

Voice and Video

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Meeting Controls for CMS Meetings

Applies to: All clients

Jabber provides meeting control functions through the Cisco Meeting Server (CMS) ActiveControl feature. The meeting control functions include participant lists, muting participants, dropping participants, and changing the video layout.

To use ActiveControl requires the following in your deployment:

- The call path between the endpoint and Meeting Server supports iX media end to end.
- Appropriate permissions enabled in Meeting Server.

For more information on using CMS, see the Cisco Meeting Server, Deployments with Expressway Planning and Preparation Guide.

As of Release 12.5, Jabber can access Cisco Meeting Server conferences as a SIP device through ActiveControl. You can enter an ActiveControl conference by either:

- · Dialing into a room that is configured on CMS
- Merging two calls when a CMS room is configured as the conference bridge

Before you begin

To set up ActiveControl, you need:

- Cisco Meeting Server Release 2.3 or later
- Cisco Unified Communications Manager 12.5.1.11900 or later
- Cisco Expressway for Mobile and Remote Access X12.5.1 or later (Optional if Jabber is in your corporate network, not using MRA)



Note These are the releases with full support for ActiveControl. Earlier releases of Unified CM and Expressway did not support the control functions over Expressway.

Procedure

Step 1 Configure a SIP trunk in Cisco Unified Communications Manager with CMS to enable communication using SIP signals. For more information, see System Configuration Guide for Cisco Unified Communications Manager.
 Step 2 Configure a route pattern in Cisco Unified Communications Manager to route inbound and outbound SIP calls. For more information, see the *Configure Call Routing* chapter in System Configuration Guide for Cisco Unified Communications Manager.

- **Step 3** Set up rules in CMS for outbound SIP call routing to the Cisco Unified Communications Manager server. For more information, see the Cisco Meeting Server with Cisco Unified Communications Manager Deployment Guide.
- **Step 4** Configure your CMS space to manage your conference resources. For more information, see Cisco Meeting Server Release API Reference Guide.

Bridge Escalations

Applies to: All clients

Bridge escalations allow users to quickly escalate a group chat to a conference call. Participants are automatically added without the need to merge them into the conference call.

	Procedure
Step 1	Enable bridge escalations in Cisco Jabber clients by setting the EnableBridgeConferencing parameter to true in the jabber-config.xml file.
Step 2	(Optional) Specify a mask for the room URI in the UserBridgeUriAdmin parameter in the jabber-config.xml file. If you don't specify a mask the user can enter a DN or a SIP URI in the client.
Step 3	Enable URI dialing to allow your users enter a SIP URI for the conference call number. For more information on URI dialing, see the <i>URI Dialing</i> topic.

Call Park

Applies to: Cisco Jabber for Android, Cisco Jabber for iPhone and iPad

You can use call park to place a call on hold and pick it up from another phone in a Cisco Unified Communications Manager system. Call park must be enabled and extension numbers must be defined on each Cisco Unified Communications Manager node in the cluster. You can define either a single directory number or a range of directory numbers for use as call park extension numbers.

Complete the following tasks to enable call park. For detailed instructions, see the *Feature Configuration Guide for Cisco Unified Communications Manager*.

Procedure

Step 1	Configure cluster wide call park	
	[Optional] Configure call park for the entire cluster, or use the procedure in Step 3 to configure call park on individual nodes within the cluster.	
Step 2	Configure a partition	
	Create a partition to add a call park number.	
Step 3	Configure a call park number	
	Configure a call park number to use call park across nodes in a cluster.	

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.

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 adv	vanced service parameters are displayed in the window.	
Step 4	In Clust to True	terwide Parameter(Feature- General) section set the Enable cluster-wide Call Park Number/Ranges	
		ault value is False. This parameter determines whether the Call Park feature is implemented clusterwide acted 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.		
		ault is 10 seconds. This parameter determines how long a Call Park number displays on the phone ked the call.	
Step 6	Set the	Call Park Reversion Timer for each server in a cluster that has the service and Call Park configured.	
	expires,	ault is 60 seconds. This parameter determines the time that a call remains parked. When this timer the parked call returns to the device that parked the call. If a hunt group member parks a call that hrough 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 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.

Procedure

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 (\leq), 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 . Each to which devices are registered requires its own unique Call Park directory number and range. 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 Dialed Number Analyzer tool.

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.**

I

Call Park Configuration Fields

Field	Description
Call Park Number/Range	Enter the Call Park extension number. You can enter digits or the wildcard character X (the system allows one or two Xs). For example, enter 5555 to define a single Call Park extension number of 5555 or enter 55XX to define a range of Call Park extension numbers 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 servers. Ensure that each 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 phone A (registered to node A) calls phone B (registered to node B) and the phone B user presses Park, phone B requires a call park range in the CSS that resides on node A. 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	Provide a brief description of this call park number. The description can include up to 50 characters in any language, but it cannot include double-quotes ("), percentage sign (%), ampersand (&), or angle brackets (<>).
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 .

Field	Description
	Using the drop-down list, choose the Cisco Unified Communications Manager to which these call park numbers apply.

Call Pickup

Applies to: Cisco Jabber for Windows, Cisco Jabber for Mac, Cisco Jabber Softphone for VDI

The Call Pickup feature allows users to answer calls that come in on a directory number other than their own. Call pickup groups have assigned directory numbers. Cisco Unified Communications Manager (Unified CM) automatically dials the appropriate call pickup group number. Users select **Pickup** to answer the call.

Group call pickup

This setting allows users to pick up incoming calls in another group. Users enter the group pickup number, select **Pickup**, and Unified CM automatically dials the appropriate call pickup group number. The user can then pick up an available call in that group.

Other group pickup

This setting allows users to pick up incoming calls in a group that is associated with their group. When the user selects **Other Pickup**, Unified CM automatically searches for the incoming call in the associated groups and connects the call.

Directed call pickup

This setting allows users to pick up an incoming call on a directory number. Users enter the directory number, select **Pickup** and Unified CM connects the incoming call.

To enable call pickup, you use these parameters in the jabber-config.xml file, depending on the types of call pickup that you support:

```
<Policies>
<EnableCallPickup>true</EnableCallPickup>
<EnableGroupCallPickup>true</EnableGroupCallPickup>
<EnableOtherGroupPickup>true</EnableOtherGroupPickup>
<EnableHuntGroup>true</EnableHuntGroup>
</Policies>
```

For more information about configuring call pickup, see the *Feature Configuration Guide for Cisco Unified Communications Manager*.

Call Pickup Notifications

For multiple incoming calls, a notification, *Call(s) available for pickup*, appears. When the user answers a call, the user gets connected to the longest ringing call.

Desk Phone Mode

In desk phone mode, the following limitations apply:

- The Unified CM notification settings aren't supported for the pickup group. The call pickup notification that displays is *CallerA->CallerB*.
- The Unified CM settings for audio and visual settings aren't supported. The visual alerts always appear.

Shared Line Behavior

For users that have a desk phone and also audio on computer with a shared line, the following limitations apply:

- For an attempt to pick up a call using the client when no call is available, *No call available for PickUp* displays on the desk phone.
- For an attempt to pick up a call using the desk phone when no call is available, *No call available for PickUp* displays on the client.

User Not a Member of an Associated Group

For an incoming call to another pickup group where the user isn't a member of an associated group:

- You can use directed call pickup to pick up the incoming call.
- Group pickup doesn't work.

Expected Behavior Using Group Call Pickup and Directed Call Pickup

The following are expected behaviors when using group call pickup and directed call pickup:

- If you enter an invalid number:
 - Audio on computer mode—The conversation window appears and the user hears the annunciator immediately.
 - Desk phone mode—The conversation window, fast busy tone, or the annunciator occurs followed by the fast busy tone, *Pickup failed* error message.
- If you enter a valid number with no active call available to pick up:
 - Audio on computer mode—Tone in the headset, no conversation window appears, and *No call available for pickup* error message.
 - Desk phone mode—No conversation window and No call available for pickup error message
- If you enter a directory number of a phone in an associated group with no active call available to pick up:
 - Audio on computer mode—Tone in the headset, no conversation window appears, and *No call available for pickup* error message.
 - Desk phone mode—No conversation window and No call available for pickup error message
- If you enter a directory number of a phone not in an associated group, but on the same Unified CM node:
 - Audio on computer mode—The conversation window appears and fast busy tone.
 - Desk phone mode—The conversation window appears, fast busy tone, and *Pickup failed* error message.
- If you enter the first digits of a valid group:
 - Audio on computer mode—Tone in the headset, conversation window appears, and, after 15 seconds, the annunciator followed by the fast busy tone.

• Desk phone mode—The conversation window appears, after 15 seconds, the annunciator, fast busy tone, and *Pickup failed* error message.

Call Pickup Using a Desk Phone That Isn't in a Call Pickup Group

If a user attempts a call pickup from a desk phone that isn't in a call pickup group, the conversation window appears for a moment. Don't configure users to use the call pickup feature if they aren't members of a call pickup group.

Original Recipient Information Not Available

When the Unified CM *Auto Call Pickup Enabled* setting is true, the recipient information isn't available in the client when the call is picked up in audio-on-computer mode. If the setting is false, the recipient information is available.

Configure Call Pickup Group

Call pickup groups allow users to pick up incoming calls in their own group.

Procedure

Step 1 Step 2	Open the Cisco Unified Communication Manager interface. Select Call Routing > Call Pickup Group
	The Find and List Call Pickup Groups window opens.
Step 3	Select Add New
	The Call Pickup Group Configuration window opens.
Step 4	 Enter call pickup group information: a) Specify a unique name for the call pickup group. b) Specify a unique directory number for the call pickup group number. c) Enter a description. d) Select a partition.
Step 5	 (Optional) Configure the audio or visual notification in the Call Pickup Group Notification Settings section. a) Select the notification policy. b) Specify the notification timer. For further information on call pickup group notification settings see the call pickup topics in the relevant Cisco Unified Communications Manager documentation.
Step 6	Select Save.

What to do next

Assign a call pickup group to directory numbers.

Assign Directory Number

Assign a call pickup group to a directory number. Only directory numbers that are assigned to a call pickup group can use call pickup, group call pickup, other group pickup, and directed call pickup.

Before you begin

Before you assign a call pickup group to a directory number, you must create the call pickup group.

Procedure

- **Step 2** Assign a call pickup group to a directory number using one of the following methods:
 - Select Call Routing > Directory Number, find and select your directory number and in the Call Forward and Call Pickup Settings area select the call pickup group from the call pickup group drop down list.
 - Select Device > Phone, find and select your phone and in the Association Information list choose the directory number to which the call pickup group will be assigned.

Step 3 To save the changes in the database, select **Save**.

Configure Other Call Pickup

Other Group Pickup allows users to pick up incoming calls in an associated group. Cisco Unified Communications Manager automatically searches for the incoming call in the associated groups to make the call connection when the user selects **Other Pickup**.

Before you begin

Before you begin, configure call pickup groups.

Procedure

Step 1	Open the Cisco Unified Communication Manager Administration interface.	
Step 2	Select Call Routing > Call Pickup Group	
	The Find and List Call Pickup Groups window opens.	
Step 3	Select your call pickup group.	
	The Call Pickup Group Configuration window opens.	
Step 4	In the Associated Call Pickup Group Information section, you can do the following:	
	• Find call pickup groups and add to current associated call pickup groups.	
	• Reorder associated call pickup groups or remove call pickup groups.	

Step 5 Select Save.

Configure Directed Call Pickup

Directed call pickup allows you to pick up a incoming call directly. The user enters the directory number in the client and selects **Pickup**. Cisco Unified Communications Manager uses the associated group mechanism to control if the user can pick up an incoming call using Directed Call Pickup.

To enable directed call pickup, the associated groups of the user must contain the pickup group to which the directory number belongs.

When the user invokes the feature and enters a directory number to pick up an incoming call, the user connects to the call that is incoming to the specified phone whether or not the call is the longest incoming call in the call pickup group to which the directory number belongs.

Procedure

Step 1 Configure call pickup groups and add associated groups. The associated groups list can include up to 10 groups.

For more information, see topics related to defining a pickup group for Other Group Pickup.

Step 2Enable the Auto Call Pickup Enabled service parameter to automatically answer calls for directed call pickups.For more information, see topics related to configuring Auto Call Pickup.

Auto Call Pickup

You can automate call pickup, group pickup, other group pickup, and directed call pickup by enabling the Auto Call Pickup Enabled service parameter. When this parameter is enabled, Cisco Unified Communications Manager automatically connects users to the incoming call in their own pickup group, in another pickup group, or a pickup group that is associated with their own group after users select the appropriate pickup on the phone. This action requires only one keystroke.

Auto call pickup connects the user to an incoming call in the group of the user. When the user selects **Pickup** on the client, Cisco Unified Communications Manager locates the incoming call in the group and completes the call connection. If automation is not enabled, the user must select **Pickup** and answer the call, to make the call connection.

Auto group call pickup connects the user to an incoming call in another pickup group. The user enters the group number of another pickup group and selects **Pickup** on the client. Upon receiving the pickup group number, Cisco Unified Communications Manager completes the call connection. If auto group call pickup is not enabled, dial the group number of another pickup group, select **Pickup** on the client, and answer the call to make the connection.

Auto other group pickup connects the user to an incoming call in a group that is associated with the group of the user. The user selects **Other Pickup** on the client. Cisco Unified Communications Manager automatically searches for the incoming call in the associated groups in the sequence that the administrator enters in the

Call Pickup Group Configuration window and completes the call connection after the call is found. If automation is not enabled, the user must select **Other Pickup**, and answer the call to make the call connection.

Auto directed call pickup connects the user to an incoming call in a group that is associated with the group of the user. The user enters the directory number of the ringing phone and selects **Pickup** on the client. Upon receiving the directory number, Cisco Unified Communications Manager completes the call connection. If auto directed call pickup is not enabled, the user must dial the directory number of the ringing phone, select **Pickup**, and answer the call that will now ring on the user phone to make the connection.

For more information about **Call Pickup**, see the *Feature Configuration Guide for Cisco Unified Communications Manager*.

Configure Auto Call Pickup

Procedure

Step 1	Open the Cisco Unified CM Administration interface.	
Step 2	Select System > Service Parameters	
Step 3	Select your server from the Server drop down list and then select the Cisco Call Manager service from the Service drop down list.	
Step 4	In the Clusterwide Parameters (Feature - Call Pickup) section, select one of the following for Auto Call Pickup Enabled:	
	 true—The auto call pickup feature is enabled. false—The auto call pickup feature is not enabled. This is the default value. 	
Step 5	Select Save.	

Meeting Control for CMR Meetings

Applies to: All clients

Cisco Collaboration Meeting Rooms (CMR) Cloud provides easy access for users to join or start a Cisco Webex meeting. Cisco Jabber provides users with the ability to access the meeting either using Cisco Webex interface or join using video.

There's a limitation on CMR Cloud join experience for attendees of scheduled CMR Cloud meetings. This limitation a Mac users and Windows users who haven't enabled Outlook calendar integration. Because of a server limitation, attendees for these deployment scenarios can join the meeting only by using Cisco Webex. Hosts enjoy the full experience, as does anyone invited to join ad hoc CMR Cloud meetings.

Users who are in CTI control mode can join using Webex only.

Before you begin

WebEx Meeting Center videos (CMR) Cloud is available on Cisco Webex Meetings.

	Procedure
Step 1	Configure the Collaboration Meeting Room options.
	For more information, visit https://help.webex.com/:
	Site Administration—https://help.webex.com/en-us/6maub2/ Configure-Webex-Meetings-in-Cisco-Webex-Site-Administration
	 Control Hub—https://help.webex.com/en-us/n8pgczj/ Configure-Teleconferencing-Options-for-a-Webex-Site-in-Cisco-Webex-Control-Hub
Step 2	Enable Collaboration Meeting Rooms for your users, on Cisco Webex Meetings.
Step 3	Enable Common Identity (CI) for your Webex site.
	If your Webex site isn't CI-enabled, users who join meetings from Jabber get audio and video controls only They can also share their screens.
Step 4	Collaboration Meeting Room features uses SIP URI, you must enable URI dialing for your users on Cisco Unified Communications Manager. For more information on URI dialing, see the <i>URI Dialing</i> topic.

Dial via Office

Applies to: Cisco Jabber for Android, Cisco Jabber for iPhone and iPad



Important The following features are not supported if the Dial via Office-Reverse (DvO-R) feature is enabled:

- URI dialing
- Secure Phone

User-controlled voicemail avoidance, which can be used in conjunction with the DvO feature, is available only on Cisco Unified Communications Manager release 9.0 and later. Timer-controlled voicemail avoidance is available on Cisco Unified Communications Manager release 6.0 and later.

You can make DvO-R calls over Expressway for Mobile and Remote Access when you are outside corporate network. DvO-R is supported on Cisco Expressway X8.7 and Cisco Unified Communications Manager 11.0(1a)SU1.

The DvO feature is not supported when users connect to the corporate network using Expressway for Mobile and Remote Access.

The DvO feature allows users to initiate Cisco Jabber outgoing calls with their work number using the mobile voice network for the device.

Cisco Jabber supports DvO-R (DvO-Reverse) calls, which works as follows:

- 1. User initiates a DvO-R call.
- 2. The client notifies Cisco Unified Communications Manager to call the mobile phone number.

- 3. Cisco Unified Communications Manager calls and connects to the mobile phone number.
- 4. Cisco Unified Communications Manager calls and connects to the number that the user dialed.
- 5. Cisco Unified Communications Manager connects the two segments.
- 6. The user and the called party continue as with an ordinary call.

Incoming calls use either Mobile Connect or the Voice over IP, depending on which Calling Options the user sets on the client. Dial via Office does not require Mobile Connect to work. However, we recommend that you enable Mobile Connect to allow the native mobile number to ring when someone calls the work number. From the Cisco Unified Communications Manager user pages, users can enable and disable Mobile Connect, and adjust Mobile Connect behavior using settings (for example, the time of day routing and Delay Before Ringing Timer settings). For information about setting up Mobile Connect, see the *Set Up Mobile Connect* topic.



Note

- The users do not receive incoming calls on Cisco Jabber in the following situations:
 - If users select the **Mobile Voice Network** calling option on any network and the Single Number Reach (SNR) is not configured for their device, they will not receive incoming calls on Cisco Jabber.
 - If users select the **Mobile Voice Network** calling option on any network and the Single Number Reach (SNR) is configured with the **Ring Schedule**, they will not receive incoming calls on Cisco Jabber beyond the time set in the **Ring Schedule**.

The following table describes the calling methods used for incoming and outgoing calls. The calling method (VoIP, Mobile Connect, DvO-R, or native cellular call) varies depending on the selected Calling Options and the network connection.

Calling Option				Calling Options		
Connection	Voice over IP		Mobile Voice Network		Autoselect	
Corporate Wi-Fi	Outgoing: VoIP	Incoming: VoIP	Outgoing: DvO-R	Incoming: Mobile Connect	Outgoing: VoIP	Incoming: VoIP
Mobile Network (3G, 4G)					Outgoing: DvO-R	Incoming: Mobile Connect
Phone Services are	Outgoing Native Cellular Call					
not registered	Incoming Mobile Connect					

To set up Dial via Office-Reverse (DvO-R), you must do the following:

- 1. Set up the Cisco Unified Communications Manager to support DvO-R. See the Set Up Cisco Unified Communications Manager to Support DvO topic for more information.
- 2. Enable DvO on each Cisco Dual Mode for iPhone or Android device. See the *Set Up Dial via Office for Each Device* topic for more information.

Set Up Cisco Unified Communications Manager to Support Dial via Office

To set up Cisco Unified Communications Manager to support Dial via Office-Reverse (DvO-R), perform the following procedures:

- 1. Complete one or both of the following procedures.
 - Set Up Enterprise Feature Access Number
 - Set Up Mobility Profile
- 2. Complete the Verify Device COP File Version procedure.
- **3.** If necessary, create application dial rules to allow the system to route calls to the Mobile Identity phone number to the outbound gateway. Ensure that the format of the Mobile Identity phone number matches the application dial rules.

Set Up Enterprise Feature Access Number

Use this procedure to set up an Enterprise Feature Access Number for all Cisco Jabber calls that are made using Dial via Office-Reverse.

The Enterprise Feature Access Number is the number that Cisco Unified Communications Manager uses to call the mobile phone and the dialed number unless a different number is set up in Mobility Profile for this purpose.

Before you begin

- Reserve a Direct Inward Dial (DID) number to use as the Enterprise Feature Access Number (EFAN). This procedure is optional if you already set up a mobility profile.
- Determine the required format for this number. The exact value you choose depends on the phone number that the gateway passes (for example, 7 digits or 10 digits). The Enterprise Feature Access Number must be a routable number.

Procedure

- **Step 1** Open the Cisco Unified CM Administration interface.
- **Step 2** Select Call Routing > Mobility > Enterprise Feature Access Number Configuration.
- Step 3 Select Add New.
- **Step 4** In the Number field, enter the Enterprise Feature Access number.

Enter a DID number that is unique in the system.

To support dialing internationally, you can prepend this number with \+.

Step 5 From the **Route Partition** drop-down list, choose the partition of the DID that is required for enterprise feature access.

This partition is set under **System > Service Parameters**, in the **Clusterwide Parameters (System - Mobility)** section, in the **Inbound Calling Search Space for Remote Destination** setting. This setting points either to the Inbound Calling Search Space of the Gateway or Trunk, or to the Calling Search Space assigned on the **Phone Configuration** window for the device.

If the user sets up the DvO Callback Number with an alternate number, ensure that you set up the trunk Calling Search Space (CSS) to route to destination of the alternate phone number.

- **Step 6** In the **Description** field, enter a description of the Mobility Enterprise Feature Access number.
- **Step 7** (Optional) Check the **Default Enterprise Feature Access Number** check box if you want to make this Enterprise Feature Access number the default for this system.

Step 8 Select Save.

Set Up Mobility Profile

Use this procedure to set up a mobility profile for Cisco Jabber devices. This procedure is optional if you already set up an Enterprise Feature Access Number.

Mobility profiles allow you to set up the Dial via Office-Reverse settings for a mobile client. After you set up a mobility profile, you can assign it to a user or to a group of users, such as the users in a region or location.

Procedure

Step 1	Open the Cisco Unified CM Administration interface.
Step 2	Select Call Routing > Mobility > Mobility Profile.
Step 3	In the Mobility Profile Information section, in the Name field, enter a descriptive name for the mobility profile.
Step 4	In the Dial via Office-Reverse Callback section, in the Callback Caller ID field, enter the caller ID for the callback call that the client receives from Cisco Unified Communications Manager.
Step 5	Click Save.

Verify Device COP File Version

Use the following procedure to verify that you are using the correct device COP file for this release of Cisco Jabber.

Procedure

- **Step 1** Open the Cisco Unified CM Administration interface.
- **Step 2** Select **Device** > **Phone**.
- Step 3 Click Add New.

Step 4 From the **Phone Type** drop-down list, choose **Cisco Dual Mode for iPhone** or **Cisco Dual Mode for Android**.

- Step 5 Click Next.
- Step 6Scroll down to the Product Specific Configuration Layout section, and verify that you can see the Video
Capabilities drop-down list.

If you can see the Video Capabilities drop-down list, the COP file is already installed on your system.

If you cannot see the Video Capabilities drop-down list, locate and download the correct COP file.

Set Up Dial via Office for Each Device

Use the following procedures to set up Dial via Office - Reverse for each TCT or BOT device.

Procedure

	Command or Action	Purpose
Step 1	Add a Mobility Identity for each user.	
Step 2	Enable Dial via Office on each device.	
Step 3	If you enabled Mobile Connect, verify that Mobile Connect works. Dial the desk phone extension and check that the phone number that is specified in the associated Mobile Identity rings.	

Add Mobility Identity

Use this procedure to add a mobility identity to specify the mobile phone number of the mobile device as the destination number. This destination number is used by features such as Dial via Office or mobile connect.

You can specify only one number when you add a mobility identity. If you want to specify an alternate number such as a second mobile phone number for a mobile device, you can set up a remote destination. The mobility identity configuration characteristics are identical to those of the remote destination configuration.

Procedure

Step 1	Open the Cisco Unified CM Administration interface.
Step 2	Navigate to the device that you want to configure as follows:
	a) Select Device > Phone .
	b) Search for the device that you want to configure.
	c) Select the device name to open the Phone Configuration window.
Step 3	In the Associated Mobility Identity section, select Add a New Mobility Identity.
Step 4	Enter the mobile phone number as the destination number.
	You must be able to rout this number to an outbound gateway. Generally, the number is the full E.164 number.

Note If you enable the Dial via Office — Reverse feature for a user, you must enter a destination number for the user's mobility identity.

If you enable Dial via Office — Reverse and leave the destination number empty in the mobility identity:

- The phone service cannot connect if the user selects the **Autoselect** calling option while using a mobile data network and VPN.
- The phone service cannot connect if the user selects the **Mobile Voice Network** calling option on any type of network.
- The logs do not indicate why the phone service cannot connect.

Step 5 Enter the initial values for call timers.

These values ensure that calls are not routed to the mobile service provider voicemail before they ring in the client on the mobile device. You can adjust these values to work with the end user's mobile network. For more information, see the online help in Cisco Unified Communications Manager.

The following is an example of mobility Identity timers' information in Cisco Unified Communications Manager 9.x.

Setting	Suggested Initial Value
Answer Too Soon Timer	3000
Answer Too Late Timer	20000
Delay Before Ringing Timer	0
	Note This setting does not apply to DvO-R calls.

The following is an example of mobility Identity timers' information in Cisco Unified Communications Manager 10.x.

Setting	Suggested Initial Value
Wait * before ringing this phone when my business line is dialed.*	0.0 seconds
Prevent this call from going straight to this phone's voicemail by using a time delay of * to detect when calls go straight to voicemail.*	3.0 seconds
Stop ringing this phone after * to avoid connecting to this phone's voicemail.*	20.0 seconds

Step 6 Do one of the following:

- Cisco Unified Communications Manager release 9 or earlier Check the Enable Mobile Connect check box.
- Cisco Unified Communications Manager release 10 Check the Enable Single Number Reach check box.

Step 7 If you are setting up the Dial via Office feature, in the Mobility Profile drop-down list, select one of the following options.

Option	Description
Leave blank	Choose this option if you want users to use the Enterprise Feature Access Number (EFAN).
Mobility Profile	Choose the mobility profile that you just created if you want users to use a mobility profile instead of an EFAN.

Step 8 Set up the schedule for routing calls to the mobile number.

Step 9 Select Save.

Enable Dial via Office on Each Device

Use this procedure to enable Dial via Office on each device.

Procedure

Step 1	Open the	ne Cisco Unified CM Administration interface.			
Step 2	Navigate to the device that you want to configure as follows:				
	a) Sel	ect Device > Phone .			
	b) Search for the device that you want to configure.				
	c) Select the device name to open the Phone Configuration window.				
Step 3	In the I	Device Information section, check the Enable Cisco Unified Mobile Communicator check box.			
Step 4	In the Protocol Specific Information section, in the Rerouting Calling Search Space drop-down list, select a Calling Search Space (CSS) that can route the call to the DvO callback number.				
Step 5	In the Product Specific Configuration Layout section, set the Dial via Office drop-down list to Enabled.				
Step 6	Select Save.				
Step 7	Select Apply Config.				
Step 8	Instruct the user to sign out of the client and then to sign back in again to access the feature.				
	Note	DVO enabled devices may encounter issues registering with Cisco Unified Communications Manager. Resetting the device from the Cisco Unified Communications Manager administrative interface fixes this issue.			

What to do next

Test this feature.

Far End Camera Control (FECC)

Applies to: All clients except Cisco Jabber Softphone for VDI

In calls that support far-end camera control (FECC), you can adjust the far-end camera to give you a better view during video calls. FECC is available to users if the endpoint that they are calling supports it.

You can configure whether users can access FECC-enabled endpoints. Disabling the configuration parameter means that users are not provided with the ability to control far-end camera endpoints, even if the endpoint is capable. From a user experience, with FECC disabled, it works the same as dialing in to an endpoint that is not FECC enabled.

To disable FECC, set the EnableFecc parameter to false. For more information about this parameter, see the *Parameters Reference Guide*.

Limitations

FECC is only supported in point-to-point calls, but not in group calls or conferences where multiple video connections are connecting to the same bridge.

FECC is only supported in Softphone mode.

Flexible DSCP Values

Applies to: Cisco Jabber for Mac, Cisco Jabber for Android, Cisco Jabber for iPhone and iPad

Flexible Differentiated Services Code Point (DSCP) allows you to specify different DSCP values to separate the audio and video streams on the network.

The EnableDSCPPacketMarking parameter is used to enable or disable DSCP packet marking in the client.

You can configure the DSCP values for audio calls, video calls, audio portion for video calls, and audio portion for telepresence calls separately. For better bandwidth management and to protect audio stream degradation, separate the audio stream from the higher-bandwidth video stream. This can help when the network is congested or the call quality is impacted.

DSCP values are configured on Cisco Unified Communications Manager. For more information, see the *Configure Flexible DSCP Marking and Video Promotion Policy* section of the *System Configuration Guide for Cisco Unified Communications Manager*.

Hunt Group

A Hunt Group is a group of lines that are organized hierarchically, so that if the first number in the hunt group list is busy, the system dials the second number. If the second number is busy, the system dials the next number, and so on. Every hunt group has a pilot number that is also called as hunt pilot. A hunt pilot contains a hunt pilot number and an associated hunt list. Hunt pilots provide flexibility in network design. They work with route filters and hunt lists to direct calls to specific devices and to include, exclude, or modify specific digit patterns.

A hunt pilot number is the number that a user dials. A hunt list contains a set of line groups in a specific order. A line group comprises a group of directory numbers in a specific order. The order controls the progress of the search for available directory numbers for incoming calls. A single-line group can appear in multiple hunt lists.

Unified Communications Manager (Unified CM) identifies a call that is to be routed through a defined hunt list, Unified CM finds the first available device on the basis of the order of the line groups that a hunt list defines.

You can let a user sign in and out of hunt groups by configuring EnableHuntGroup parameter. You can control whether users can decline calls from hunt groups with the PreventDeclineOnHuntCall parameter. For more information, see the *Parameters Reference Guide for Cisco Jabber*.

Unified CM 9.x and later allows configuring of automatic sign out of a hunt member when there is no answer. Once the user is signed out, the system displays a sign out notification whether the user is auto-signed out, manually signed out, or signed out by the Unified CM administrator.

Features	Mobile Clients	Desktop Clients and Cisco Jabber Softphone for VDI
Sign in to hunt group and sign out of hunt group	Not supported	Supported
Call, answer, and decline	Supported	Supported

Hunt group features supported by the Cisco Jabber clients:

Limitation

Desktop clients must use audio on computer mode before users can sign in to or out of hunt groups.

Line Group

A line group allows you to designate the order in which directory numbers are chosen. Cisco Unified Communications Manager distributes a call to an idle or available member of a line group based on the call distribution algorithm and on the Ring No Answer (RNA) Reversion timeout setting.

Users cannot pick up calls to a DN that belongs to a line group by using the directed call pickup feature.

Configure Line Group

Before you begin

Configure directory numbers.

Procedure

Step 1	Open the Cisco Unified CM Administration interface.	•
--------	-----------------------------------------------------	---

Step 2Select Call Routing > Route/Hunt > Line Group.The Find and List Line Groups window opens.

Step 3 Select Add New.

The Line Group Configuration window opens.

Specify a unique name in the Line Group Name field. Specify number of seconds for RNA Reversion Timeout.
Specify number of seconds for RNA Reversion Timeout
speery number of seconds for KivA Keversion Threout.
Select a Distribution Algorithm to apply to the line group.
ter settings in the Hunt Options section as follows:
• Select a value for No Answer from the drop-down list.
• Select Automatically Logout Hunt Member on No Answer to configure auto logout of the hunt list.
• Select a value for Busy from the drop-down list.
• Select a value for Not Available from the drop-down list.
the Line Group Member Information section, you can do the following:
• Find directory numbers or route partitions to add to the line group.
• Reorder the directory numbers or route partitions in the line group.
• Remove directory numbers or route partitions from the line group.
lect Save.
t

What to do next

Configure a hunt list and add the line group to the hunt list.

Hunt List

A hunt list contains a set of line groups in a specific order. A hunt list associates with one or more hunt pilots and determines the order in which those line groups are accessed. The order controls the progress of the search for available directory numbers for incoming calls.

A hunt list comprises a collection of directory numbers as defined by line groups. After Cisco Unified Communications Manager determines a call that is to be routed through a defined hunt list, Cisco Unified Communications Manager finds the first available device on the basis of the order of the line group(s) that a hunt list defines.

A hunt list can contain only line groups. Each hunt list should have at least one line group. Each line group includes at least one directory number. A single line group can appear in multiple hunt lists.



Note

The group call pickup feature and directed call pickup feature do not work with hunt lists.

Configure Hunt List

Procedure

Step 1	Open the Cisco Unified CM Administration interface.
Step 2	Select Call Routing > Route/Hunt > Hunt List.
	The Find and Hunt List Groups window opens.
Step 3	Select Add New.
	The Hunt List Configuration window opens.
Step 4	Enter settings in the Hunt List Information section as follows:
	a. Specify a unique name in the Name field.
	b. Enter a description for the Hunt List.
	c. Select a Cisco Unified Communications Manager Group from the drop-down list.
	d. The system selects Enable this Hunt List by default for a new hunt list when the hunt list is saved.
	e. If this hunt list is to be used for voice mail, select For Voice Mail Usage.
Step 5	Select Save to add the hunt list.

What to do next

Add line groups to the hunt list.

Add Line Group to Hunt List

Before you begin

You must configure line groups and configure a hunt list.

Procedure

Step 1	Open the Cisco Unified CM Administration interface.
Step 2	Select Call Routing > Route/Hunt > Hunt List.
	The Find and Hunt List Groups window opens.
Step 3	Locate the hunt list to which you want to add a line group.
Step 4	To add a line group, select Add Line Group.
	The Hunt List Detail Configuration window displays.
Step 5	Select a line group from the Line Group drop-down list.
Step 6	To add the line group, select Save .

Step 7	To add additional line groups, repeat Step 4 to Step 6.
Step 8	Select Save.
Step 9	To reset the hunt list, select Reset . When the dialog box appears, select Reset .

Hunt Pilot

A hunt pilot comprises a string of digits (an address) and a set of associated digit manipulations that route calls to a hunt list. Hunt pilots provide flexibility in network design. They work in conjunction with route filters and hunt lists to direct calls to specific devices and to include, exclude, or modify specific digit patterns. For more information about hunt pilots, see the *System Configuration Guide for Cisco Unified Communications Manager*.

For more detailed information on the configuration options for hunt pilots, see the relevant *Cisco Unified Communications Manager documentation*.

Configure Hunt Pilot

Procedure

Step 1 Step 2	Open the Cisco Unified CM Administration interface. Select Call Routing > Route/Hunt > Hunt Pilot.
	The Find and List Hunt Pilots window opens.
Step 3	Select Add New.
	The Hunt Pilot Configuration window opens.
Step 4	Enter the hunt pilot, including numbers and wildcards.
Step 5	Select a hunt list from the Hunt List drop-down list.
Step 6	Enter any additional configurations in the Hunt Pilot Configuration window. For more information on hunt pilot configuration settings, see the relevant Cisco Unified Communications Manager documentation.
Step 7	Select Save.

Jabber to Jabber Call

Applies to: All clients except Cisco Jabber Softphone for VDI

Jabber to Jabber voice and video calling provides basic calling capabilities between two Cisco Jabber clients without using Cisco Unified Communications Manager. If Cisco Jabber users are not registered with Cisco Unified Communications Manager, they can still make Jabber to Jabber calls from Cisco Jabber.

Note

- Jabber to Jabber calling is only supported for users who authenticate to the Cisco Webex Messenger service.
- For Cisco Jabber for Windows clients, we recommend running Internet Explorer 10 or greater while using the Jabber to Jabber calling feature. Using the feature with previous versions of Internet Explorer or with Internet Explorer in Compatibility Mode can cause issues. These issues are with Cisco Jabber client login (non-SSO setup) or Jabber to Jabber calling capability (SSO setup).

Jabber to Jabber Call Experience

A Jabber to Jabber call does not support all the features of a Cisco Unified Communication Manager call. Users can make a Jabber to Jabber call with only one contact at a time. In a Jabber to Jabber call, users can experience any of the following scenarios:

- Cisco Jabber for mobile clients does not support HD video in portrait mode. To achieve HD video, you need to rotate the phone from portrait to landscape mode during the call.
- If two users start a Jabber to Jabber call to each other at the same time, the call is automatically connected. In such case, users do not receive any incoming call notification.
- When users are on a Jabber to Jabber call and start another call, the ongoing call ends immediately, even if the person they called does not answer.
- When on a Jabber to Jabber call and they receive an incoming Jabber to Jabber call, the **End Call And Answer** option is displayed. When they select this button, the ongoing Jabber to Jabber call ends and the incoming call is answered.
- For Jabber to Jabber calls on Cisco Jabber for mobile clients:
 - Cisco Jabber for mobile clients does not support HD video in portrait mode. To achieve HD video, you need to rotate the phone from portrait to landscape mode during the call.
 - When users are on a Jabber to Jabber call and they make a phone call, the ongoing Jabber to Jabber call ends immediately, even if the remote party does not answer.
 - When users are on a mobile call, they cannot answer any Jabber to Jabber call. The incoming Jabber to Jabber call is listed as a missed call.
 - When users are on a Jabber to Jabber call and they receive an incoming mobile call:
 - On an iPhone, the Jabber to Jabber call ends immediately, even if they do not answer the call.
 - On an Android phone, the Jabber to Jabber call ends immediately when they answer the incoming mobile call.

Supported In-Call Features

The following features are supported during a Jabber to Jabber call:

- · End a Jabber to Jabber call
- Mute or unmute the audio

- Start or stop the video
- Volume control
- Open or close or move the self-video
- Switch to front or back camera. This feature is only supported on the Cisco Jabber mobile clients.

Jabber to Jabber Call Cloud Deployment

Cloud deployment for Jabber to Jabber call uses the SDP/HTTPS setup. For cloud deployment, ensure the following:

- Install the following root certificate to use the Jabber to Jabber call feature: GoDaddy Class 2 Certification Authority Root Certificate. To resolve any warnings about this certificate name, install the required GoDaddy certificate.
- Include the following servers in the proxy server bypass list:
 - https://locus-a.wbx2.com/locus/api/v1
 - https://conv-a.wbx2.com/conversation/api/v1

For information on proxy server lists, see the *Configure Proxy Settings* in the Cisco Jabber Deployment Guides.

- Enable the range of media ports and protocols for RTP/SRTP over UDP: 33434-33598 and 8000-8100. For Jabber to Jabber call setup over HTTPS, enable port 443.
- Before you enable the Jabber to Jabber calling feature, complete the following tasks:
 - Contact the Cisco Customer Support team or your Cisco Customer Success Manager to request that
 your organization is added to the Cisco Common Identity server. This process to add users to the
 Common Identity server takes some time to complete and is necessary to access Jabber to Jabber
 calling capabilities.
 - For Single Sign On (SSO) users, you must set up SSO for Common Identity. For more information about configuring SSO, see the Cisco Webex Messenger documentation at this link: https://www.cisco.com/c/en/us/support/unified-communications/webex-messenger/ products-installation-guides-list.html.

For cloud deployments, Jabber to Jabber calling is configured on the Cisco Webex Messenger Administration tool with one of the following methods:

- Using the *P2P settings* in the *Configuration Tab* section. For more information, see the *Cisco Webex Messenger Administrator's Guide*.
- Using the Internal VoIP and External VoIP settings in the policy editor for Cisco Webex Messenger Administration tool. You can control the video services for Jabber to Jabber calls using the Internal Video and External Video policy actions. For more information, see the *Policy Editor* section of the *Cisco Webex Messenger Administration Guide*. Jabber to Jabber calling can be enabled for groups of users or all users.

Jabber to Jabber Hybrid Mode

Jabber to Jabber Call Experience in Hybrid Mode

In addition to the limitations for Jabber to Jabber, the following are the scenarios that occur when using Jabber to Jabber calls and Cisco Unified Communications Manager calls:

- When users are on a Jabber to Jabber call and make a Cisco Unified Communications Manager call, the ongoing Jabber to Jabber call ends immediately, even if the remote party does not answer.
- When users are on a Jabber to Jabber call and resume a Cisco Unified Communications Manager call from on hold, the Jabber to Jabber call ends immediately.
- When users are on a Jabber to Jabber call and receive an incoming Cisco Unified Communications Manager call, a notification with an **End Call And Answer** button displays. If your user selects this button the ongoing Jabber to Jabber call ends and the incoming call is answered.
- When users receive a Cisco Unified Communications Manager call, they can place the ongoing Cisco Unified Communications Manager call on hold to answer the new call.
- When users are on a Cisco Unified Communications Manager call and they choose to make a Jabber to Jabber call, the Cisco Unified Communications Manager call is put on hold immediately, even if the participant in the Jabber to Jabber call does not answer the call.
- When users are on a Cisco Unified Communications Manager call and they answer an incoming Jabber to Jabber call, the Cisco Unified Communications Manager call is put on hold immediately.
- If your user's line is configured on Cisco Unified Communications Manager to auto-answer calls and they receive an incoming Cisco Unified Communications Manager call when they are on a Jabber to Jabber call, the Jabber to Jabber call ends immediately without notification and the Cisco Unified Communications Manager call is answered.

Jabber to Jabber Bandwidth

Specifies the maximum bandwidth (in kilobits per second) to be used for Jabber to Jabber calls. The video quality (resolution) of the call is lowered so that it meets the bandwidth limit. This feature is configured using the J2JMaxBandwidthKbps parameter.

For more information on parameters, see the Parameter Reference Guide for your release.

Let Users Without Voicemail Ignore Calls

Applies to: All clients.

You can choose a NoVoicemail profile for users who don't have voicemail configured. Jabber displays an **Ignore call** option for these users.

Configure a Device with No Voicemail

You can configure a device with no voicemail and users can ignore an incoming call in the Jabber client.

Procedure

Step 1	From Cisco Unified CM IM and Presence Administration, go to Device > Phone.
Step 2	Find and select the device.
Step 3	In the Association Information, choose the directory number.
Step 4	In the Directory Number Settings, choose NoVoicemail for Voice Mail Profile.
Step 5	Click Save and then select Apply Config.

Meeting Controls for Video Device-Enabled Meetings

Set up Cisco Jabber so users can join Webex meetings from Jabber without having to launch Webex.

Procedure

Step 1	Configure your outgoing firewall to allow the following domains: *.ciscospark.com, *.wbx2.com, *.webex.com, *.clouddrive.com.
Step 2	Configure a SIP trunk in Cisco Unified Communications Manager with Expressway for MRA and then Webex to enable communication using SIP signals. For more information, see System Configuration Guide for Cisco Unified Communications Manager.
Step 3	Configure a route pattern in Cisco Unified Communications Manager to route inbound and outbound SIP calls. For more information, see the <i>Configure Call Routing</i> chapter in System Configuration Guide for Cisco Unified Communications Manager.
Step 4	Set up rules in Webex for outbound SIP call routing to the Cisco Unified Communications Manager server. For more information, see the Cisco Meeting Server 2.3 with Cisco Unified Communications Manager Deployment Guide.

Move to Mobile

Applies to: Cisco Jabber for Android, Cisco Jabber for iOS

Users can transfer an active VoIP call from Cisco Jabber to their mobile phone number on the mobile network. This feature is useful when a user on a call leaves the Wi-Fi network (for example, leaving the building to walk out to the car), or if there are voice quality issues over the Wi-Fi network.



Note

The Move to Mobile feature requires a mobile telephone network connection with a phone number. Users must have a TCT or BOT device.

Implementation Method	Description	Instructions
Handoff DN	The mobile device calls Cisco Unified Communications Manager using the mobile network.	See the Enable Handoff from VoIP to Mobile Network topic.
	This method requires a Direct Inward Dial (DID) number.	
	The service provider must deliver the DID digits exactly as configured. Alternately, for Cisco IOS gateways with H.323 or SIP communication to Cisco Unified Communications Manager, you can use Cisco IOS to manipulate the inbound called-party number at the gateway, presenting the digits to Cisco Unified Communications Manager exactly as configured on the handoff DN. This method does not work for iPod Touch	
Mobility Softkey	devices. Cisco Unified Communications Manager calls the phone number of the PSTN mobile service provider for the mobile device.	See the Enable Transfer from VoIP to Mobile Network topic.
None of the above	Disable this feature if you do not want to make it available to users.	Select Disabled for the Transfer to Mobile Network option in the Product Specific Configuration Layout section of the TCT device page. Select Disabled for the Transfer to Mobile Network option in the Product
		Specific Configuration Layout section of the BOT device page.

There are two ways to enable this feature. You can also disable it.

Enable Handoff from VoIP to Mobile Network

Set up a directory number that Cisco Unified Communications Manager can use to hand off active calls from VoIP to the mobile network. Match the user's caller ID with the Mobility Identity to ensure that Cisco Unified Communications Manager can recognize the user. Set up the TCT device and mobile device to support handoff from VoIP to the mobile network.

Set up a directory number that Cisco Unified Communications Manager can use to hand off active calls from VoIP to the mobile network. Match the user's caller ID with the Mobility Identity to ensure that Cisco Unified Communications Manager can recognize the user. Set up the BOT device and mobile device to support handoff from VoIP to the mobile network.

Set Up Handoff DN

Before you begin

Determine the required values. The values that you choose depend on the phone number that the gateway passes (for example, seven digits or ten digits).

Procedure

Open the	e Cisco Unified CM Administration interface.
Select C	all Routing > Mobility > Handoff Configuration.
	e Handoff Number for the Direct Inward Dial (DID) number that the device uses to hand off a VoIP e mobile network.
with H.3 manipula	ice provider must deliver the DID digits exactly as configured. Alternately, for Cisco IOS gateways 23 or SIP communication to Cisco Unified Communications Manager, you can use Cisco IOS to ate the inbound called-party number at the gateway, presenting the digits to Cisco Unified nications Manager exactly as configured on the handoff number.
Note	You cannot use translation patterns or other similar manipulations within Cisco Unified Communications Manager to match the inbound DID digits to the configured Handoff DN.
Select th	e Route Partition for the handoff DID.
-	ition should be present in the Remote Destination inbound Calling Search Space (CSS), which points the Inbound CSS of the Gateway or Trunk, or the Remote Destination CSS.
This feat	aure does not use the remaining options on this page.

Step 5 Select Save.

Match Caller ID with Mobility Identity

To ensure that only authorized phones can initiate outbound calls, calls must originate from a phone that is set up in the system. To do this, the system attempts to match the caller ID of the requesting phone number with an existing Mobility Identity. By default, when a device initiates the Handoff feature, the caller ID that is passed from the gateway to Cisco Unified Communications Manager must exactly match the Mobility Identity Identity number that you entered for that device.

However, your system may be set up such that these numbers do not match exactly. For example, Mobility Identity numbers may include a country code while caller ID does not. If so, you must set up the system to recognize a partial match.

Be sure to account for situations in which the same phone number may exist in different area codes or in different countries. Also, be aware that service providers can identify calls with a variable number of digits, which may affect partial matching. For example, local calls may be identified using seven digits (such as 555 0123) while out-of-area calls may be identified using ten digits (such as 408 555 0199).

Before you begin

Set up the Mobility Identity. See the Add Mobility Identity topic.

To determine whether you need to complete this procedure, perform the following steps. Dial in to the system from the mobile device and compare the caller ID value with the Destination Number in the Mobility Identity. If the numbers do not match, you must perform this procedure. Repeat this procedure for devices that are issued in all expected locales and area codes.

Procedure

Step 1	Open the Cisco Unified CM Administration interface.
Step 2	Select System > Service Parameters.
Step 3	Select the active server.
Step 4	Select the Cisco CallManager (Active) service.
Step 5	Scroll down to the Clusterwide Parameters (System - Mobility) section.
Step 6	Select Matching Caller ID with Remote Destination and read essential information about this value.
Step 7	Select Partial Match for Matching Caller ID with Remote Destination.
Step 8	Select Number of Digits for Caller ID Partial Match and read the essential requirements for this value.
Step 9	Enter the required number of digits to ensure partial matches.
Step 10	Select Save.

Set Up User and Device Settings for Handoff

Before you begin

- Set up the user device on the Cisco Unified Communications Manager.
- Set up the user with a Mobility Identity.

Procedure

Step 1	In the Cisco Unified CM Administration interface, go to the TCT Device page, and select Use Handoff DN Feature for the Transfer to Mobile Network option.
	Do not assign this method for iPod Touch devices. Use the Mobility Softkey method instead.
Step 2	In the Cisco Unified CM Administration interface, go to the BOT Device page, and select Use Handoff DN Feature for the Transfer to Mobile Network option.
Step 3	On the iOS device, tap Settings > Phone > Show My Caller ID to verify that Caller ID is on.
Step 4	On some Android device and operating system combinations, you can verify that the Caller ID is on. On the Android device, open the Phone application and tap Menu > Call Settings > Additional settings > Caller ID > Show Number.
Step 5	Test this feature.

Enable Transfer from VoIP to Mobile Network

Procedure

- **Step 1** Open the Cisco Unified CM Administration interface.
- **Step 2** For system-level settings, check that the Mobility softkey appears when the phone is in the connected and on-hook call states.
 - a) Select Device > Device Settings > Softkey Template.
 - b) Select the same softkey template that you selected when you configured the device for Mobile Connect.
 - c) In the Related Links drop-down list at the upper right, select Configure Softkey Layout and select Go.
 - d) In the call state drop-down list, select the On Hook state and verify that the Mobility key is in the list of selected softkeys.
 - e) In the call state drop-down list, select the Connected state and verify that the Mobility key is in the list of selected softkeys.
- **Step 3** Navigate to the device that you want to configure as follows:
 - a) Select **Device** > **Phone**.
 - b) Search for the device that you want to configure.
 - c) Select the device name to open the Phone Configuration window.
- **Step 4** For the per-user and per-device settings in Cisco Unified Communications Manager, set the specific device to use the Mobility softkey when the device transfers calls to the mobile voice network. Ensure that you have set up both Mobility Identity and Mobile Connect for the mobile device. After the transfer feature is working, users can enable and disable Mobile Connect at their convenience without affecting the feature.

If the device is an iPod Touch, you can configure a Mobility Identity using an alternate phone number such as the mobile phone of the user.

- a) Select the **Owner User ID** on the device page.
- b) Select the Mobility User ID. The value usually matches that of the Owner User ID.
- c) In the Product Specific Configuration Layout section, for the Transfer to Mobile Network option, select Use Mobility Softkey or Use HandoffDN Feature.
- **Step 5** In the User Locale field, choose **English**, **United States**.
- Step 6 Select Save.
- Step 7 Select Apply Config.
- **Step 8** Instruct the user to sign out of the client and then to sign back in again to access the feature.

What to do next

Test your settings by transferring an active call from VoIP to the mobile network.

Multiline

Applies to: Cisco Jabber for Windows and Cisco Jabber for Mac.

You can configure multiple phone lines for your users to perform daily Cisco Jabber tasks. You can add up to 8 phone lines for each user. You can configure multiline for your users on Cisco Services Framework (CSF) device.

Multiline is supported on Cisco Unified Communications Manager release 11.5 SU3 and later. However, if you are using Cisco Unified Communications Manager release 11.5 SU3 and Cisco Unified Communications Manager release 12.0, you must manually install the Cisco Options Package (COP) file on all cluster nodes and restart Cisco Unified Communications Manager to enable multiline.

After you have installed and configured Multiline, your users can:

- Select a preferred line for making calls.
- View missed calls and voicemails.
- Use call forwarding, transfers, and conference calls on all lines.

Multiline supports the following features on all lines:

- Far End Camera Control (FECC) and Binary Floor Control Protocol (BFCP)
- Hunt groups
- Call recording and silent monitoring
- Shared line, dial rules, and directory lookup
- Accessory manager

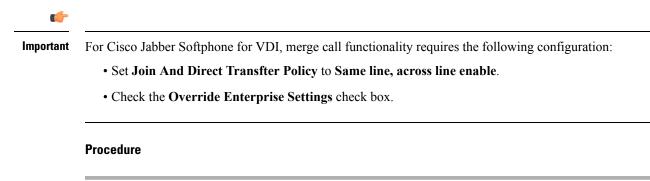
If Multiline is enabled, these features are only available on the primary line:

- Call pickup
- CTI control for the desk phone
- Extend & Connect

Configure Multiline

Before you begin

Create and add user profiles in Cisco Unified Communications Manager.



Step 1 From **Cisco Unified CM Administration**, go to **Device** > **Phone**, and find and select the device.

Step 2 For each line you want to configure:

- a. Click Add a new DN, enter a Directory Number.
- b. Add any additional configurations and click Save.

Enable Multiline MRA Access

Multiline is supported when using Cisco Jabber for Desktop in Mobile and Remote Access (MRA) mode. This function can be enabled in the Cisco TelePresence Video Communication Server (VCS-C).

Procedure

 Step 1
 Go to VCS-C.

 Step 2
 Select VSC-C configuration > Unified Communication > Configuration > SIP Path headers and set it to On.

Personal Rooms

Applies to: All clients

A personal room is a virtual conference room that is always available and can be used to meet with people. Cisco Jabber uses the personal room feature of Cisco Webex Meetings to allow users to easily meet with their contacts using the **Start meeting** option in the client.

Procedure

- Step 1
 Personal Rooms are enabled by default for users on Cisco Webex Meetings. For more information see the Cisco Webex Meetings documentation available here: https://www.cisco.com/c/en/us/support/conferencing/ webex-meeting-center/products-installation-and-configuration-guides-list.html
- Step 2 Users can configure their personal rooms for all instant meetings by selecting Use Personal Room for all my instant meetings in Cisco Webex Meetings.

Push Notification Service for Cisco Jabber Video and Voice Calls

Applies to: Cisco Jabber for iPhone and iPad.

Cisco Jabber users can receive push notification for Jabber voice and video calls. This feature works when the device is locked, whether Cisco Jabber runs in the background or foreground, and whether the Cisco Jabber IM service is connected. For Release 11.9 and earlier, Cisco Jabber used VoIP-sockets to contact the Unified CM server periodically. Incoming calls reached Jabber through the VoIP sockets. From Release 12.1 onwards, the Apple Push Notification (APN) implementation supports push notification for users with AES enabled. Users continue to receive push notification even if the VoIP-sockets are disabled.



Note

If the user manually terminates Jabber with the push notification service enabled, then the **ForceLogoutTimerMobile** parameter does not function. We recommend that you disable the push notification service if you want to use the **ForceLogoutTimerMobile** parameter.

Prerequisites

- Cisco Unified Communications Manager 11.5.1 SU3 version or later
- Cisco Expressway X8.10

Jabber registers to APN services during the sign-in process. Users must sign in to Jabber to receive the push notifications service.

How Push Notifications Are Delivered to Jabber

The Unified CM server pushes the notification to the Cisco cloud server, and the Cisco cloud server pushes this notification to the APN service. The APN service then delivers this notification to Jabber on the Cisco Jabber devices such as the iPhone and iPad. These devices relaunches Jabber to retrieve the call from the Unified CM server, thus making it possible to receive the incoming calls at any time.

Supported Services

- · On-Premises and Cloud deployment modes
- Phone-only and Full UC modes
- Shared line (You can pick the call from one device and transfer it to Jabber using Hold and Resume functions)
- CallKit (You can switch between Jabber calls, Jabber to native calls, and native to Jabber calls)

Limitations

- If an incoming call disconnects before Jabber retrieves the call from the Unified CM server, then the missed call or call history is not recorded.
- If you have both Cisco Jabber and Cisco Webex Teams installed, the application that first receives the incoming call displays the callkit.
- Users receive no notifications for peer-to-peer communications.
- If you kill or suspend Jabber and you answer an incoming call, Jabber starts a connection to Unified CM. In this case, you might see a "call connecting" phase.

Enable Push Notification Service on Cisco Unified Communications Manager

Procedure

Step 1	Go to Cisco Unified CM Administration > Advanced Features > Cisco Cloud Onboarding.
Step 2	From the Notification Settings, check Enable Push Notification.
Step 3	Click Save.

Single Number Reach

Applies to: All clients.

With Single Number Reach (SNR), a user can automatically forward calls from their work number to their mobile phone if:

• Cisco Jabber isn't available.

After Jabber becomes available again and connects to the corporate network, Unified CM sends calls to the Jabber client, rather than using SNR.

• Jabber mobile users select Mobile Voice Network or Autoselect and they're outside their Wi-Fi network.

A user can select or clear their SNR destination number from Cisco Jabber.

Enable Single Number Reach

Use the following procedure to enable single number reach for your users.

Before you begin

Make sure that the user has a device already assigned to them.

Procedure

Step 1	Open the Cisco Unified CM Administration interface.			
Step 2	Configure the end user for single number reach as follows:			
	a) Go to User Management > End User, search for the user and click their name.			
	b) In the Mobility Information section, check the Enable Mobility check box.			
	c) On Cisco Unified Communications Manager Release 9.0 and earlier, specify the Primary User Device.			
	d) Click Save.			
Step 3	Create their remote destination profile.			
	a) Go to Device > Device Settings > Remote Destination Profile > Add New.			

b) Enter the required values and click **Save**.

- c) Click **Add a New Directory Number** and enter the directory number of the desk phone to associate with the remote destination profile.
- d) Click Save.
- e) Click Add a New Remote Destination, enter the number for your remote destination in Destination number and choose the User ID.
- f) Click Enable Unified Mobility features, and click the following options:
 - Enable Single Number Reach
 - Enable Move to Mobile
- g) Click Save.

Limitations

For Cisco TelePresence Video Communication Server Control (VCS) versions earlier than 8.10.X, you need to configure the following to enable the single number reach for your users who are using Cisco Jabber over Mobile and Remote Access.

Procedure

- Step 1
 From Cisco TelePresence Video Communication Server Control (VCS), choose Configuration > Unified

 Communications > HTTP allow list > Editable inbound rules
- **Step 2** Click New to create a new entry
- **Step 3** Enter the following details:
 - Description—Enter the required description.
 - URL-Enter the URL details. For example, https://[CUCM domain name]: port number.
 - Allowed Methods-Check the default value. For example, GET, POST, PUT
 - Match Type—Choose Prefix match from the drop-down list.

Step 4 Click Save.

URI Dialing

Applies to: All clients

You can use the URI dialing feature for on-premises deployments. URI dialing requires Cisco Unified Communications Manager, Release 9.1(2) or later.



Important

The mobile clients don't support URI dialing when you enable the Dial via Office-Reverse feature.

You enable this feature in the jabber-config.xml file with the EnableSIPURIDialling parameter.

Example: <EnableSIPURIDialling>True</EnableSIPURIDialling>

For more information on the values of the parameter, see the Parameters Reference Guide.

URI dialing allows users to make calls and resolve contacts with Uniform Resource Identifiers (URI). For example, a user whose name is Adam McKenzie has the following SIP URI associated with his directory number: amckenzi@example.com. URI dialing enables users to call Adam with his SIP URI, rather than his directory number.

For detailed information on URI dialing requirements and advanced configuration including ILS setup, see the URI Dialing section of the System Configuration Guide for Cisco Unified Communications Manager.

Associate URIs to Directory Numbers

When users make URI calls, Cisco Unified Communications Manager routes the inbound calls to the directory numbers associated to the URIs. For this reason, you must associate URIs with directory numbers. You can either automatically populate directory numbers with URIs or configure directory numbers with URIs.

Automatically Populate Directory Numbers with URIs

When you add users to Cisco Unified Communications Manager, you populate the **Directory URI** field with a valid SIP URI. Cisco Unified Communications Manager saves that SIP URI in the end user configuration.

When you specify primary extensions for users, Cisco Unified Communications Manager populates the directory URI from the end user configuration to the directory number configuration. In this way, automatically populates the directory URI for the user's directory number. Cisco Unified Communications Manager also places the URI in the default partition, which is **Directory URI**.

The following task outlines, at a high level, the steps to configure Cisco Unified Communications Manager so that directory numbers inherit URIs:

Procedure

- Step 1 Add devices.
- **Step 2** Add directory numbers to the devices.
- **Step 3** Associate users with the devices.
- **Step 4** Specify primary extensions for users.

What to do next

Verify that the directory URIs are associated with the directory numbers.

Configure Directory Numbers with URIs

You can specify URIs for directory numbers that are not associated with users. You should configure directory numbers with URIs for testing and evaluation purposes only.

To configure directory numbers with URIs, do the following:

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Procedure

Step 1	Open the Cisco Unified CM Administration interface.					
Step 2	Select Call Routing > Directory Number.					
	The Find and List Directory Numbers window opens.					
Step 3	Find and select the appropriate directory number.					
	The Directory Number Configuration window opens.					
Step 4	Locate the Directory URIs section.					
Step 5	Specify a valid SIP URI in the URI column.					
Step 6	Select the appropriate partition from the Partition column.					
	Note	You cannot manually add URIs to the system Directory URI partition. You should add the URI to the same route partition as the directory number.				
Step 7	Add the partition to the appropriate calling search space so that users can place calls to the directory numbers.					
Step 8	Select Save.					

Associate the Directory URI Partition

You must associate the default partition into which Cisco Unified Communications Manager places URIs with a partition that contains directory numbers.

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Important	To enable URI dialing, you must associate the default directory URI partition with a partition that contains directory numbers.			
	If you do not already have a partition for directory numbers within a calling search space, you should create a partition and configure it as appropriate.			
	Procedure			
Step 1	Open the Cisco Unified CM Administration interface.			
Step 2	Select System > Enterprise Parameters.			
	The Enterprise Parameters Configuration window opens.			
Step 3	Locate the End User Parameters section.			
Step 4	In the Directory URI Alias Partition row, select the appropriate partition from the drop-down list.			
Step 5	Click Save.			

The default directory URI partition is associated with the partition that contains directory numbers. As a result, Cisco Unified Communications Manager can route incoming URI calls to the correct directory numbers.

You should ensure the partition is in the appropriate calling search space so that users can place calls to the directory numbers.

Enable FQDN in SIP Requests for Contact Resolution

To enable contact resolution with URIs, you must ensure that Cisco Unified Communications Manager uses the fully qualified domain name (FQDN) in SIP requests.

Procedure

Step 1 Step 2	Open the Cisco Unified CM Administration interface. Select Device > Device Settings > SIP Profile .		
	The Find and List SIP Profiles window opens.		
Step 3	Find and select the appropriate SIP profile.		
	Remember You cannot edit the default SIP profile. If required, you should create a copy of the default SIP profile that you can modify.		
Step 4	Select Use Fully Qualified Domain Name in SIP Requests and then select Save.		

What to do next

Associate the SIP profile with all devices that have primary extensions to which you associate URIs.

Voicemail Avoidance

Applies to: All clients

Voicemail avoidance is a feature that prevents calls from being answered by the mobile service provider voice mail. This feature is useful if a user receives a Mobile Connect call from the enterprise on the mobile device. It is also useful when an incoming DvO-R call is placed to the mobile device.

You can set up voicemail avoidance in one of two ways:

- Timer-controlled—(Default) With this method, you set timers on the Cisco Unified Communications Manager to determine if the call is answered by the mobile user or mobile service provider voicemail.
- User-controlled—With this method, you set Cisco Unified Communications Manager to require that a
 user presses any key on the keypad of the device to generate a DTMF tone before the call can proceed.

If you deploy DvO-R, Cisco recommends that you also set user-controlled voicemail avoidance. If you set user-controlled Voicemail Avoidance, this feature applies to both DvO-R and Mobile Connect calls.

For more information about voicemail avoidance, see the *Confirmed Answer and DvO VM detection* section in the *Cisco Unified Communications Manager Features and Services Guide* for your release.

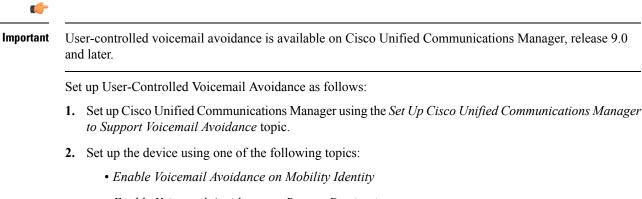
Set Up Timer-Controlled Voicemail Avoidance

Set up the timer control method by setting the **Answer Too Soon Timer** and **Answer Too Late Timer** on either the Mobility Identity or the Remote Destination. For more information, see the *Add Mobility Identity* or *Add Remote Destination (Optional)* topics.

Before you begin

Timer-controlled voicemail avoidance is supported on Cisco Unified Communications Manager, release 6.0 and later.

Set Up User-Controlled Voicemail Avoidance



• Enable Voicemail Avoidance on Remote Destination



Important Cisco does not support user-controlled voicemail avoidance when using DvO-R with alternate numbers that the end user sets up in the client. An alternate number is any phone number that the user enters in the DvO Callback Number field on the client that does not match the phone number that you set up on the user's Mobility Identity.

If you set up this feature with alternate numbers, the Cisco Unified Communications Manager connects the DvO-R calls even if the callback connects to a wrong number or a voicemail system.

Set Up Cisco Unified Communications Manager to Support Voicemail Avoidance

Use this procedure to set up the Cisco Unified Communications Manager to support user-controlled Voicemail Avoidance.

Procedure

Step 1Open the Cisco Unified CM Administration interface.Step 2Select System > Service Parameters.Step 3In the Server drop-down list, select the active Cisco Unified Communications Manager.Step 4In the Service drop-down list, select the Cisco Call Manager (Active) service.

Step 5	Configure the settings in the Clusterwide Parameters (System - Mobility Single Number Reach Voicemail) section.			
	Note	The settings in this section are not specific to Cisco Jabber. For information about how to configure these settings, see the <i>Confirmed Answer and DvO VM detection</i> section in the <i>Cisco Unified Communications Manager Administrator Guide</i> for your release.		
Step 6	Click Sa	ive.		

Enable Voicemail Avoidance on Mobility Identity

Use this procedure to enable user-controlled voicemail avoidance for the end user's mobility identity.

Before you begin

- Set up the annunciator on the Cisco Unified Communications Manager. For more information, see the *Annunciator setup* section in the *Cisco Unified Communications Manager Administrator Guide* for your release.
- If you set up a Media Resource Group on the Cisco Unified Communications Manager, set up the annunciator on the Media Resource Group. For more information, see the *Media resource group setup* section in the *Cisco Unified Communications Manager Administrator Guide* for your release.

Procedure

Step 1	Open the Cisco Unified CM Administration interface.					
Step 2	Navigate to the device that you want to configure as follows:					
	a) Select Device > Phone .					
	b) Search for the device that you want to configure.					
	c) Sele	ct the device name to open the Phone Configuration window.				
Step 3	In the Associated Mobility Identity section, click the link for the Mobility Identity.					
	Note	To ensure that the Voicemail Avoidance feature works correctly, the DvO Callback Number that the end user enters in the Cisco Jabber client must match the Destination Number that you enter on the Mobility Identity Configuration screen.				
Step 4	Set the p	policies as follows:				
		co Unified Communications Manager release 9 — In the Single Number Reach Voicemail Policy p-down list, select User Control .				
	• Cisco Unified Communications Manager release 10 without Dial via Office — In the Single Number Reach Voicemail Policy drop-down list, select User Control.					
	• Cis	co Unified Communications Manager release 10 with Dial via Office				
		• In the Single Number Reach Voicemail Policy drop-down list, select Timer Control.				

• In the Dial-via-Office Reverse Voicemail Policy drop-down list, select User Control.

Step 5 Click Save.

Enable Voicemail Avoidance on Remote Destination

Use this procedure to enable user-controlled voicemail avoidance for the end user's remote destination.

Before you begin

- Set up the annunciator on the Cisco Unified Communications Manager. For more information, see the *Annunciator setup* section in the Cisco Unified Communications Manager Administrator Guide for your release.
- If you set up a Media Resource Group on the Cisco Unified Communications Manager, set up the annunciator on the Media Resource Group. For more information, see the *Media resource group setup* section in the Cisco Unified Communications Manager Administrator Guide for your release.

Procedure

- **Step 1** Open the **Cisco Unified CM Administration** interface.
- **Step 2** Navigate to the device that you want to configure as follows:
 - a) Select **Device** > **Phone**.
 - b) Search for the device that you want to configure.
 - c) Select the device name to open the **Phone Configuration** window.
- **Step 3** In the Associated Remote Destinations section, click the link for the associated remote destination.
- **Step 4** Set the policies as follows:
 - Cisco Unified Communications Manager release 9 In the Single Number Reach Voicemail Policy drop-down list, select User Control.
 - Cisco Unified Communications Manager release 10 without Dial via Office In the Single Number Reach Voicemail Policy drop-down list, select User Control.
 - Cisco Unified Communications Manager release 10 with Dial via Office
 - In the Single Number Reach Voicemail Policy drop-down list, select Timer Control.
 - In the Dial-via-Office Reverse Voicemail Policy drop-down list, select User Control.

Step 5 Click Save.