add a new DN or Line [2] - Add a new DN link in the Association Information area on the left side of the Phone Configuration window.

You can also add a directory number to a CTI route point by configuring the CTI route point under **Device > CTI Route Point**.

You can configure the call forward, call pickup, and MLPP phone features while you are adding the directory number.



#### Tip

You can assign patterns to directory numbers; for example, 352XX. To avoid user confusion when you assign a pattern to a directory number, add text or digits to the DN configuration fields, Line Text Label, Display (Internal Caller ID), and External Phone Number Mask. (These fields display for a directory number only after you add the directory number and you associate the directory number with a phone.)

For example, add the user name to the line text label and internal caller ID, but add the outside line number to the external number mask, so when the calling information displays, it says John Chan, not 352XX.



#### Tip

If you need more than two lines, you can increase the lines by modifying the phone button template for the phone type (such as Cisco IP Phone 7960). Some phone types, however, only support one or two lines (such as Cisco IP Phone 7902).



**Note** Restart devices as soon as possible. During this process, the system may drop calls on gateways.

## Directory Number Settings

Field	Description
Directory Number Information	
Directory Number	<p>Enter a dialable phone number. Values can include route pattern wildcards and numeric characters (0 through 9). Special characters such as a question mark (?), exclamation mark (!), backslash (\), brackets ([ ]), plus sign (+), dash (-), asterisk (*), caret (^), pound sign (#), and an X are also allowable. Special characters that are not allowed are a period (.), at sign (@), dollar sign (\$), and percent sign (%).</p> <p>At the beginning of the pattern, enter \+ if you want to use the international escape character +. For this field, \+ does not represent a wildcard; instead, entering \+ represents a dialable digit.</p> <p><b>Note</b> When a pattern is used as a directory number, the display on the phone and the caller ID that displays on the dialed phone will both contain characters other than digits. To avoid this, Cisco recommends that you provide a value for Display (Internal Caller ID), Line text label, and External phone number mask.</p> <p>The directory number that you enter can appear in more than one partition.</p> <p>If you configure this field under <b>Call Routing &gt; Directory Number</b>, you can enter insert directory numbers in bulk by entering a range (that is, by entering the beginning directory number in the first field and by entering the ending directory number in the second field); by using this method, you can create up to 500 directory numbers at a time.</p>

Field	Description
Urgent Priority	<p>If the dial plan contains overlapping patterns, Cisco Unified Communications Manager does not route the call to the device associated with the directory number until the interdigit timer expires (even if the directory number is a better match for the sequence of digits dialed as compared to the overlapping pattern). Check this check box to interrupt interdigit timing when Cisco Unified Communications Manager must route a call immediately to the device associated with the directory number.</p> <p>By default, the Urgent Priority check box is unchecked.</p>
Route Partition	<p>Choose the partition to which the directory number belongs. Make sure that the directory number that you enter in the Directory Number field is unique within the partition that you choose. If you do not want to restrict access to the directory number, choose &lt;None&gt; for the partition.</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, then find and choose a partition name.</p> <p><b>Note</b> To set the maximum list box items, choose <b>System &gt; Enterprise Parameters</b> and choose CCMAAdmin Parameters.</p>
Description	<p>Enter a description of the directory number and route partition. The description can include up to 50 characters in any language, but it cannot include double-quotes ("), percentage sign (%), ampersand (&amp;), or angle brackets (&lt;&gt;).</p>

Field	Description
Alerting Name	

Field	Description
	<p>Enter a name that you want to display on the phone of the caller when the called phone is ringing.</p> <p>This setting, which supports the Identification Services for the QSIG protocol, applies to shared and nonshared directory numbers. When the phone rings at the terminating PINX, if you configured an alerting name for a directory number with shared-line appearances, the system performs the following tasks:</p> <ul style="list-style-type: none"> <li>• Forwards the alerting name of the called party, if configured, to the caller.</li> <li>• Applies the Connected Name Restrictions (CONR) that are configured for the translation pattern (if restrictions exist)</li> </ul> <p>Depending on the state of the call and your configuration, the alerting name, directory number, or display (internal caller ID) configuration may display on the phone, as described in the following bullets.</p> <ul style="list-style-type: none"> <li>• Alerting state—The alerting name displays, as configured in the Directory Number window.</li> <li>• Connected state—If you configure the Display (Internal Caller ID) and the Alerting Name fields, the display (internal caller ID) name displays.</li> <li>• Connected State—If you configured the Alerting Name field but not the Display (Internal Caller ID) field, the directory number displays.</li> </ul> <p>If you set the Always Display Original Dialed Number service parameter to True, the original dialed number and the alerting name displays during the call.</p> <p>You can choose if the alerting name for the original dialed number or the translated dialed number is displayed using the Cisco CallManager service parameter called Name Display for Original Dialed Number When Translated. The default setting displays the alerting name of the original dialed number before translation.</p> <p><b>Caution</b> Do not use the following strings anywhere in your Alerting Name or ASCII Alerting Name:</p> <ul style="list-style-type: none"> <li>• Alert(—Use of “Alert(” returns a security protocol error.</li> <li>• Voicemail—Use of this word can</li> </ul>

Field	Description
	cause Cisco Unity Connection to process the call as a direct call rather than as a forwarded one.
ASCII Alerting Name	<p>This field provides the same information as the Alerting Name field, but you must limit input to ASCII characters. Devices that do not support Unicode (internationalized) characters display the content of the Alerting Name ASCII field.</p> <p><b>Caution</b> Do not use the following strings anywhere in your Alerting Name or ASCII Alerting Name:</p> <ul style="list-style-type: none"> <li>• Alert(—Use of “Alert(” returns a security protocol error.</li> <li>• Voicemail—Use of this word can cause Cisco Unity Connection to process the call as a direct call rather than as a forwarded one.</li> </ul>
Active	<p>To view this check box on the Directory Number Configuration window, access an unassigned directory number from the Route Plan Report window. Checking this check box allows calls to this DN to be forwarded (if forwarding is configured). If check box is not checked, Cisco Unified Communications Manager ignores the DN.</p>
Allow Control of Device from CTI	<p>Check this check box to allow CTI to control and monitor a line on a device with which this directory number is associated</p> <p>If the directory number specifies a shared line, ensure the check box is enabled as long as at least one associated device specifies a combination of device type and protocol that CTI supports.</p>

Field	Description
Line Group	<p>From this drop-down list box, choose a line group with which to associate this DN.</p> <p>To edit or view the line group information for a line group, choose a line group from the drop-down list box and click the Edit Line Group button.</p> <p><b>Note</b> If you configure a DN as part of a line group, you will not be able to associate that DN with a CTI port nor a CTI route point. Conversely, when you configure a CTI port or CTI route point, you will not be able to specify a DN that already belongs to a line group or to a hunt list. Furthermore, if a DN is a member of a line group or hunt list, any device (CTI port, CTI route point, phone that is running SCCP, or phone that is running SIP) that uses that DN should not be associated with a CTI user.</p>
Associated Devices	<p>After you associate this DN with a device(s), this pane displays the devices with which this DN is associated.</p> <p>To edit a device with which this DN is associated, choose a device name in the Associated Devices pane and click the Edit Device button. The Phone Configuration window or Device Profile Configuration window displays for the device that you choose.</p> <p>To edit a line appearance that has been defined for this DN, choose a device name in the Associated Devices pane and click the Edit Line Appearance button. The Directory Number Configuration window or Device Profile Configuration window refreshes to show the line appearance for this DN on the device that you choose.</p> <p>To associate a device to this DN from the list of devices in the Dissociate Devices pane, choose a device in the Dissociate Devices pane and add it to the Associated Devices pane by clicking the up arrow between the two panes.</p>
Dissociate Devices	<p>If you choose to dissociate a DN from a device, this pane displays the device(s) from which you dissociate this DN.</p> <p>Choose a device in the Associated Devices pane and add it to the Dissociate Devices pane by clicking the down arrow between the two panes.</p>



Field	Description
Directory Number Settings	
Voice Mail Profile	<p>Choose from list of Voice Mail Profiles that the Voice Mail Profile Configuration defines.</p> <p>The first option specifies &lt;None&gt;, which represents the current default Voice Mail Profile that is configured in the Voice Mail Profile Configuration.</p>

Field	Description
Calling Search Space	

Field	Description
	<p>From the drop-down list box, choose the appropriate calling search space. A calling search space comprises a collection of partitions that are searched for numbers that are called from this directory number. The value that you choose applies to all devices that are using this directory number.</p> <p>Changes result in an update of the numbers that the Call Pickup Group field lists.</p> <p>You can configure calling search space for Forward All, Forward Busy, Forward No Answer, Forward No Coverage, and Forward on CTI Failure directory numbers. The value that you choose applies to all devices that are using this directory number.</p> <p>You must configure either primary Forward All Calling Search Space or Secondary Forward All Calling Search Space or both for Call Forward All to work properly. The system uses these concatenated fields (Primary CFA CSS + Secondary CFA CSS) to validate the CFA destination and forward the call to the CFA destination.</p> <p><b>Note</b> If the system is using partitions and calling search spaces, Cisco recommends that you configure the other call forward calling search spaces as well. When a call is forwarded or redirected to the call forward destination, the configured call forward calling search space gets used to forward the call. If the forward calling search space is None, the forward operation may fail if the system is using partitions and calling search spaces. For example, if you configure the Forward Busy destination, you should also configure the Forward Busy Calling Search Space. If you do not configure the Forward Busy Calling Search Space and the Forward Busy destination is in a partition, the forward operation may fail.</p> <p>When you forward calls by using the CFwdAll softkey on the phone, the automatic combination of the line CSS and device CSS does not get used. Only the configured Primary CFA CSS and Secondary CFA CSS get used. If both of these fields are None, the combination results in two null partitions, which may cause the operation to fail.</p> <p>If you want to restrict users from forwarding calls on</p>

Field	Description
	their phones, you must choose a restrictive calling search space from the Forward All Calling Search Space field.
BLF Presence Group	<p>Configure this field with the BLF Presence feature.</p> <p>From the drop-down list box, choose a BLF Presence group for this directory number. The selected group specifies the devices, end users, and application users that can monitor this directory number.</p> <p>The default value for BLF Presence Group specifies Standard Presence group, configured with installation. Presence groups that are configured in Cisco Unified Communications Manager Administration also appear in the drop-down list box.</p> <p>BLF Presence authorization works with presence groups to allow or block presence requests between groups.</p>
User Hold MOH Audio Source	Choose the audio source that plays when a user initiates a hold action.
Network Hold MOH Audio Source	Choose the audio source that plays when the network initiates a hold action.
Auto Answer	<p>Choose one of the following options to activate the Auto Answer feature for this directory number:</p> <ul style="list-style-type: none"> <li>• Auto Answer Off &lt;Default&gt;</li> <li>• Auto Answer with Headset</li> <li>• Auto Answer with Speakerphone</li> </ul> <p><b>Note</b> Make sure that the headset or speakerphone is not disabled when you choose Auto Answer with headset or Auto Answer with speakerphone.</p> <p><b>Note</b> Do not configure Auto Answer for devices that have shared lines.</p>
Reject anonymous calls	Check this check box to reject all anonymous calls for the DN. Anonymous calls are calls with no caller ID or that have caller ID blocked.
Enterprise Alternate Number / +E.164 Alternate Number	
<p><b>Note</b> The following fields apply to both Enterprise Alternate Numbers and +E.164 Alternate Numbers as the fields are identical for each section.</p>	

Field	Description
Add Alternate Number	<p>Click <b>Add Enterprise Alternate Number</b> to add an enterprise alternate number and associate it to this directory number.</p> <p>Click <b>Add +E.164 Alternate Number</b> to add an +E.164 alternate number and associate it to this directory number.</p>
Number Mask	<p>In the text box, enter a number mask for the enterprise alternate number or +E.164 alternate number. This field can contain only digits 0-9, X and the plus sign (+). If the Number Mask contains a plus sign, the plus sign must be the first character in the mask. Refer to the Alternate Number field to see how the alternate number appears after the mask is applied.</p> <p>Cisco Unified Communications Manager applies the mask to the directory number and creates an enterprise alternate number or +E.164 alternate number that acts as an alias for the directory number. Other phones can dial this directory number by dialing the enterprise number.</p> <p><b>Enterprise Alternate Number Example</b></p> <p>If you apply a number mask of 8XXXXX to directory number 2000, Cisco Unified Communications Manager creates an enterprise alternate number 82000 as an alias of directory number 2000. If the dialed digits of an incoming call are 82000, Cisco Unified Communications Manager routes the call to the user that is registered to directory number 2000.</p> <p><b>+E.164 Alternate Number Example</b></p> <p>If you apply a number mask of 1972515XXXX to directory number 2000, Cisco Unified Communications Manager creates an +E.164 alternate number 19725152000 as an alias of directory number 2000. If the dialed digits of an incoming call are 19725152000, Cisco Unified Communications Manager routes the call to the user that is registered to directory number 2000.</p>
Alternate Number	<p>This field displays the enterprise alternate number or +E.164 alternate number after the Number Mask field has been applied. Users are able to dial the phone that is registered to this directory number by dialing this alternate number.</p>

Field	Description
Add to Local Partition	<p>Check this check box to assign this alternate number to a local route partition. Leave the check box unchecked if you do not want to restrict access to this alternate number.</p> <p><b>Note</b> For users in the local cluster to be able to dial this alternate number, the partition to which you assign the alternate number must be in a local calling search space.</p>
Route Partition	<p>From the drop-down list box, choose the local route partition on which you want to assign the alternate number. Make sure that this alternate number is unique on this partition.</p>
Advertise Globally via ILS	<p>Check this check box to enable ILS to advertise this alternate number to remote clusters in the ILS network.</p> <p>If you leave this check box unchecked, Cisco Unified Communications Manager does not replicate this alternate number to remote clusters in the ILS network even if the Global Dial Plan Replication feature is enabled.</p> <p><b>Note</b> In order for Cisco Unified Communications Manager to replicate this alternate number to remote clusters, you must also set up an ILS network and enable the Global Dial Plan Replication feature across the network.</p>
Remove Alternate Number	<p>Click <b>Remove Enterprise Alternate Number</b> to delete the enterprise alternate number. After you remove the alternate number, click <b>Save</b>.</p> <p>Click <b>Remove +E.164 Alternate Number</b> to delete the +E.164 alternate number. After you remove the alternate number, click <b>Save</b>.</p>
Directory URIs	

Field	Description
Directory URIs	<p>The fields in this section can be completed to associate directory URIs to a directory number so that users can make calls and identify callers using directory URIs rather than directory numbers. Users can associate up to five separate directory URIs to a single directory number, but they must select a primary URI.</p> <p>To associate a directory URI to the directory number, enter the directory URI in the URI text box, select the partition on which the URI is saved, and click <b>Save</b>.</p> <p>The Directory URIs section contains the following fields and buttons:</p> <ul style="list-style-type: none"> <li>• <b>Primary</b>—Check this radio button to select the primary directory URI for instances where more than one directory URI is associated to a directory number.</li> <li>• <b>URI</b>—Enter the directory URI address in this text box. For detailed information on valid directory URI formats, see <a href="#">Directory URI format</a>.</li> <li>• <b>Partition</b>—From the drop-down menu, choose the partition to which the directory URI belongs. Make sure that the directory URI that you enter is unique within the partition that you choose. If you do not want to restrict access to the URI, choose <b>&lt;None&gt;</b> for the partition.</li> <li>• <b>Advertise Globally via ILS</b>—Check this check box to enable ILS to replicate this directory URI to remote clusters in the ILS network. The maximum number of directory URIs that can be replicated is seven. If this check box is left unchecked, ILS will not replicate this directory URI to remote clusters, even if the Global Dial Plan Replication feature is enabled. By default, this check box is checked.</li> <li>• <b>Remove</b>—Click the (–) button to delete this directory URI from the directory number configuration. After the directory URI has been deleted, click <b>Save</b>.</li> <li>• <b>Add Row</b>—When you want to associate multiple directory URIs to the directory number, click this button to add new rows on which you can enter the additional directory URIs.</li> </ul>
<b>PSTN Failover for Enterprise Alternate Number, +E.164 Alternate Number, and URI Dialing</b>	

Field	Description
Advertised Failover Number	<p>If the local cluster is part of an ILS network, and Global Dial Plan Replication is enabled, the local cluster advertises the PSTN failover to remote clusters in the ILS network. If a remote cluster is unable to route a call via a SIP trunk to one of the advertised directory URIs or alternate numbers that are associated with this directory number (DN), the remote cluster can reroute the call to the advertised PSTN failover number and send the call to a PSTN gateway.</p> <p>From the drop-down list box, choose one of the following options:</p> <ul style="list-style-type: none"> <li>• &lt;None&gt;—ILS does not advertise a PSTN failover option.</li> <li>• Enterprise Number (&lt;number&gt;)—ILS advertises the enterprise alternate number as the PSTN failover for all the alternate numbers and directory URIs that are associated to this DN.</li> <li>• +E.164 Number (&lt;number&gt;)—ILS advertises the +E.164 alternate number as the PSTN failover for all the alternate numbers and directory URIs that are associated to this DN.</li> </ul> <p><b>Note</b> If Global Dial Plan Replication is enabled, ILS advertises the PSTN failover setting to the ILS network, regardless of whether the Advertise Globally via ILS check box is checked for the alternate number that you choose.</p>
External Presentation Information	
Anonymous External Presentation	<p>This field only applies to outbound calls. Check this box to send External Presentation Name and Number as Anonymous.</p> <p>Default: Disabled</p>



Field	Description
External Presentation Number	<p>This field only applies to outbound calls. Enter the digits that you want to show as external presentation number.</p> <p>Default: None</p> <p><b>Note</b></p> <ul style="list-style-type: none"> <li>• This field accepts a maximum of 32 digits.</li> <li>• The allowed characters in the field are number 0-9, character X, *, #, \, and +.</li> <li>• When you enable <b>Anonymous External Presentation</b>, this field will be non-editable.</li> </ul>
AAR Settings	
AAR (Voice Mail, AAR Destination Mask, AAR Group)	<p>The settings in this row of fields specify treatment of calls for which insufficient bandwidth exists to reach the destination. Automated alternate routing (AAR) handles these calls that are routed to the AAR Destination Mask or Voice Mail.</p> <p>Configure the following values:</p> <ul style="list-style-type: none"> <li>• <b>Voice Mail</b>—Check this check box to use settings in the Voice Mail Profile Configuration window.</li> </ul> <p>When this check box is checked, Cisco Unified Communications Manager ignores the settings in the Coverage/Destination box and Calling Search Space.</p> <ul style="list-style-type: none"> <li>• <b>AAR Destination Mask</b>—Use this setting instead of the external phone number mask to determine the AAR Destination to be dialed.</li> <li>• <b>AAR Group</b>—This setting provides the prefix digits that are used to route calls that are otherwise blocked due to insufficient bandwidth. An AAR group setting of None indicates that no rerouting of blocked calls will be attempted.</li> </ul>

Field	Description
Retain this destination in the call forwarding history	<p>This setting determines whether the AAR leg of the call will be present in the call forwarding history. If you uncheck the check box, the AAR leg of the call is not present in the call history. If you check the check box, the AAR leg of the call will be present in the call history.</p> <p>By default, the directory number configuration retains the AAR leg of the call in the call history, which ensures that the AAR forward to voice-messaging system will prompt the user to leave a voice message.</p>
Call Forward and Call Pickup Settings	

Field	Description
Calling Search Space Activation Policy	

Field	Description
	<p>Three possible values exist for this option:</p> <ul style="list-style-type: none"> <li>• Use System Default</li> <li>• With Configured CSS</li> <li>• With Activating Device/Line CSS</li> </ul> <p>If you select the With Configured CSS option, the Forward All Calling Search Space that is explicitly configured in the Directory Number Configuration window controls the forward all activation and call forwarding. If the Forward All Calling Search Space is set to None, no CSS gets configured for Forward All. A forward all activation attempt to any directory number with a partition will fail. No change in the Forward All Calling Search Space and Secondary Calling Search Space for Forward All occurs during the forward all activation.</p> <p>If you prefer to utilize the combination of the Directory Number Calling Search Space and Device Calling Search Space without explicitly configuring a Forward All Calling Search Space, select With Activating Device/Line CSS for the Calling Search Space Activation Policy. With this option, when Forward All is activated from the phone, the Forward All Calling Search Space and Secondary Calling Search Space for Forward All automatically gets populated with the Directory Number Calling Search Space and Device Calling Search Space for the activating device.</p> <p>With this configuration (Calling Search Space Activation Policy set to With Activating Device/Line), if the Forward All Calling Search Space is set to None, when forward all is activated through the phone, the combination of Directory Number Calling Search Space and activating Device Calling Search Space gets used to verify the forward all attempt.</p> <p>If you configure the Calling Search Space Activation Policy to Use System Default, then the CFA CSS Activation Policy cluster-wide service parameter determines which Forward All Calling Search space will be used. If the CFA CSS Activation Policy service parameter gets set to With Configured CSS, then Forward All Calling Search Space and Secondary Calling Search Space for Forward All will be used for Call Forwarding. If CFA CSS Activation Policy service parameter gets set to With Activating Device/Line CSS, then Forward All Calling Search</p>

Field	Description
	<p>Space and Secondary Calling Search Space for Forward All will be automatically populated with the Directory Number Calling Search Space and Device Calling Search Space for the activating device.</p> <p>CFA CSS Activation Policy Service Parameter:</p> <p>Ensure the CFA CSS Activation Policy service parameter that displays in the Clusterwide Parameters (Feature - Forward) section of the Service Parameter Configuration window is set correctly for call forward all to work as intended. The parameter includes two possible values:</p> <ul style="list-style-type: none"> <li>• With Configured CSS (default)</li> <li>• With Activating Device/Line CSS</li> </ul> <p>When the Calling Search Space Activation Policy is set to Use System Default, the value of the CFA CSS Activation Policy service parameter gets used to determine the Call Forward All CSS.</p> <p>When the option With Configured CSS is selected, the primary and secondary CFA Calling Search Space get used. When the option With Activating Device/Line CSS is selected, the primary and secondary CFA Calling Search Space get updated with primary line Calling Search Space and activating Device Calling Search Space.</p> <p>By default, the value of the CFA CSS Activation Policy service parameter is set to With Configured CSS.</p> <p>Roaming:</p> <p>When a device is roaming in the same device mobility group, Cisco Unified Communications Manager uses the Device Mobility CSS to reach the local gateway. If a user sets Call Forward All at the phone, the CFA CSS is set to None, and the CFA CSS Activation Policy is set to With Activating Device/Line CSS, then:</p>

Field	Description
	<ul style="list-style-type: none"> <li>• The Device CSS and Line CSS get used as the CFA CSS when the device is in its home location.</li> <li>• If the device is roaming within the same device mobility group, the Device Mobility CSS from the Roaming Device Pool and the Line CSS get used as the CFA CSS.</li> <li>• If the device is roaming within a different device mobility group, the Device CSS and Line CSS get used as the CFA CSS.</li> </ul>
Forward All	<p>The settings in this row of fields specify the forwarding treatment for calls to this directory number if the directory number is set to forward all calls. The Calling Search Space field gets used to validate the Forward All destination that is entered when the user activates Call Forward All from the phone. This field also gets used to redirect the call to the Call Forward All destination.</p> <p>Specify the following values:</p> <ul style="list-style-type: none"> <li>• Voice Mail—Check this check box to use settings in the Voice Mail Profile Configuration window.</li> </ul> <p><b>Note</b> When this check box is checked, Cisco Unified Communications Manager ignores the settings in the Destination box and Calling Search Space.</p> <ul style="list-style-type: none"> <li>• Destination—This setting indicates the directory number to which all calls are forwarded. Use any dialable phone number, including an outside destination.</li> <li>• Calling Search Space—This setting applies to all devices that are using this directory number.</li> </ul>

Field	Description
Secondary Calling Search Space for Forward All	<p>Because call forwarding is a line-based feature, in cases where the device calling search space is unknown, the system uses only the line calling search space to forward the call. If the line calling search space is restrictive and not routable, the forward attempt fails.</p> <p>Addition of a secondary calling search space for Call Forward All provides a solution to enable forwarding. The primary calling search space for Call Forward All and secondary calling search space for Call Forward All get concatenated (Primary CFA CSS + Secondary CFA CSS). Cisco Unified Communications Manager uses this combination to validate the CFA destination and to forward the call.</p> <p>See the description for the Calling Search Space field for information about how the combination of Primary and Secondary CFA CSSs works</p>

Field	Description
Forward Busy Internal	



Field	Description
	<p>The settings in this row of fields specify the forwarding treatment for internal calls to this directory number if the directory number is busy. See the description for the Busy Trigger field for information on when a line is considered busy. The call forward destination and Calling Search Space field get used to redirect the call to the forward destination.</p> <p>Specify the following values:</p> <ul style="list-style-type: none"> <li>• <b>Voice Mail</b>—Check this check box to use settings in the Voice Mail Profile Configuration window for internal calls.</li> </ul> <p><b>Note</b> When this check box is checked, the calling search space of the voice mail pilot gets used. Cisco Unified Communications Manager ignores the settings in the Destination box and Calling Search Space.</p> <p><b>Note</b> When this check box is checked for internal calls, the system automatically checks the Voice Mail check box for external calls. If you do not want external calls to forward to the voice-messaging system, you must uncheck the Voice Mail check box for external calls.</p> <ul style="list-style-type: none"> <li>• <b>Destination</b>—This setting indicates the call forward busy destination for internal calls. Use any dialable phone number, including an outside destination.</li> </ul> <p><b>Note</b> When you enter a destination value for internal calls, the system automatically copies this value to the Destination field for external calls. If you want external calls to forward to a different destination, you must enter a different value in the Destination field for external calls.</p> <ul style="list-style-type: none"> <li>• <b>Calling Search Space</b>—The Forward Busy internal Calling Search Space is used to forward the call to the Forward Busy Internal destination. It applies to all devices that are using this directory number.</li> </ul> <p><b>Note</b> If the system is using partitions and calling search spaces, Cisco recommends that you configure the forward calling search</p>

Field	Description
	<p>spaces. When a call is forwarded or redirected to the call forward destination, the configured call forward calling search space gets used to forward the call. If the forward calling search space is None, the forward operation may fail if the system is using partitions and calling search spaces. For example, if you configure the Forward Busy Destination, you should also configure the Forward Busy Calling Search Space. If you do not configure the Forward Busy Calling Search Space and the Forward Busy destination is in a partition, the forward operation may fail.</p> <p><b>Note</b> When you choose a Calling Search Space for internal calls, the system automatically copies this setting to the Calling Search Space setting for external calls. If you want external calls to forward to a different calling search space, you must choose a different setting in the Calling Search Space drop-down list box.</p>

Field	Description
Forward Busy External	

Field	Description
	<p>The settings in this row of fields specify the forwarding treatment for external calls to this directory number if the directory number is busy. See the description for the Busy Trigger field for information on when a line is considered busy. The call forward destination and Calling Search Space field get used to redirect the call to the forward destination.</p> <p>Specify the following values:</p> <ul style="list-style-type: none"> <li>• <b>Voice Mail</b>—Check this check box to use settings in the Voice Mail Profile Configuration window for external calls.</li> </ul> <p><b>Note</b> When this check box is checked, the calling search space of the voice mail pilot gets used. Cisco Unified Communications Manager ignores the settings in the Destination box and Calling Search Space.</p> <p><b>Note</b> When the Voice Mail check box is checked for internal calls, the system automatically checks the Voice Mail check box for external calls. If you do not want external calls to forward to the voice-messaging system, you must uncheck the Voice Mail check box for external calls.</p> <ul style="list-style-type: none"> <li>• <b>Destination</b>—This setting indicates the call forward busy destination for external calls. Use any dialable phone number, including an outside destination.</li> </ul> <p><b>Note</b> When you enter a destination value for internal calls, the system automatically copies this value to the Destination field for external calls. If you want external calls to forward to a different destination, you must enter a different value in the Destination field for external calls.</p> <ul style="list-style-type: none"> <li>• <b>Calling Search Space</b>—The Forward Busy external Calling Search Space is used to forward the call to the Forward Busy External destination. It applies to all devices that are using this directory number.</li> </ul> <p><b>Note</b> If the system is using partitions and calling search spaces, Cisco recommends that you configure the forward calling search</p>

Field	Description
	<p>spaces. When a call is forwarded or redirected to the call forward destination, the configured call forward calling search space gets used to forward the call. If the forward calling search space is None, the forward operation may fail if the system is using partitions and calling search spaces. For example, if you configure the Forward Busy Destination, you should also configure the Forward Busy Calling Search Space. If you do not configure the Forward Busy Calling Search Space and the Forward Busy destination is in a partition, the forward operation may fail.</p> <p><b>Note</b> When you choose a Calling Search Space for internal calls, the system automatically copies this setting to the Calling Search Space setting for external calls. If you want external calls to forward to a different calling search space, you must choose a different setting in the Calling Search Space drop-down list box.</p>

Field	Description
Forward No Answer Internal	

Field	Description
	<p>The settings in this row of fields specify the forwarding treatment for internal calls to this directory number if the directory number does not answer. The call forward destination and Calling Search Space field get used to redirect the call to the forward destination. Specify the following values:</p> <ul style="list-style-type: none"> <li>• <b>Voice Mail</b>—Check this check box to use settings in the Voice Mail Profile Configuration window.</li> </ul> <p><b>Note</b> When this check box is checked, the calling search space of the voice mail pilot gets used. Cisco Unified Communications Manager ignores the settings in the Destination box and Calling Search Space.</p> <p><b>Note</b> When this check box is checked for internal calls, the system automatically checks the Voice Mail check box for external calls. If you do not want external calls to forward to the voice-messaging system, you must uncheck the Voice Mail check box for external calls.</p> <ul style="list-style-type: none"> <li>• <b>Destination</b>—This setting indicates the directory number to which an internal call is forwarded when the call is not answered. Use any dialable phone number, including an outside destination.</li> </ul> <p><b>Note</b> When you enter a destination value for internal calls, the system automatically copies this value to the Destination field for external calls. If you want external calls to forward to a different destination, you must enter a different value in the Destination field for external calls.</p> <ul style="list-style-type: none"> <li>• <b>Calling Search Space</b>—The Forward No Answer internal Calling Search Space is used to forward the call to the Forward No Answer internal destination. It applies to all devices that are using this directory number.</li> </ul> <p><b>Note</b> If the system is using partitions and calling search spaces, Cisco recommends that you configure the forward calling search spaces. When a call is forwarded or redirected to the call forward destination, the configured call forward calling search</p>

Field	Description
	<p>space gets used to forward the call. If the forward calling search space is None, the forward operation may fail if the system is using partitions and calling search spaces. For example, if you configure the Forward No Answer destination, you should also configure the Forward No Answer Calling Search Space. If you do not configure the Forward No Answer Calling Search Space, and the Forward No Answer destination is in a partition, the forward operation may fail.</p> <p><b>Note</b> When you choose a Calling Search Space for internal calls, the system automatically copies this setting to the Calling Search Space setting for external calls. If you want external calls to forward to a different calling search space, you must choose a different setting in the Calling Search Space drop-down list box for external calls.</p>



Field	Description
Forward No Answer External	

Field	Description
	<p>The settings in this row of fields specify the forwarding treatment for external calls to this directory number if the directory number does not answer. The call forward destination and Calling Search Space field get used to redirect the call to the forward destination. Specify the following values:</p> <ul style="list-style-type: none"> <li>• <b>Voice Mail</b>—Check this check box to use settings in the Voice Mail Profile Configuration window.</li> </ul> <p><b>Note</b> When this check box is checked, the calling search space of the voice mail pilot gets used. Cisco Unified Communications Manager ignores the settings in the Destination box and Calling Search Space.</p> <p><b>Note</b> When this check box is checked for internal calls, the system automatically checks the Voice Mail check box for external calls. If you do not want external calls to forward to the voice-messaging system, you must uncheck the Voice Mail check box for external calls.</p> <ul style="list-style-type: none"> <li>• <b>Destination</b>—This setting indicates the directory number to which an external call is forwarded when the call is not answered. Use any dialable phone number, including an outside destination.</li> </ul> <p><b>Note</b> When you enter a destination value for internal calls, the system automatically copies this value to the Destination field for external calls. If you want external calls to forward to a different destination, you must enter a different value in the Destination field for external calls.</p> <ul style="list-style-type: none"> <li>• <b>Calling Search Space</b>—The Forward No Answer external Calling Search Space is used to forward the call to the Forward No Answer external destination. It applies to all devices that are using this directory number.</li> </ul> <p><b>Note</b> If the system is using partitions and calling search spaces, Cisco recommends that you configure the forward calling search spaces. When a call is forwarded or redirected to the call forward destination, the configured call forward calling search</p>

Field	Description
	<p>space gets used to forward the call. If the forward calling search space is None, the forward operation may fail if the system is using partitions and calling search spaces. For example, if you configure the Forward No Answer destination, you should also configure the Forward No Answer Calling Search Space. If you do not configure the Forward No Answer Calling Search Space, and the Forward No Answer destination is in a partition, the forward operation may fail.</p> <p><b>Note</b> When you choose a Calling Search Space for internal calls, the system automatically copies this setting to the Calling Search Space setting for external calls. If you want external calls to forward to a different calling search space, you must choose a different setting in the Calling Search Space drop-down list box for external calls.</p>

Field	Description
Forward No Coverage Internal	

Field	Description
	<p>The call forward destination and Calling Search Space field get used to redirect the call to the forward destination. Specify the following values:</p> <ul style="list-style-type: none"> <li>• <b>Voice Mail</b>—Check this check box to use settings in the Voice Mail Profile Configuration window.</li> </ul> <p><b>Note</b> When this check box is checked, Cisco Unified Communications Manager ignores the settings in the Destination box and Calling Search Space. When this check box is checked for internal calls, the system automatically checks the Voice Mail check box for external calls. If you do not want external calls to forward to the voice-messaging system, you must uncheck the Voice Mail check box for external calls.</p> <ul style="list-style-type: none"> <li>• <b>Destination</b>—This setting specifies the directory number to which an internal nonconnected call is forwarded when an application that controls that directory number fails. Use any dialable phone number, including an outside destination.</li> </ul> <p><b>Note</b> When you enter a destination value for internal calls, the system automatically copies this value to the Destination field for external calls. If you want external calls to forward to a different destination, you must enter a different value in the Destination field for external calls.</p> <ul style="list-style-type: none"> <li>• <b>Calling Search Space</b>—The Forward No Coverage internal Calling Search Space is used to forward the call to the Forward No Coverage internal destination. This setting applies to all devices that are using this directory number.</li> </ul> <p><b>Note</b> If the system is using partitions and calling search spaces, Cisco recommends that you configure the forward calling search spaces. When a call is forwarded or redirected to the call forward destination, the configured call forward calling search space gets used to forward the call. If the forward calling search space is None, the forward operation may fail if the system is using partitions and calling search spaces. For example, if you configure the Forward</p>

Field	Description
	<p>No Coverage destination, you should also configure the Forward No Coverage Calling Search Space. If you do not configure the Forward No Coverage Calling Search Space, and the Forward No Coverage destination is in a partition, the forward operation may fail.</p> <p><b>Note</b> When you choose a Calling Search Space for internal calls, the system automatically copies this setting to the Calling Search Space setting for external calls. If you want external calls to forward to a different calling search space, choose a different setting in the Calling Search Space for external calls.</p>

Field	Description
Forward No Coverage External	

Field	Description
	<p>The call forward destination and Calling Search Space field get used to redirect the call to the forward destination. Specify the following values:</p> <ul style="list-style-type: none"> <li>• <b>Voice Mail</b>—Check this check box to use settings in the Voice Mail Profile Configuration window.</li> </ul> <p><b>Note</b> When this check box is checked, Cisco Unified Communications Manager ignores the settings in the Destination box and Calling Search Space. When this check box is checked for internal calls, the system automatically checks the Voice Mail check box for external calls. If you do not want external calls to forward to the voice-messaging system, you must uncheck the Voice Mail check box for external calls.</p> <ul style="list-style-type: none"> <li>• <b>Destination</b>—This setting specifies the directory number to which an internal nonconnected call is forwarded when an application that controls that directory number fails. Use any dialable phone number, including an outside destination.</li> </ul> <p><b>Note</b> When you enter a destination value for internal calls, the system automatically copies this value to the Destination field for external calls. If you want external calls to forward to a different destination, you must enter a different value in the Destination field for external calls.</p> <ul style="list-style-type: none"> <li>• <b>Calling Search Space</b>—The Forward No Coverage external Calling Search Space is used to forward the call to the Forward No Coverage external destination. This setting applies to all devices that are using this directory number.</li> </ul> <p><b>Note</b> If the system is using partitions and calling search spaces, Cisco recommends that you configure the forward calling search spaces. When a call is forwarded or redirected to the call forward destination, the configured call forward calling search space gets used to forward the call. If the forward calling search space is None, the forward operation may fail if the system is using partitions and calling search spaces. For example, if you configure the Forward</p>



Field	Description
	<p>No Coverage destination, you should also configure the Forward No Coverage Calling Search Space. If you do not configure the Forward No Coverage Calling Search Space, and the Forward No Coverage destination is in a partition, the forward operation may fail.</p> <p><b>Note</b> When you choose a Calling Search Space for internal calls, the system automatically copies this setting to the Calling Search Space setting for external calls. If you want external calls to forward to a different calling search space, choose a different setting in the Calling Search Space for external calls.</p>
Forward on CTI Failure	<p>This field applies only to CTI route points and CTI ports. The settings in this row specify the forwarding treatment for external calls to this CTI route point or CTI port if the CTI route point or CTI port fails. Specify the following values:</p> <ul style="list-style-type: none"> <li>• Voice Mail—Check this check box to use settings in the Voice Mail Profile Configuration window.</li> </ul> <p><b>Note</b> When this check box is checked, Cisco Unified Communications Manager ignores the settings in the Destination box and Calling Search Space.</p> <ul style="list-style-type: none"> <li>• Destination—This setting specifies the directory number to which an internal nonconnected call is forwarded when an application that controls that directory number fails. Use any dialable phone number, including an outside destination.</li> <li>• Calling Search Space—This setting applies to all devices that are using this directory number.</li> </ul>
Forward Unregistered Internal	<p>This field applies to unregistered internal DN calls. The calls are rerouted to a specified Destination Number or Voice Mail.</p> <p><b>Note</b> You must also specify the maximum number of forwards in the Service Parameters Configuration window for a Directory Number.</p>

Field	Description
Forward Unregistered External	<p>This field applies to unregistered external DN calls. The calls are rerouted to a specified Destination Number or Voice Mail.</p> <p><b>Note</b> You must also specify the maximum number of forwards in the Service Parameters Configuration window for a Directory Number.</p>
No Answer Ring Duration (seconds)	<p>Used in conjunction with Call Forward No Answer Destination, this field sets the timer for how long the phone will ring before it gets forwarded. Leave this setting blank to use the value that is set in the Cisco CallManager service parameter, Forward No Answer Timer.</p> <p><b>Caution</b> By default, Cisco Unified Communications Manager makes the time for the T301 timer longer than the No Answer Ring Duration time; if the set time for the T301 timer expires before the set time for the No Answer Ring Duration expires, the call ends, and no call forwarding can occur. If you choose to do so, you can configure the time for the No Answer Ring Duration to be greater than the time for the T301 timer. For information on the T301 timer, choose <b>System &gt; Service Parameters</b>; choose the server, the Cisco CallManager service, and then the parameter in the window that displays.</p>
Call Pickup Group	Choose the number that can be dialed to answer calls to this directory number (in the specified partition).
Park Monitoring	

Field	Description
Park Monitoring Forward No Retrieve Destination External	<p>When the parkee is an external party, the call will be forwarded to the specified destination in this field. If this field value is empty, the parkee will be redirected to the parker's line.</p> <p>Specify the following values:</p> <ul style="list-style-type: none"><li>• Voice Mail—Check this check box to use settings in the Voice Mail Profile Configuration window.</li></ul> <p><b>Note</b> When this check box is checked, Cisco Unified Communications Manager ignores the settings in the Destination box and Calling Search Space.</p> <ul style="list-style-type: none"><li>• Destination—This setting specifies the directory number to which a parked call (from an external party) is forwarded when the service parameter Park Monitoring Forward No Retrieve Timer expires. Use any dialable phone number, including an outside destination.</li><li>• Calling Search Space—A calling search space comprises an ordered list of route partitions that are typically assigned to devices. Calling search spaces determine the partitions that calling devices search when they are attempting to complete a call.</li></ul>

Field	Description
Park Monitoring Forward No Retrieve Destination Internal	<p>When the parkee is an internal party, the call will be forwarded to the specified destination in this field. If this field value is empty, the parkee will be redirected to the parker's line.</p> <p>Specify the following values:</p> <ul style="list-style-type: none"> <li>• Voice Mail—Check this check box to use settings in the Voice Mail Profile Configuration window.</li> </ul> <p><b>Note</b> When this check box is checked, Cisco Unified Communications Manager ignores the settings in the Destination box and Calling Search Space.</p> <ul style="list-style-type: none"> <li>• Destination—This setting specifies the directory number to which a parked call (from an internal party) is forwarded when the service parameter Park Monitoring Forward No Retrieve Timer expires. Use any dialable phone number, including an outside destination.</li> <li>• Calling Search Space—A calling search space comprises an ordered list of route partitions that are typically assigned to devices. Calling search spaces determine the partitions that calling devices search when they are attempting to complete a call.</li> </ul>
Park Monitoring Reversion Timer	<p>This parameter determines the number of seconds that Cisco Unified Communications Manager waits before prompting the user to retrieve a call that the user parked. This timer starts when the user presses the Park softkey on the phone, and a reminder is issued when the timer expires.</p> <p>The default is 60 seconds.</p> <p><b>Note</b> If you configure a non-zero value, this value overrides the value of this parameter set in the Service Parameters window. However, if you configure a value of 0 here, then the value in the Service Parameters window will be used.</p>
MLPP Alternate Party Settings	

Field	Description
Target (Destination)	<p>Enter the number to which MLPP precedence calls should be diverted if this directory number receives a precedence call and neither this number nor its call forward destination answers the precedence call.</p> <p>Values can include numeric characters, octothorpe (#), and asterisk (*).</p>
MLPP Calling Search Space	<p>From the drop-down list box, choose the calling search space to associate with the MLPP alternate party target (destination) number.</p>
MLPP No Answer Ring Duration (seconds)	<p>Enter the number of seconds (between 4 and 60) after which an MLPP precedence call will be directed to this directory number alternate party if this directory number and its call-forwarding destination have not answered the precedence call.</p> <p>Leave this setting blank to use the value that is set in the Cisco Unified Communications Manager enterprise parameter, Precedence Alternate Party Timeout.</p>
Confidential Access Level	<p>Select the appropriate CAL value from the drop-down list box.</p>
Confidential Access Mode	<p>From the drop-down list box, select one of the following options to set the CAL mode:</p> <ul style="list-style-type: none"> <li>• Fixed—CAL value has higher precedence over call completion.</li> <li>• Variable—Call completion has higher precedence over CAL level.</li> </ul>
Call Control Agent Profile	<p>Select the Call Control Agent Profile to associate to the directory number user. Configure a Call Control Agent Profile from the <b>Advanced Features &gt; Call Control Agent Profile</b> menu.</p>
Line Settings for All Devices	
Hold Reversion Ring Duration (seconds)	<p>Enter a number from 0 to 1200 (inclusive) to specify the wait time in seconds before issuing a reverted call alert to the holding party phone.</p> <p>If you enter a value of 0, Cisco Unified Communications Manager does not invoke the reverted call feature for a held call.</p> <p>At installation, this field remains blank. If you leave this setting blank, the Hold Reversion Duration timer setting for the cluster applies.</p>

Field	Description
Hold Reversion Notification Interval (seconds)	<p>Enter a number from 0 to 1200 (inclusive) to specify the interval time in seconds for sending periodic reminder alerts to the holding party phone.</p> <p>If you enter a value of 0, Cisco Unified Communications Manager does not send reminder alerts.</p> <p>At installation, this field remains blank. If you leave this setting blank, the Hold Reversion Notification Interval timer setting for the cluster applies.</p> <p><b>Note</b> SCCP phones support a minimum Hold Reversion Notification Interval (HRNI) of 5 seconds, whereas SIP phones support a minimum of 10 seconds. SCCP phones set for the minimum HRNI of 5 seconds may experience a Hold Reversion Notification ring delay of 10 seconds when handling calls involving SIP phones.</p>
Party Entrance Tone	<p>From the Party Entrance Tone drop-down list box, choose one of the following options:</p> <ul style="list-style-type: none"> <li>• <b>Default</b>—Use the value that you configured in the Party Entrance Tone service parameter.</li> <li>• <b>On</b>—A tone plays on the phone when a basic call changes to a multi-party call; that is, a barge call, cBarge call, ad hoc conference, meet-me conference, or a joined call. In addition, a different tone plays when a party leaves the multi-party call. If the controlling device, that is, the originator of the multi-party call has a built-in bridge, the tone gets played to all parties if you choose On for the controlling device. When the controlling device leaves the call, Cisco Unified Communications Manager identifies whether another device on the call can play the tone; if another device on the call can play the tone, Cisco Unified Communications Manager plays the tone. If the controlling device cannot play the tone, Cisco Unified Communications Manager does not play the tone even if you enable the party entrance tone feature.</li> <li>• <b>Off</b>—A tone does not play on the phone when a basic call changes to a multi-party call.</li> </ul>
Line [number] on Device [device name]	
<b>Note</b> These fields display only after you associate this directory number with a device.	

Field	Description
Display (Internal Caller ID)	<p>Leave this field blank to have the system display the extension.</p> <p>Use a maximum of 30 characters. Typically, use the user name or the directory number (if using the directory number, the person receiving the call may not see the proper identity of the caller).</p> <p>Setting applies only to the current device unless you check the check box at right (Update Shared Device Settings) and click the Propagate Selected button. (The check box at right displays only if other devices share this directory number.)</p>
ASCII Display (Internal Caller ID)	<p>This field provides the same information as the Display (Internal Caller ID) field, but you must limit input to ASCII characters. Devices that do not support Unicode (internationalized) characters display the content of the ASCII Display (Internal Caller ID) field.</p> <p>Setting applies only to the current device unless you check the check box at right (Update Shared Device Settings) and click the Propagate Selected button. (The check box at right displays only if other devices share this directory number.)</p>
Line Text Label	<p>Use this field only if you do not want the directory number to show on the line appearance. Enter text that identifies this directory number for a line/phone combination.</p> <p>Suggested entries include boss name, department name, or other appropriate information to identify multiple directory numbers to secretary/assistant who monitors multiple directory numbers.</p> <p>Setting applies only to the current device unless you check the check box at right (Update Shared Device Settings) and click the Propagate Selected button. (The check box at right displays only if other devices share this directory number.)</p>

Field	Description
External Phone Number Mask	<p>Indicate phone number (or mask) that is used to send Caller ID information when a call is placed from this line.</p> <p>You can enter a maximum of 24 number, the international escape character +, and “X” characters. The Xs represent the directory number and must appear at the end of the pattern. For example, if you specify a mask of 972813XXXX, an external call from extension 1234 displays a caller ID number of 9728131234.</p> <p>Setting applies only to the current device unless you check the check box at right (Update Shared Device Settings) and click the Propagate Selected button. (The check box at right displays only if other devices share this directory number.)</p>
Visual Message Waiting Indicator Policy	<p>Use this field to configure the handset lamp illumination policy. Choose one of the following options:</p> <ul style="list-style-type: none"> <li>• Use System Policy (The directory number refers to the service parameter “Message Waiting Lamp Policy” setting.)</li> <li>• Light and Prompt</li> <li>• Prompt Only</li> <li>• Light Only</li> <li>• None</li> </ul> <p>Setting applies only to the current device unless you check the check box at right (Update Shared Device Settings) and click the Propagate Selected button. (The check box at right displays only if other devices share this directory number.)</p>
Audible Message Waiting Indicator Policy	<p>Use this field to configure an audible message waiting indicator policy. Choose one of the following options:</p> <ul style="list-style-type: none"> <li>• Off</li> <li>• On—When you select this option, you will receive a stutter dial tone when you take the handset off hook.</li> <li>• Default—When you select this option, the phone uses the default that was set at the system level.</li> </ul>



Field	Description
Ring Setting (Phone Idle)	<p>Use this field to configure the ring setting for the line appearance when an incoming call is received and no other active calls exist on that device. Choose one of the following options:</p> <ul style="list-style-type: none"><li>• Use system default</li><li>• Disable</li><li>• Flash only</li><li>• Ring once</li><li>• Ring</li></ul> <p>Setting applies only to the current device unless you check the check box at right (Update Shared Device Settings) and click the Propagate Selected button. (The check box at right displays only if other devices share this directory number.)</p> <p><b>Note</b> Turning on MLPP Indication (at the enterprise parameter, device pool, or device level) disables normal Ring Setting behavior for the lines on a device, unless MLPP Indication is turned off (overridden) for the device.</p> <p><b>Note</b> The “Disable ” or “Flash only” setting options apply only for the handset. The led light on the phone button line will still flash.</p>

Field	Description
Ring Setting (Phone Active)	<p>From the drop-down list box, choose the ring setting that is used when this phone has another active call on a different line. Choose one of the following options:</p> <ul style="list-style-type: none"> <li>• Use system default</li> <li>• Disable</li> <li>• Flash only</li> <li>• Ring once</li> <li>• Ring</li> <li>• Beep only</li> </ul> <p>Setting applies only to the current device unless you check the check box at right (Update Shared Device Settings) and click the Propagate Selected button. (The check box at right displays only if other devices share this directory number.)</p> <p><b>Note</b> Turning on MLPP Indication (at the enterprise parameter, device pool, or device level) disables normal Ring Setting behavior for the lines on a device, unless MLPP Indication is turned off (overridden) for the device.</p> <p><b>Note</b> The “Disable ” or “Flash only” setting options apply only for the handset. The led light on the phone button line will still flash.</p>
Call Pickup Group Audio Alert Setting (Phone Idle)	<p>This field determines the type of notification an incoming call sends to members of a call pickup group. If the called phone does not answer, the phones in the call pickup group that are idle will either hear a short ring (ring once) or hear nothing (disabled).</p> <ul style="list-style-type: none"> <li>• Use System Default—The value of this field gets determined by the setting of the Cisco CallManager service parameter Call Pickup Group Audio Alert Setting of Idle Station.</li> <li>• Disable—No alert is sent to members of the call pickup group.</li> <li>• Ring Once—A short ring is sent to members of the call pickup group.</li> </ul>

Field	Description
Call Pickup Group Audio Alert Setting (Phone Active)	<p>This field determines the type of notification an incoming call sends to members of a call pickup group. If the called phone does not answer, the phones in the call pickup group that are busy will either hear a beep (beep beep) or hear nothing (disabled).</p> <ul style="list-style-type: none"><li>• Use System Default—The value of this field gets determined by the setting of the Cisco CallManager service parameter Call Pickup Group Audio Alert Setting of Busy Station.</li><li>• Disable—No alert is sent to member of the call pickup group.</li><li>• Beep Only—A beep beep is sent to members of the call pickup group.</li></ul>

Field	Description
Recording Option	<p>This field determines the recording option on the line appearance of an agent. The default recording option is Call Recording Disabled.</p> <p>Choose one of the following options:</p> <ul style="list-style-type: none"> <li>• Call Recording Disabled—Calls made on this line appearance cannot be recorded.</li> <li>• Automatic Call Recording Enabled—Calls made on this line appearance are recorded automatically.</li> <li>• Selective Call Recording Enabled—Calls made on this line appearance can be recorded using a softkey or programmable line key that is assigned to the device, a CTI-enabled application, or both interchangeably.</li> </ul> <p>Selective recording supports two modes:</p> <ul style="list-style-type: none"> <li>• Silent recording—Call recording status is not reflected on the Cisco IP device display. Silent recording is typically used in a call center environment to allow a supervisor to record an agent call. A CTI-enabled application running on the supervisor desktop is generally used to start and stop the recording for an agent-customer call.</li> <li>• User recording—Call recording status is reflected on the Cisco IP device display. A recording can be started or stopped using a softkey, programmable line key, or CTI-enabled application running on the user desktop. To enable user recording, add the Record softkey or programmable line key to the device template. Do not add the Record key if only silent recording is desired.</li> </ul> <p>When the recording option is set to either Automatic Call Recording Enabled or Selective Call Recording Enabled, the line appearance can be associated with a recording profile.</p> <p>When automatic recording is enabled, start- and stop-recording requests using a softkey, programmable line key, or CTI-enabled application are rejected.</p>

Field	Description
Recording Profile	<p>This field determines the recording profile on the line appearance of an agent. Choose an existing recording profile from the drop-down list box. To create a recording profile, use the <b>Device &gt; Device Settings &gt; Recording Profile</b> menu option.</p> <p>The default value specifies None.</p>
Recording Media Source	<p>This field determines the recording media source option on the line appearance.</p> <p>Choose one of the following options:</p> <ul style="list-style-type: none"> <li>• Gateway Preferred—Voice gateway is selected as the recording media source when the call is routed through a recording enabled gateway.</li> <li>• Phone Preferred—Phone is selected as the recording media source</li> </ul> <p><b>Note</b> For non-BIB devices, the default option is Gateway Preferred.</p>
Monitoring Calling Search Space	<p>The monitoring calling search space of the supervisor line appearance must include the agent line or device partition to allow monitoring the agent.</p> <p>Set the monitoring calling search space on the supervisor line appearance window. Choose an existing calling search space from the drop-down list box.</p> <p>The default value specifies None.</p>
Log Missed Calls	<p>If the check box displays as checked, which is the default for this setting, Cisco Unified Communications Manager logs missed calls in the call history for the shared line appearance on the phone. If you uncheck the check box, missed calls do not get logged to the shared line appearance.</p>
Multiple Call/Call Waiting Settings on Device [device name]	
<b>Note</b> These fields display only after you associate this directory number with a device.	

Field	Description
Maximum Number of Calls	<p>You can configure up to 200 calls for a line on a device, with the limiting factor being the total number of calls that are configured on the device. As you configure the number of calls for one line, the calls that are available for another line decrease.</p> <p>The default specifies 4. If the phone does not allow multiple calls for each line, the default specifies 2.</p> <p>For CTI route points, you can configure up to 10,000 calls for each port. The default specifies 5000 calls. Use this field in conjunction with the Busy Trigger field.</p> <p><b>Note</b> Although the default specifies 5000 calls for maximum number of active calls that can be configured on a CTI route point, Cisco recommends that you set the maximum number of calls to no more than 200 per route point. This will prevent system performance degradation. If the CTI application needs more than 200 calls, Cisco recommends that you configure multiple CTI route points.</p> <p><b>Tip</b> If you use the external call control feature, and the policies on the policy server dictate that a chaperone must monitor and record calls, make sure that you set the Maximum Number of Calls setting to 2 and set the Busy Trigger setting to 1.</p>
Busy Trigger	<p>This setting, which works in conjunction with Maximum Number of Calls and Call Forward Busy, determines the maximum number of calls to be presented at the line. If maximum number of calls is set for 50 and the busy trigger is set to 40, incoming call 41 gets rejected with a busy cause (and will get forwarded if Call Forward Busy is set). If this line is shared, all the lines must be busy before incoming calls get rejected.</p> <p>Use this field in conjunction with Maximum Number of Calls for CTI route points. The default specifies 4500 calls.</p>
Forwarded Call Information Display on Device [device name]	
<b>Note</b> These fields display only after you associate this directory number with a device.	
Caller Name	Checking this check box will cause the caller name to display upon call forward.

Field	Description
Caller Number	Checking this check box will cause the caller number to display upon call forward.
Redirected Number	Checking this check box will cause the number that was redirected to display upon call forward.
Dialed Number	Checking this check box will cause the original dialed number to display upon call forward.
<b>Users Associated with Line</b> <b>Note</b> This information displays only after you associate this directory number with a device.	
(user name)	<p>This pane displays the end users that are associated with this line.</p> <p>To associate end users with this line, click the Associate End Users button, which causes the Find and List Users popup window to display. In the popup window, you can use the Find function to find end users to associate with this line. After you have found the end users to associate with this line, click the Add Selected button, and the selected end users will be added to the Users Associated with Line pane for this line.</p> <p>For each associated end user, the following information displays:</p> <ul style="list-style-type: none"> <li>• Full Name—This column displays the last name and first name entries for the associated end user.</li> <li>• User ID—This column displays the user ID of the associated end user.</li> <li>• Permission—Click the i button to display the user privilege information for this end user.</li> </ul> <p>After at least one end user has been associated with this line, the following additional buttons display:</p> <ul style="list-style-type: none"> <li>• Select All—Click this button to select all end users that are associated with this line.</li> <li>• Clear All—Click this button to deselect all end users that are associated with this line.</li> <li>• Delete Selected—After selecting any end users that you wish to dissociate from this line, click this button. Doing so dissociates the end users from this line, but does not delete the end user records.</li> </ul>

## Display Calling Search Space

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 partitions exist than the Max List Box Items enterprise parameter specifies, the Find button displays next to the Calling Search Space drop-down list box on the Cisco Unified Communications Manager Administration windows where the button appears. Click the Find button to search for the calling search space that you want.



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**Note** To set the maximum list box items, choose **System > Enterprise Parameters** and choose CCMAAdmin Parameters.

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## Synchronize Directory Number Settings with Devices

To synchronize devices with a directory number that has undergone configuration changes, perform the following procedure, which applies any outstanding configuration settings in the least-intrusive manner possible. (For example, a reset/restart may not be required on some affected devices.)

### Procedure

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**Step 1** Choose **Call Routing > Directory Number Configuration**.

The Find and List Directory Numbers window displays.

**Step 2** Choose the search criteria to use.

**Step 3** Click Find.

The window displays a list of directory numbers that match the search criteria.

**Step 4** Click the directory number to which you want to synchronize applicable devices. The Directory Number Configuration window displays.

**Step 5** Make any additional configuration changes.

**Step 6** Click Save.

**Step 7** Click Apply Config.

The Apply Configuration Information dialog displays.

**Note** If devices require a restart, the system may drop active calls on gateways.

**Step 8** Click OK.

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# Set Up Private Line Automatic Ringdown (PLAR)

You can configure Private Line Automatic Ringdown (PLAR), so when the user goes off hook (or the NewCall softkey or line key gets pressed), the phone immediately dials a preconfigured number. The phone user cannot dial any other number from the phone line that gets configured for PLAR.

PLAR works with features such as barge, cBarge, or single button barge. If you use PLAR with a feature, you must configure the feature as described in the feature documentation, and you must configure the PLAR destination, which is a directory number that is used specifically for PLAR.

See the example of how to configure PLAR, which describes how to enable PLAR functionality for phones that support barge and that are running SCCP and SIP.

## Set Up PLAR Example

This example of how to configure PLAR describes how to enable PLAR functionality for phones that support barge and that are running SCCP and SIP. A and A' represent shared-line devices that you configured for barge, and B1 represents the directory number for the PLAR destination. Follow this example to enable PLAR functionality from A/A'.



**Tip** **Set Up PLAR Example** through **Set Up PLAR Example** apply if you want to configure PLAR for phones that are running SCCP. For phones that are running SIP, you must perform **Set Up PLAR Example** through **Set Up PLAR Example**. Before you attempt to configure PLAR, verify that your phone model supports PLAR. To determine whether your phone supports PLAR, see the *Cisco Unified IP Phone Administration Guide* that supports your phone model and this release of Cisco Unified Communications Manager.

### Procedure

- Step 1** Create a partition, for example, P1, and a calling search space, for example CSS1, so CSS1 contains P1. (In Cisco Unified Communications Manager Administration, choose **Call Routing** > **Class of Control** > **Partition or Calling Search Space**.)
- Step 2** Create a null (blank) translation pattern, for example, TP1, which contains calling search space CSS1 and partition P1. In this null (blank) pattern, make sure that you enter the directory number for the B1 PLAR destination in the Called Party Transformation Mask field. (In Cisco Unified Communications Manager Administration, choose **Call Routing** > **Translation Pattern**.)
- Step 3** Assign the calling search space, CS1, to either A or A'. (In Cisco Unified Communications Manager Administration, choose **Device** > **Phone**.)
- Step 4** Assign the P1 partition to the directory number for B1, which is the PLAR destination. (In Cisco Unified Communications Manager Administration, choose **Call Routing** > **Directory Number**.)
- Step 5** For phones that are running SIP, create a SIP dial rule. (In Cisco Unified Communications Manager Administration, choose **Call Routing** > **Dial Rules** > **SIP Dial Rules**. Choose 7940\_7960\_OTHER. Enter a name for the pattern; for example, PLAR1. Click Save; then, click Add Plar. Click Save.)

- Step 6** For phones that are running SIP, assign the SIP dial rule configuration that you created for PLAR to the phones, which, in this example, are A and A'. (In Cisco Unified Communications Manager Administration, choose **Device > Phone**. Choose the SIP dial rule configuration from the SIP Dial Rules drop-down list box.)
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## Remove Directory Number From Phone

Perform the following procedure to remove a directory number (DN) from a specific phone.

### Before you begin

If you try to remove a directory number that is in use, Cisco Unified Communications Manager displays a message. To find out which line groups are using the directory number, click the Dependency Records link from the Directory Number Configuration window. If the dependency records are not enabled for the system, the dependency records summary window displays a message.

When you remove a directory number from a phone, the number still exists within Cisco Unified Communications Manager. To see a list of directory numbers that are not associated with phones, use the Route Plan Report menu option.

### Procedure

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- Step 1** Choose **Device > Phone**.  
The Find and List Phones window displays.
- Step 2** To locate a specific phone, enter the search criteria and click Find.  
A list of phones that match the search criteria displays.
- Step 3** Choose the device name that contains the directory number that you want to remove.  
The Phone Configuration window displays.
- Step 4** In the Association Information area on the left, choose the line that you want to remove.  
The Directory Number Configuration window displays.
- Step 5** In the Associated Devices pane, choose the device name of the phone from which you want to remove this directory number.
- Step 6** Click the down arrow below the Associated Devices pane.  
The phone name moves to the Dissociate Devices pane.
- Step 7** Click the Save button at the bottom of the Directory Number Configuration window.  
The Phone Configuration window displays with the directory number removed. The change gets automatically applied to the phone; however, you can click Reset Phone.
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# Create Cisco Unity Connection Voice Mailbox

The “Create Cisco Unity Voice Mailbox” link on the Directory Number Configuration window allows administrators to create individual Cisco Unity Connection voice mailboxes from Cisco Unified Communications Manager Administration. If Cisco Unified Communications Manager is integrated with Cisco Unity Connection, this link allows you to create a Cisco Unity Connection voice mailbox.

To configure a voice mailbox and other Cisco Unity Connection settings in Cisco Unity Connection Administration, see the applicable User Moves, Adds, and Changes Guide for Cisco Unity Connection. Ensure that you have defined an appropriate template and selected a class of service (COS) for the users that you plan to add.



**Note** Before you can create a Cisco Unity Connection voice mailbox for the end user, you must first configure the end user with a phone device association and a primary extension, and the integration between Cisco Unified Communications Manager and Cisco Unity Connection must be complete. For more information, see the Cisco Unified Communications Manager SCCP Integration Guide for Cisco Unity Connection or the Cisco Unified Communications Manager SIP Trunk Integration Guide for Cisco Unity Connection.

## Before you begin

- You must configure Cisco Unified Communications Manager for voice-messaging service. See topics related to Cisco Unity and Cisco Unity Connection Configuration in the *Cisco Unified Communications Manager System Guide*.
- You must configure Cisco Unity Connection servers. See the applicable *Installation Guide for Cisco Unity Connection*.
- For Cisco Unity Connection integration, create an AXL connection via Cisco Unity Connection, as described in the “Managing the Phone System Integrations” chapter in the *System Administration Guide for Cisco Unity Connection*.
- Ensure the Cisco RIS Data Collector service is activated. See the *Cisco Unified Serviceability Administration Guide*.
- On the Directory Number configuration window, ensure the Voice Mail Profile setting is configured and contains a pilot number, or the Voice Mail Profile setting should be set to None. If the Voice Mail Profile is set to No Voice Mail, the “Create Cisco Unity User” link does not display.
- Ensure that you have defined an appropriate template and selected a class of service (COS) for the users you plan to add. For Cisco Unity Connection users, see the User Moves, Adds, and Changes Guide for Cisco Unity Connection.



**Note** The End User Configuration window also includes the “Create Cisco Unity Voice Mailbox” link.

## Procedure

- Step 1** Choose **Call Routing > Directory Number** and click Add New.
- Step 2** Enter the appropriate settings in [#unique\\_271 unique\\_271\\_Connect\\_42\\_table69](#), on page 3.

**Step 3** From the Related Links drop-down list box, in the upper, right corner of the window, choose the “Create Cisco Unity Voice Mailbox” link and click Go.

The Add Cisco Unity User dialog box displays.

**Step 4** From the Application Server drop-down list box, choose the Cisco Unity Connection server on which you want to create a Cisco Unity Connection mailbox and click Next.

**Step 5** From the Subscriber Template drop-down list box, choose the subscriber template that you want to use.

**Step 6** Click Save.

The Cisco Unity Connection mailbox gets created.

From Cisco Unity Connection Administration, you can now see the mailbox that you created. See the applicable User Moves, Adds, and Changes Guide for Cisco Unity Connection.

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