

Call Park and Directed Call

- Call Park Overview, on page 1
- Call Park Prerequisites, on page 2
- Call Park Configuration Task Flow, on page 2
- Call Park Interactions, on page 16
- Call Park Restrictions, on page 17
- Troubleshooting Call Park, on page 17
- Directed Call Park Overview, on page 18
- Directed Call Park Prerequisites, on page 18
- Directed Call Park Configuration Task Flow, on page 18
- Directed Call Park Interactions, on page 22
- Directed Call Park Restrictions, on page 24
- Troubleshooting Directed Call Park, on page 24

Call Park Overview

The Call Park feature allows you to place a call on hold so that can be retrieved from another phone in the Unified Communications Manager system (for example, a phone in another office or in a conference room). If you are on an active call, you can park the call to a call park extension by pressing the Park softkey. Another phone in your system can then dial the call park extension to retrieve the call.

You can define either a single directory number or a range of directory numbers for use as Call Park extension numbers. You can park only one call at each Call Park extension number.

The Call Park feature works within a Unified Communications Manager cluster, and each Unified Communications Manager node in a cluster must have Call Park extension numbers defined. You can define either a single directory number or a range of directory numbers for use as Call Park extension numbers. Ensure that the directory number or range of numbers is unique.

Users can dial the assigned route pattern (for example, a route pattern for an intercluster trunk could be 80XX) and the Call Park number (for example, 8022) to retrieve parked calls from another Unified Communications Manager cluster. You must ensure that calling search spaces and partitions are properly configured. Call Park works across clusters.

Valid Call Park extension numbers comprise integers and the wildcard character X. You can configure a maximum of XX in a Call Park extension number (for example, 80XX), which provides up to 100 Call Park extension numbers. When a call gets parked, Unified Communications Manager chooses the next Call Park extension number that is available and displays that number on the phone.

Park Monitoring

Park Monitoring is an optional Call Park feature where Cisco Unified Communications Manager monitors the status of a parked call until a timer expires. After the timer expires, the call is forwarded to a preassigned number, sent to voicemail, or returned to the call parker. You can apply park monitoring to phone lines and to hunt pilots.

Call Park Prerequisites

If you are using call park across clusters, you must have partitions and calling search spaces configured.

Table 1: Cisco Unified IP Phones that Support Park Softkey Template and Call Park Button Template

Phone Model	Supported in Softkey Template	Supported in Phone Button Template
Cisco Unified IP Phones 6900 series (except 6901 and 6911)	X	X
Cisco IP Phone 7800 Series	X	X
Cisco Unified IP Phones 7900 series (except 7921, 7925, 7936, 7937)	X	
Cisco IP Phone 8800 Series	X	X
Cisco Unified IP Phones 8900 series	X	X
Cisco Unified IP Phones 9900 series	X	X
Cisco Unified IP Phones 7900 series (except 7906, 7911, 7921, 7925, 7936, 7937)		X



Note

You can configure Call Park on any line (except line 1) or button by using the programmable line key feature.

Call Park Configuration Task Flow

Before you begin

• Review Call Park Prerequisites, on page 2

Procedure

	Command or Action	Purpose
Step 1	Configure Clusterwide Call Park, on page 3	(Optional). Configure Call Park for the entire cluster, or use the procedure in step 3 to configure Call Park on servers within the cluster
Step 2	Configure a Partition for Call Park, on page 4	Create a partition to add a Call Park Number
Step 3	Configure a Call Park Number, on page 5	Configure a Call Park Number to use Call Park across servers in a cluster.
Step 4	Configure a Softkey Template for Call Park, on page 7	Add the Park softkey to a softkey template.
Step 5	To Associate a Softkey Template with a Common Device Configuration, on page 8, complete the following subtasks: • Add a Softkey Template to a Common Device Configuration, on page 8 • Associate a Common Device Configuration with a Phone, on page 9	Optional. To make the softkey template available to phones, you must complete either this step or the following step. Follow this step if your system uses a Common Device Configuration to apply configuration options to phones. This is the most commonly used method for making a softkey template available to phones.
Step 6	Associate a Softkey with a Phone, on page 9	Optional. Use this procedure either as an alternative to associating the softkey template with the Common Device Configuration, or in conjunction with the Common Device Configuration. Use this procedure in conjunction with the Common Device Configuration if you need assign a softkey template that overrides the assignment in the Common Device Configuration or any other default softkey assignment.
Step 7	To Configure Call Park Button, on page 10, complete the following subtasks: • Configure a Phone Button Template for Call Park, on page 10 • Associate a Button Template with a Phone, on page 10	
Step 8	Configure Park Monitoring, on page 11	Complete this optional task flow to add Park Monitoring to your Call Park configuration.

Configure Clusterwide Call Park

Procedure

Step 1 Choose **System** > **Service Parameters**.

- **Step 2** Select the desired node as **Server** and the service as **Cisco CallManager** (active).
- Step 3 Click the Advanced.

The advanced service parameters are displayed in the window.

Step 4 In Clusterwide Parameter(Feature- General) section set the **Enable cluster-wide Call Park Number/Ranges** to **True**.

The default value is False. This parameter determines whether the Call Park feature is implemented clusterwide or restricted to a specific Unified CM node.

Step 5 Set the Call Park Display Timer for each server in a cluster that has the Cisco CallManager service and Call Park configured.

The default is 10 seconds. This parameter determines how long a Call Park number displays on the phone that parked the call.

Set the Call Park Reversion Timer for each server in a cluster that has the Unified Communications Manager service and Call Park configured.

The default is 60 seconds. This parameter determines the time that a call remains parked. When this timer expires, the parked call returns to the device that parked the call. If a hunt group member parks a call that comes through a hunt pilot, the call goes back to the hunt pilot when the Call Park Reversion Timer expires.

Note If you enter a Call Park Reversion Timer value that is less than the Call Park Display Timer, Call Park numbers may not display on the phone.

- Step 7 Click Save.
- **Step 8** Restart all Unified Communications Manager and CTI Manager services.

Configure a Partition for Call Park

Configure partitions to create a logical grouping of directory numbers (DNs) and route patterns with similar reachability characteristics. Partitions facilitate call routing by dividing the route plan into logical subsets that are based on organization, location, and call type. You can configure multiple partitions.

Before you begin

(Optional) Configure Clusterwide Call Park, on page 3

- **Step 1** From Cisco Unified CM Administration, choose **Call Routing > Class of Control > Partition**.
- **Step 2** Click **Add New** to create a new partition.
- Step 3 In the Partition Name, Description field, enter a name for the partition that is unique to the route plan.

 Partition names can contain alphanumeric characters, as well as spaces, hyphens (-), and underscore characters

 (_). See the online help for guidelines about partition names.
- **Step 4** Enter a comma (,) after the partition name and enter a description of the partition on the same line.

The description can contain up to 50 characters in any language, but it cannot include double quotes ("), percentage sign (%), ampersand (&), backslash (\), angle brackets (<>), or square brackets ([]).

If you do not enter a description, Cisco Unified Communications Manager automatically enters the partition name in this field.

- **Step 5** To create multiple partitions, use one line for each partition entry.
- Step 6 From the Time Schedule drop-down list, choose a time schedule to associate with this partition.

 The time schedule specifies when the partition is available to receive incoming calls. If you choose None, the partition remains active at all times.
- **Step 7** Select one of the following radio buttons to configure the **Time Zone**:
 - Originating Device—When you select this radio button, the system compares the time zone of the calling device to the **Time Schedule** to determine whether the partition is available is available to receive an incoming call.
 - **Specific Time Zone**—After you select this radio button, choose a time zone from the drop-down list. The system compares the chosen time zone to the **Time Schedule** to determine whether the partition is available is available to receive an incoming call.
- Step 8 Click Save.

Configure a Call Park Number

If you want to use Call Park across servers in a cluster, you must configure Call Park extension numbers on each server.

Ensure that each Call Park directory number, partition, and range is unique within the Unified Communications Manager. Each Unified Communications Manager to which devices are registered requires its own unique Call Park directory number and range. Cisco Unified Communications Manager Administration does not validate the Call Park numbers or range that you use to configure Call Park. To help identify invalid numbers or ranges and potential range overlaps, use the Unified Communications Manager Dialed Number Analyzer tool.

Before you begin

Configure a Partition for Call Park, on page 4

Procedure

- Step 1 Choose Call Routing > Call Park.
- **Step 2** Perform one of the following tasks:
 - To add a new Call Park number, click **Add New**.
 - To copy a Call Park number, find the Call Park number or range of numbers and then click the Copy icon.
 - To update a Call Park number, find the Call Park number or range of numbers.

The Call Park number configuration window displays.

- Step 3 Configure the fields in the Call Park configuration fields. See Call Park Configuration Fields, on page 6 for more information about the fields and their configuration options.
- **Step 4** To save the new or changed Call Park numbers in the database, click **Save.**

Call Park Configuration Fields

Field	Descript	ion
Call Park Number/Range	digits or one or tw single Ca 55XX to	the wildcard character X (the system allows vo Xs). For example, enter 5555 to define a all Park extension number of 5555 or enter define a range of Call Park extension from 5500 to 5599.
	Note	You can create a maximum of 100 Call Park numbers with one call park range definition. Make sure that the call park numbers are unique.
	Note	You cannot overlap call park numbers between Unified Communications Manager servers. Ensure that each Unified Communications Manager server has its own number range.
	Note	The call park range is selected from the list of servers where the call originates. For example, if phoneA (registered to nodeA) calls phone B (registered to nodeB) and the phoneB user presses Park, phoneB requires a call park range in the CSS that resides on nodeA. In a multinode environment where phones and gateways communicate with various nodes and where calls that originate from any server may need to be parked, the phones require a CSS that contains call park ranges from all servers.
Description	The desc	a brief description of this call park number. cription can include up to 50 characters in any e, but it cannot include double-quotes ("), ge sign (%), ampersand (&), or angle brackets

Field	Description
Partition	If you want to use a partition to restrict access to the call park numbers, choose the desired partition from the drop-down list. If you do not want to restrict access to the call park numbers, choose <none> for the partition.</none>
	Note Make sure that the combination of call park extension number and partition is unique within the Unified Communications Manager.
Unified Communications Manager	Using the drop-down list, choose the Cisco Unified Communications Manager to which these call park numbers apply.

Configure a Softkey Template for Call Park

Use this procedure to make the **Park** softkey available.

Park softkey has the following call states:

- On Hook
- Ring Out
- Connected Transfer

Procedure

- **Step 1** From Cisco Unified CM Administration, choose **Device > Device Settings > Softkey Template**.
- **Step 2** Perform the following steps to create a new softkey template; otherwise, proceed to the next step.
 - a) Click Add New.
 - b) Select a default template and click **Copy**.
 - c) Enter a new name for the template in the **Softkey Template Name** field.
 - d) Click Save.
- **Step 3** Perform the following steps to add softkeys to an existing template.
 - a) Click **Find** and enter the search criteria.
 - b) Select the required existing template.
- Step 4 Check the **Default Softkey Template** check box to designate this softkey template as the default softkey template.

Note If you designate a softkey template as the default softkey template, you cannot delete it unless you first remove the default designation.

Step 5 Choose Configure Softkey Layout from the Related Links drop-down list in the upper right corner and click Go.

- **Step 6** From the **Select a Call State to Configure** drop-down list, choose the call state for which you want the softkey to display.
- **Step 7** From the **Unselected Softkeys** list, choose the softkey to add and click the right arrow to move the softkey to the **Selected Softkeys** list. Use the up and down arrows to change the position of the new softkey.
- **Step 8** Repeat the previous step to display the softkey in additional call states.
- Step 9 Click Save.
- **Step 10** Perform one of the following tasks:
 - Click Apply Config if you modified a template that is already associated with devices to restart the
 devices
 - If you created a new softkey template, associate the template with the devices and then restart them. For more information, see *Add a Softkey Template to a Common Device Configuration* and *Associate a Softkey Template with a Phone* sections.

Associate a Softkey Template with a Common Device Configuration

Optional. There are two ways to associate a softkey template with a phone:

- Add the softkey template to the **Phone Configuration**.
- Add the softkey template to the **Common Device Configuration**.

The procedures in this section describe how to associate the softkey template with a **Common Device Configuration**. Follow these procedures if your system uses a **Common Device Configuration** to apply configuration options to phones. This is the most commonly used method for making a softkey template available to phones.

To use the alternative method, see the section Associate a Softkey Template with a Phone.

Procedure

- **Step 1** Add a Softkey Template to a Common Device Configuration, on page 8
- **Step 2** Associate a Common Device Configuration with a Phone, on page 9

Add a Softkey Template to a Common Device Configuration

- Step 1 From Cisco Unified CM Administration, choose **Device > Device Settings > Common Device Configuration**.
- **Step 2** Perform the following steps to create a new Common Device Configuration and associate the softkey template with it; otherwise, proceed to the next step.
 - a) Click **Add New**.
 - b) Enter a name for the Common Device Configuration in the **Name** field.
 - c) Click Save.

- **Step 3** Perform the following steps to add the softkey template to an existing Common Device Configuration.
 - a) Click **Find** and enter the search criteria.
 - b) Click an existing Common Device Configuration.
- **Step 4** In the **Softkey Template** drop-down list, choose the softkey template that contains the softkey that you want to make available.
- Step 5 Click Save.
- **Step 6** Perform one of the following tasks:
 - If you modified a Common Device Configuration that is already associated with devices, click **Apply Config** to restart the devices.
 - If you created a new Common Device Configuration, associate the configuration with devices and then restart them.

Associate a Common Device Configuration with a Phone

Procedure

- **Step 1** From Cisco Unified CM Administration, choose **Device** > **Phone**.
- **Step 2** Click **Find** and select the phone device to add the softkey template.
- **Step 3** From the **Common Device Configuration** drop-down list, choose the common device configuration that contains the new softkey template.
- Step 4 Click Save.
- **Step 5** Click **Reset** to update the phone settings.

Associate a Softkey with a Phone

Optional. Use this procedure as an alternative to associating the softkey template with the Common Device Configuration. This procedure also works in conjunction with the Common Device Configuration. You can use it when you need to assign a softkey template that overrides the assignment in the Common Device Configuration or any other default softkey assignment.

- **Step 1** From Cisco Unified CM Administration, choose **Device** > **Phone**.
- **Step 2** Click **Find** to select the phone to add the softkey template.
- **Step 3** From the **Softkey Template** drop-down list, choose the template that contains the new softkey.
- Step 4 Click Save.
- **Step 5** Press **Reset** to update the phone settings.

Configure Call Park Button

Configure a Phone Button Template for Call Park

Procedure

- Step 1 From Cisco Unified CM Administration, choose Device > Device Settings > Phone Button Template.
- **Step 2** Click **Find** to display list of supported phone templates.
- **Step 3** Perform the following steps if you want to create a new phone button template; otherwise, proceed to the next step.
 - a) Select a default template for the model of phone and click **Copy**.
 - b) In the **Phone Button Template Information** field, enter a new name for the template.
 - c) Click Save.
- **Step 4** Perform the following steps if you want to add phone buttons to an existing template.
 - a) Click **Find** and enter the search criteria.
 - b) Choose an existing template.
- **Step 5** From the **Line** drop-down list, choose feature that you want to add to the template.
- Step 6 Click Save.
- **Step 7** Perform one of the following tasks:
 - Click Apply Config if you modified a template that is already associated with devices to restart the
 devices.
 - If you created a new softkey template, associate the template with the devices and then restart them.

Associate a Button Template with a Phone

Before you begin

Configure a Phone Button Template for Call Park, on page 10

Procedure

- **Step 1** From Cisco Unified CM Administration, choose **Device** > **Phone**.
- **Step 2** Click **Find** to display the list of configured phones.
- **Step 3** Choose the phone to which you want to add the phone button template.
- **Step 4** In the **Phone Button Template** drop-down list, choose the phone button template that contains the new feature button.
- Step 5 Click Save.

A dialog box is displayed with a message to press **Reset** to update the phone settings.

Configure Park Monitoring

Complete these optional tasks to add Park Monitoring to your Call Park configuration.

Before you begin

Park Monitoring is supported on only a subset of phones that support Call Park. The following Cisco Unified IP Phones support Park Monitoring:

- Cisco IP Phone 8811
- Cisco IP Phone 8841
- Cisco IP Phone 8845
- Cisco IP Phone 8851
- Cisco IP Phone 8851NR
- Cisco IP Phone 8861
- Cisco IP Phone 8865
- Cisco IP Phone 8865NR
- Cisco Unified IP Phone 8961
- Cisco Unified IP Phone 9951
- Cisco Unified IP Phone 9971

Procedure

	Command or Action	Purpose
Step 1	Configure Park Monitoring System Timers, on page 11	Configure system-level timers for the Park Monitoring feature.
Step 2	Configure Park Monitoring for Hunt Pilots, on page 12	Optional. If you have hunt pilots deployed, assign a Park Monitoring destination to a hunt pilot.
Step 3	Configure Park Monitoring for a Directory Number, on page 13	Assign a Park Monitoring destination for an individual phone line.
Step 4	Configure Park Monitoring via Universal Line Template, on page 14	If you have an LDAP directory sync configured, you can use universal line templates to provision directory number settings for multiple users with park monitoring configured.

Configure Park Monitoring System Timers

Use this procedure to configure system-level timers for the Park Monitoring feature.

Procedure

- **Step 1** From Cisco Unified CM Administration, choose **System > Service Parameters**.
- **Step 2** From the **Server** drop-down list, select the publisher node.
- **Step 3** From the **Service** drop-down list, select **Cisco CallManager**.
- **Step 4** Configure values for the following service parameters:
 - Park Monitoring Reversion Timer—The number of seconds that Cisco Unified Communications Manager waits before prompting the user to retrieve a parked call. For individual phone lines, this setting can be overridden by the same setting in the **Directory Number Configuration** window. When the call park reversion timer expires, the call will be forwarded to the hunt pilot.
 - Park Monitoring Periodic Reversion Timer—The number of seconds between reversion attempts when a call has been parked. Cisco Unified Communications Manager prompts the user about the parked call by ringing, beeping, or flashing the parker's phone. When the park monitoring reversion timer expires, the call will be forwarded to the parked party and not the hunt pilot.
 - Park Monitoring Forward No Retrieve Timer—The number of seconds that park reminder notifications occur before the parked call is forwarded to the Park Monitoring Forward No Retrieve destination specified in the call parker's Directory Number configuration. When park monitoring forward no retrieve timer expires, the call will be forwarded to the hunt pilot.

Note For additional details on these fields, see the service parameter online help.

Step 5 Click Save.

What to do next

Use any of these optional tasks to assign how expired timers get handled for individual phones lines and hunt pilots:

- Configure Park Monitoring for Hunt Pilots, on page 12
- Configure Park Monitoring for a Directory Number, on page 13
- Configure Park Monitoring via Universal Line Template, on page 14

Configure Park Monitoring for Hunt Pilots

If your deployment uses hunt pilots, use this optional procedure to assign a Park Monitoring destination to a hunt pilot.



Note

For general information on setting up hunt pilots, see the "Configure Hunt Pilots" chapter of the System Configuration Guide for Cisco Unified Communications Manager.

Before you begin

Configure Park Monitoring System Timers, on page 11

Procedure

- Step 1 From Cisco Unified CM Administration, choose Call Routing > Route/Hunt > Hunt Pilot.
- **Step 2** Click **Find** and select the hunt pilot on which you want to configure a Park Monitoring destination.
- Step 3 In the Park Monitoring No Retrieve Destination field, assign a Destination directory number and Calling Search Space.
- **Step 4** Complete any remaining fields in the **Hunt Pilot Configuration** window. For more information on the fields and their configuration options, see Online Help.
- Step 5 Click Save.

Configure Park Monitoring for a Directory Number

Use this procedure to assign a Park Monitoring destination for an individual phone line. You can forward calls to another number, send to voicemail, or return to the call parker.



Note

The following tools are available to provision settings for multiple phone lines:

- Use a universal line template to provision park monitoring settings for multiple phone lines via an LDAP directory sync. For details, see Configure Park Monitoring via Universal Line Template, on page 14.
- Use the Bulk Administration Tool to import a CSV file with settings for a large number of phone lines. For more information, see the Bulk Administration Guide for Cisco Unified Communications Manager.

Before you begin

Configure Park Monitoring System Timers, on page 11

- Step 1 From Cisco Unified CM Administration, choose Call Routing > Directory Number.
- **Step 2** Click **Find** and select the directory number that you want to configure.
- **Step 3** Enter values for the following **Park Monitoring** fields:
 - Park Monitoring Forward No Retrieve Destination External—When the Park Monitoring Forward No Retrieve Timer expires, and the parkee is an external party, the call is forwarded either to voicemail or to a specified directory number. If this field s empty, the call is redirected to the call parker's line.
 - Park Monitoring Forward No Retrieve Destination Internal—When the Park Monitoring Forward No Retrieve Timer expires, and the parkee is an internal party, the call is forwarded either to voicemail or to a specified directory number. If this field s empty, the call is redirected to the call parker's line.
 - Park Monitor Reversion Timer—The number of seconds that Cisco Unified Communications Manager
 waits before prompting the user to retrieve a call parked on this phone line. If the value is 0 or empty,
 then Cisco Unified Communications Manager uses the value of the Park Monitor Reversion Timer
 service parameter.

- **Step 4** Complete any remaining fields in the **Directory Number Configuration** window. For more information on the fields and their configuration options, see Online Help.
- Step 5 Click Save.

Configure Park Monitoring via Universal Line Template

Use this procedure to assign park monitoring settings to a universal line template. If you have an LDAP directory sync configured, you can use the universal line template configuration to provision directory number settings with park monitoring configured for multiple users.

Before you begin

Configure Park Monitoring System Timers, on page 11

Procedure

- **Step 1** From Cisco Unified CM Administration, choose **User Management** > **User Phone/Add** > **Universal Line Template**.
- **Step 2** Perform one of the following steps:
 - Click Find and select an existing template.
 - Click **Add New** to create a new template.
- **Step 3** Expand the **Park Monitoring Settings** section and complete the fields. For field descriptions, see Park Monitoring Settings for Universal Line Templates, on page 14.
- Step 4 Click Save.

What to do next

To apply the universal line template to individual directory numbers, you must assign the template to a user profile, feature group template, and LDAP directory sync. When the sync occurs, the template settings get applied to the phone lines that are a part of the sync. For LDAP setup, see the "Configure End Users" chapters in the System Configuration Guide for Cisco Unified Communications Manager.

Park Monitoring Settings for Universal Line Templates

The following table contains the Park Monitoring fields in the **Universal Line Template Configuration** window of Cisco Unified Communications Manager.

Table 2: Park Monitoring Settings for Universal Line Templates

Field	Description
Forward Destination for External Calls When Not Retrieved	When the person whose call is parked is an external party and the Park Monitoring Forward No Retrieve Timer expires, the system sends the call to one of these destinations:
	• Voicemail—Uses the configuration in Voice Mail Profile to determine where to send the call.
	• Revert to Originator—Returns the call to the call parker.
	• To forward calls to another number, input the other number in the text box.
	If no option is selected, the call returns to the call parker.
Calling Search Space for Forwarding External Calls When Not Retrieved	If you have configured parked calls to be redirected to a configured number, select the calling search space for the forward destination.
Forward Destination for Internal Calls When Not Retrieved	When the person whose call is parked is an internal party and the Park Monitoring Forward No Retrieve Timer expires, the system sends the call to one of these destinations:
	Voicemail—Uses the configuration in Voice Mail Profile to determine where to send the call.
	• Revert to Originator—Returns the call to the call parker.
	• To forward calls to another number, input the other number in the text box.
	If no option is selected, the call returns to the call parker.
Calling Search Space for Forwarding Internal Calls When Not Retrieved	If you have configured parked calls to be redirected to a configured number, select the calling search space for the forward destination.
Park Monitor Reversion Timer (seconds)	This timer determines the number of seconds that 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. The default value is 60 seconds.
	Note If you select 0 for the timer then phone lines that use this template will use the value of the Park Monitor Reversion Timer cluster-wide service parameter.

Call Park Interactions

Feature	Interaction
CTI Applications	CTI applications access call park functionality, including monitoring activity on call park DNs. To monitor a call park DN, add an application or end user that is associated with the CTI application to the Standard CTI Allow Call Park Monitoring user group.
Music On Hold	Music On Hold allows users to place calls on hold with music that a streaming source provides. The Music On Hold audio source for Call Park is selected by the setting of the Network Hold MOH Audio Source setting within the Phone Configuration window. If you do not choose an audio source within the device configuration, Cisco Unified CM uses the audio source that is defined in the device pool or the system default if the device pool does not specify an audio source ID.
Route Plan Report	The route plan report displays the patterns and directory numbers that are configured in Unified Communications Manager. Use the route plan report to look for overlapping patterns and directory numbers before assigning a directory number to Call Park.
Calling Search Space and Partitions	Assign the call park directory number or range to a partition to limit call park access to users on the basis of the device calling search space.
Immediate Divert	Call Park supports Immediate Divert (iDivert or Divert softkey). For example, user A calls user B, and user B parks the call. User B retrieves the call and then decides to send the call to a voice-messaging mailbox by pressing the iDivert or Divert softkey. User A receives the voice mail greeting of user B.
Barge	• Barge with Call Park—The target phone (the phone that is being barged upon) controls the call. The barge initiator "piggybacks" on the target phone. The target phone includes most of the common features, even when the target is being barged; therefore, the barge initiator has no feature access. When the target parks a call, the barge initiator then must release its call (the barge).
	• cBarge with Call Park—The target and barge initiator act as peers. The cBarge feature uses a conference bridge, which causes it to function like a MeetMe conference. Both phones (target and barge initiator) have full access to their features.
Directed Call Park	We recommend that you do not configure both Directed Call Park and the Park softkey for Call Park, but the possibility exists to configure both. If you configure both, ensure that the call park and directed call park numbers do not overlap.
QSIG Intercluster Trunks	When a user parks a call across a QSIG intercluster trunk or a QSIG gateway trunk, the caller who has been parked (the parkee) does not see the To parked number message. The phone continues to display the original connected number. The call has been parked, and the user who parked the call can retrieve it. When the call is retrieved from the parked state, the call continues, but the caller who was parked does not see the newly connected number.

Call Park Restrictions

Feature	Restriction	
Call Park	Unified Communications Manager can park only one call at each call park extension number.	
Shared Line	For shared line devices across nodes, the line registers to the node on which the device registers first. For example, if a device from subscriber2 registers first and the line is created in subscriber2 and the publisher node, the line belongs to subscriber2. Each node must be configured with the call park number.	
Backup	To achieve failover or fallback, configure call park numbers on the publisher node and subscriber nodes. With this configuration, when the primary node is down, the line device association gets changed to the secondary node, and the secondary node call park number gets used.	
Directed Call Park	If a directed call park (or call park) is initiated from a shared line and the call is not retrieved from any device, the parked call does not always get reverted to the recipient in the shared line (parker).	
Conference	When a conference call is set up between both the shared line and the caller on park reversion or park reversion fails causing a two-party call (between the other shared line and caller). The reason is that, on park reversion, Unified Communications Manager extends the call to both devices sharing the line and tries to add either party in conference (party already in conference or party that hit the park). If the party attempts to add the party who is already in the conference first, then the park reversion fails. When park reversion fails, the shared line can still barge into the call as usual.	
Delete Server	If any call park numbers are configured for Unified Communications Manager on a node that is being deleted in the Server Configuration window (System > Server), the node deletion fails. Before you can delete the node, you must delete the call park numbers in Cisco Unified Communications Manager Administration.	

Troubleshooting Call Park

User Cannot Park Calls

Problem

User cannot park calls. When the user presses the Park softkey or feature button, the call does not get parked.

Solution

Ensure that a unique call park number is assigned to each Unified Communications Manager in the cluster.

The partition that is assigned to the call park number does not match the partition that is assigned to the phone directory number. For more information on partition, see the System Configuration Guide for Cisco Unified Communications Manager.

Call Park Number is Not Displayed Long Enough

Problem

The call park number is not displayed long enough for the user.

Solution

Set the Call Park Display Timer to a longer duration. See Configure Clusterwide Call Park, on page 3 for more information about the Timer.

Directed Call Park Overview

Directed Call Park allows a user to transfer a call to an available user-selected directed call park number. Configured Directed Call Park numbers exist cluster-wide. You can configure phones that support the directed call park Busy Lamp Field (BLF) to monitor the busy or idle status of specific directed call park numbers. Users can also use the BLF to speed dial a directed call park number.

Unified Communications Manager can park only one call at each directed call park number. To retrieve a parked call, a user must dial a configured retrieval prefix followed by the directed call park number at which the call is parked.

Directed Call Park Prerequisites

Make sure that the phones in your deployment support Directed Call Park. For a list of supported phones, run the **Phone Feature List** report from Cisco Unified Reporting, selecting **Assisted Directed Call Park** as the feature. For details, see Generate a Phone Feature List.

Directed Call Park Configuration Task Flow

Before you begin

• Review Directed Call Park Prerequisites, on page 18

	Command or Action	Purpose
Step 1	Configure ClusterWide Directed Call Park, on page 19	To configure clusterwide parameter for directed call park.

	Command or Action	Purpose
Step 2	Configure a Directed Call Park Number, on page 19	To add, copy, and update a single Directed Call Park extension number or range of extension numbers.
Step 3	Configure BLF/Directed Call Park Buttons, on page 21	Configure a phone button template for BLF/Directed Call Park.
Step 4	Synchronize Directed Call Park with Affected Devices, on page 22	Synchronize Directed Call Park with Affected Devices

Configure ClusterWide Directed Call Park

Procedure

- **Step 1** From Cisco Unified CM Administration, choose **System > Service Parameters**.
- Step 2 To set the timer, update the Call Park Reversion Timer fields in the Clusterwide Parameter(Feature-General) section.

The default is 60 seconds. This parameter determines the time that a call remains parked. When this timer expires, the parked call returns to the device that parked the call or to another specified number, depending on what you configure in the **Directed Call Park Configuration** window.

Configure a Directed Call Park Number

Before you begin

Ensure that each directed call park directory number, partition, and range is unique within the Unified Communications Manager. Before you begin, generate a route plan report. If the Park softkey is also activated (not recommended), ensure that no overlap exists between call park numbers and directed call park numbers. If reversion number is not configured, the call reverts to the parker (parking party) after the Call Park Reversion Timer expires.

Configure ClusterWide Directed Call Park, on page 19

- Step 1 Choose Call Routing > Directed Call Park.
- **Step 2** Perform one of the following tasks:
 - To add a new directed call park number, click **Add New**.
 - To copy a directed call park number, find the directed call park number or range of numbers and then click the **Copy** icon.
 - To update a directed call park number, find the directed call park number or range of numbers.

The directed call park number configuration window is displayed.

- Step 3 Configure the fields in the Directed Call Park settings area. See Directed Call Park Configuration Settings, on page 20 for more information about the fields and their configuration options.
- **Step 4** To save the new or changed call park numbers in the database, click **Save.**

If you update a directed call park number, Unified Communications Manager reverts any call that is parked on that number only after the Call Park Reversion Timer expires.

Step 5 Click Apply Config.

The **Apply Configuration Information** dialog is displayed.

- Step 6 Click OK.
- Step 7 If you are using BLF to monitor directed Call Park numbers, click **Restart Devices** on the **Directed Call Park Configuration** window. This step is optional if you are using change notification.

Directed Call Park Configuration Settings

Field	Description	
Number	Enter the directed call park number. You can enter digits (0-9) or the wildcard character ([], -, *, ^, #) and X (the system allows one or two Xs). For example, enter 5555 to define a single call park number of 5555 or enter 55XX to define a range of directed call park extension numbers from 5500 to 5599. Make sure that the directed call park numbers are unique and that they do not overlap with call park numbers.	
Description	Provide a brief description of this directed call park number or range. The description can include up to 50 characters in any language, but it cannot include double quotation marks ("), percentage sign (%), ampersand (&), or angle brackets (>) and tabs.	
Partition	If you want to use a partition to restrict access to the directed call park numbers, choose the desired partition from the drop-down list. If you do not want to restrict access to the directed call park numbers, leave the partition as the default of <none>.</none>	
	Note Make sure that the combination of directed call park number and partition is unique within Unified Communications Manager.	
Reversion Number	Enter the number to which you want the parked call to return if not retrieved, a leave the field blank.	
	Note A reversion number can comprise digits only; you cannot use wildcards.	
Reversion Calling Search Space	Using the drop-down list, choose the calling search space or leave the calling search space as the default of <none>.</none>	

Field	Description
Retrieval Prefix	For this required field, enter the prefix for retrieving a parked call. The system needs the retrieval prefix to distinguish between an attempt to retrieve a parked call and an attempt to initiate a directed park.

Configure BLF/Directed Call Park Buttons

Before you begin

Configure ClusterWide Directed Call Park, on page 19

Procedure

- **Step 1** From Cisco Unified CM Administration, choose **Device > Device Settings > Phone Button Template**.
- Step 2 After the configuration window displays, click the Add a new BLF Directed Call Park link in the Association Information pane.

Note The link does not display in the Association Information pane if the phone button template that you applied to the phone or device profile does not support BLF/Directed Call Park.

- Step 3 Configure the fields in the BLF/Directed Call Park fields area. See BLF/Directed Call Park Configuration Fields, on page 21 for more information about the fields and their configuration options.
- **Step 4** After you complete the configuration, click **Save** and close the window.

The directory numbers are displayed in the Association Information pane of the Phone Configuration Window.

BLF/Directed Call Park Configuration Fields

Table 3: BLF/Directed Call Park Button Configuration Fields

Field	Description
Directory Number	The Directory Number drop-down list displays a list of Directed Call Park number that exist in the Unified Communications Manager database.
	For phones that are running SCCP or phones that are running SIP, choose the number (and corresponding partition, if it is displayed) that you want the system to dial when the user presses the speed-dial button; for example, 6002 in 3. Directory numbers that display without specific partitions belong to the default partition.
Label	Enter the text that you want to display for the BLF/Directed Call Park button. This field supports internationalization. If your phone does not support internationalization, the system uses the text that displays in the Label ASCII field.

Field	Description	on
Label ASCII	The ASCI enter in th	text that you want to display for the BLF/Directed Call Park button. It label represents the noninternationalized version of the text that you be Label field. If the phone does not support internationalization, the less the text that displays in this field.
	Note	If you enter text in the Label ASCII field that differs from the text in the Label field, Cisco Unified Communications Manager Administration accepts the configuration for both fields, even though the text differs.

Synchronize Directed Call Park with Affected Devices

Procedure

Step 1 Choose Call Routing > Directed Call Park.

The Find and List Directed Call Parks window is displayed.

- **Step 2** Choose the search criteria to use.
- Step 3 Click Find.

The window displays a list of directed call parks that match the search criteria.

- Step 4 Click the directed call park to which you want to synchronize applicable devices. The **Directed Call Park**Configuration window is displayed.
- **Step 5** Make any additional configuration changes.
- Step 6 Click Save.
- Step 7 Click Apply Config.

The **Apply Configuration Information** dialog is displayed.

Step 8 Click OK.

Directed Call Park Interactions

The following table describes feature interactions with the Directed Call Park feature.

Feature	Interaction		
Music On Hold	The Music On Hold Audio Source for directed call park is assigned via the Default Network Hold MOH Audio Source service parameter. To assign the parameter:		
	1. From Cisco Unified CM Administration, choose System > Service Parameters.		
	2. From the Server drop-down list, choose a Unified Communications Manger cluster node.		
	3. From the Service drop-down list, select Cisco CallManager.		
	4. Under Clusterwide Paramters (Service), assign a MOH audio source to the Default Network Hold MOH Audio Source ID parameter. The default is 1.		
	5. Click Save.		
	Note For detailed information on adding MOH audio sources to the system, refer to the "Configure Music On Hold" section of this guide.		
Calling Search Space and Partitions	Assign the Directed Call Park Directory number or range to a partition to limit Directed Call Park access to users on the basis of the device calling search space.		
Immediate Divert	Directed call park supports Immediate Divert (iDivert or Divert softkey). For example, user A calls user B, and user B parks the call. User B retrieves the call and then decides to send the call to a voice-messaging mailbox by pressing the iDivert or Divert softkey. User A receives the voicemail greeting of user B.		
Barge	• Barge with Directed Call Park—The target phone (the phone that is being barged upon) controls the call. The barge initiator "piggybacks" on the target phone. The target phone includes most of the common features, even when the target is being barged; therefore, the barge initiator has no feature access. When the target parks a call by using directed call park, the barge initiator then must release its call (the barge).		
	• cBarge with Directed Call Park—The target and barge initiator act as peers. The cBarge feature uses a conference bridge that makes it behave like to a meet-me conference. Both phones (target and barge initiator) retain full access to their features.		
Call Park	We recommend that you do not configure both directed call park and the Park softkey for call park, but the possibility exists to configure both. If you configure both, ensure that the call park and directed call park numbers do not overlap.		
	A caller who has been parked (the parkee) by using the directed call park feature cannot, while parked, use the standard call park feature.		

Directed Call Park Restrictions

Feature	Restriction
Directed Call Park number	Unified Communications Manager one party can park only one call at each Directed Call Park number.
	You cannot delete a Directed Call Park number that a device is configured to monitor (using the BLF button). A message indicates that the Directed Call Park number or range cannot be deleted because it is in use. To determine which devices are using the number, click the Dependency Records link on the Directed Call Park Configuration window.
Standard Call Park Feature	A caller who has been parked (the parkee) by using the Directed Call Park feature cannot, while parked, use the standard call park feature.
Directed Call Park BLF	The Directed Call Park BLF cannot monitor a range of Directed Call Park numbers. A user can monitor only individual Directed Call Park numbers by using the Directed Call Park BLF. For example, if you configure a Directed Call Park number range 8X, you cannot use the Directed Call Park BLF to monitor that whole range of 80 to 89.
Directed Call Park for phones that are running SIP	The following limitations apply to Directed Call Park for phones that are running SIP:
	Directed Call Park gets invoked by using the Transfer softkey on Cisco Unified IP Phones 7940 and 7960 that are running SIP.
	The system does not support directed call park when the Blind Transfer softkey is used on Cisco Unified IP Phones 7940 and 7960 that are running SIP.
	The system does not support directed call park BLF on Cisco Unified IP Phones 7940 and 7960 that are running SIP, and third-party phones that are running SIP.

Troubleshooting Directed Call Park

User Cannot Retrieve Parked Calls

User cannot retrieve parked calls. After dialing the directed call park number to retrieve a parked call, the user receives a busy tone, and the IP phone displays the message, "Park Slot Unavailable".

Ensure that the user dials the retrieval prefix followed by the directed call park number.

User Cannot Park Calls

User cannot park calls. After the Transfer softkey (or Transfer button if available) is pressed and the directed call park number is dialed, the call does not get parked.

Ensure that the partition that is assigned to the call park number matches the partition that is assigned to the phone directory number. Ensure that the partition and calling search space are configured correctly for the device. For more information about the partition, see the *System Configuration Guide for Cisco Unified Communications Manager*.

User Receives a Reorder Tone After the Reversion Timer Expires

User cannot park calls. The user receives a reorder tone after the reversion timer expires.

Ensure that the user presses the Transfer softkey (or Transfer button if available) before dialing the directed call park number, and then presses the Transfer softkey (or Transfer button) again or goes on hook after dialing the directed call park number. Because directed call park is a transfer function, the directed call park number cannot be dialed alone.



Note

You can complete the transfer only by going on hook rather than pressing the Transfer softkey (or Transfer button) a second time if the Transfer On-hook Enabled service parameter is set to True.

User Receives a Reorder Tone or Announcement

User cannot park calls. After pressing the Transfer softkey (or Transfer button if available) and dialing the directed call park number, the user receives a reorder tone or announcement.

Ensure that the dialed number is configured as a directed call park number.

User Cannot Park a Call at a Number Within The Range

After configuring a range of directed call park numbers, the user cannot park a call at a number within the range.

Review the syntax for entering a range of directed call park numbers. If incorrect syntax is used, the system may appear to configure the range when it actually does not.

Parked Calls Revert Too Quickly

Parked calls revert too quickly.

Set the Call Park Reversion Timer to a longer duration.

Park Slot Unavailable

User cannot park calls. After pressing the Transfer softkey (or Transfer button if available) and dialing the directed call park number, the user receives a busy tone, and the IP phone displays the message, "Park Slot Unavailable".

Ensure that the dialed directed call park number is not already occupied by a parked call or park the call on a different directed call park number.

Parked Calls Do Not Revert to the Parked Call Number

Parked calls do not revert to the number that parked the call.

Check the configuration of the directed call park number to ensure that it is configured to revert to the number that parked the call rather than to a different directory number.

Number or Range Cannot Be Deleted Because It Is in Use

When an attempt is made to delete a directed call park number or range, a message displays that indicates that the number or range cannot be deleted because it is in use.

You cannot delete a directed call park number that a device is configured to monitor (by using the BLF button). To determine which devices are using the number, click the Dependency Records link in the Directed Call Park Configuration window.