Cisco Jabber for Mobile

This chapter provides information about functionality for Cisco Mobile VoIP Clients which connect directly with Cisco Unified Communications Manager. This chapter discusses the features and the required configurations.

Cisco Mobile VoIP Clients register directly with Cisco Unified Communications Manager

Cisco Mobile is the name given to a family of clients that run on mobile devices. Different Cisco Mobile clients offer different features. Features may include the following:

- Direct connection from Cisco Unified Communications Manager to mobile client without proxy server
- Dial-via-Office (DVO) optimization settings for toll reduction
- Enable/disable Cisco Unified Mobility from mobile phone
- Dial-via-Office Reverse Callback
- Dial-via-Office Forward
- Ability to transfer active Dial-via-Office calls between the mobile device and the desktop phone

See the following documentation for details about configuring Cisco Unified Mobility and Cisco Mobile VoIP Clients:

- End-user guides for Cisco Mobile VoIP Clients.
- End-user guide for a particular Cisco Unified IP Phone for procedures that end users follow to configure the Cisco Unified Mobility settings for their phones by using the Cisco Unified CM User Options windows.

- Configuration for Cisco Mobile VoIP Clients, page 2
- Cisco Mobile VoIP Clients, page 2
- Interactions and Limitations, page 5
- System Requirements, page 6
- Configure Cisco Mobile VoIP Clients, page 6
Configuration for Cisco Mobile VoIP Clients

See the Cisco Mobility installation guide for complete configuration instructions for Cisco Mobile VoIP Clients.

For more information on Cisco Unified Mobility features that are available upon configuration of the Cisco Unified Mobility Advantage server, see the List of Cisco Mobile VoIP Client Features, on page 2.

Cisco Mobile VoIP Clients

This section provides information about Cisco Mobile VoIP clients.

Be aware that special configuration in Cisco Unified Communications Manager Administration is required for features that Cisco Mobile VoIP Clients provide.

Terminology

The following table provides definitions of terms that are related to Cisco Unified Mobility with Cisco Mobile VoIP Clients.

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Cisco Mobile 8.x</td>
<td>These direct-connect dual-mode clients support voice-over-Wi-Fi (for costing savings) in addition to cellular. They connect to Cisco Unified Communications Manager directly without the need of a proxy server.</td>
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List of Cisco Mobile VoIP Client Features

This section provides a list of Cisco Unified Mobility features that are available to mobile phone users when the Cisco Mobile VoIP Client has been configured. This material discusses configuration within Cisco Unified Communications Manager Administration.

The following entities and features require configuration of Cisco Unified Mobility in Cisco Unified Communications Manager Administration:

- Direct connection from Cisco Unified Communications Manager to mobile client without proxy server - This feature provides server-side support for Cisco Mobile VoIP Clients to connect to Cisco Unified Communications Manager directly and thus eliminate Cisco Unified Mobility Advantage in the deployment. Cisco Unified Communications Manager adjusts to support direct connection with the Cisco Mobile VoIP Client.

- DVO Optimization Settings for Toll Reduction - This feature supports a pre-configured policy to determine which mobile origination call (DVO-R or DVO-F) yields the least cost to the enterprise; this determination is typically based on locations. Administrators assign a profile based on the user location and any other available information. Least cost routing negotiates with Cisco Unified Communications
Manager to determine whether DVO-R or DVO-F generates the least cost, then chooses the less costly method for making the call.

- Enable/Disable Cisco Unified Mobility From Mobile Phone - This feature allows the Cisco Mobile VoIP Client to change the Cisco Unified Mobility status dynamically and keep the Cisco Unified Mobility Status between Cisco Unified Communications Manager and the client in sync. This feature provides the flexibility to the end user: the end user can change the user Cisco Unified Mobility status from the user mobile phone, not just from the GUI website.

The following features, which were originally part of Cisco Unified MobilityManager, now reside in Cisco Unified Communications Manager:

- Cisco Unified Mobility
- Desktop Call Pickup
- Access List

Cisco Unified Communications Manager also supports the following Cisco Unified Mobility features:

- Midcall Enterprise Feature Support Using DTMF
- Dual-mode Phone Support
- Manual Handoff of Calls on a Dual-mode Phone
- Time-of-Day Access
- Directed Call Park via DTMF
- SIP URI Dialing

See topics related to the benefits of Cisco Unified Mobility features for a discussion of other benefits of Cisco Unified Mobility features, such as simultaneous desktop ringing, single enterprise voice mailbox, system remote access, caller ID, remote on/off control, call tracing, security and privacy for Cisco Unified Mobility calls, and smartphone support.

Related Topics

Benefits of Cisco Unified Mobility Features
Cisco Unified Mobility
Direct Connection From CUCM to Mobile Client, on page 3
DVO Optimization Settings, on page 4
Enable or Disable Cisco Unified Mobility From Mobile Phone, on page 5
Cisco Unified Mobility

Direct Connection From CUCM to Mobile Client

Registration between the Cisco Mobile VoIP Client and Cisco Unified Communications Manager takes place over a separate TCP port. (The shared or pooled connection that was used by the Cisco Unified Mobility Advantage server is not used.) Keepalive messages between the Cisco Mobile VoIP Client and Cisco Unified Communications Manager remain the same as those passed between Cisco Unified Communications Manager...
and Cisco Unified Mobility Advantage. Cisco Mobile VoIP Client registration with Cisco Unified Communications Manager introduces no new alarms, and registration takes place over the SIP channel.

**Figure 1: Cisco Mobile VoIP Client Registration with Cisco Unified Communications Manager**

If the client is running on the iPhone and the Cisco Mobile VoIP Client is unable to complete the SIP dialog, the Cisco Unified Communications Manager retains the PSTN call. (The PSTN call does not drop even if the SIP stat times out.) For example, if Cisco Unified Communications Manager does not receive an ACK message after it sends a 200 OK message, the PSTN call gets retained.

**Limitation for Direct Connection From Cisco Unified Communications Manager to Mobile Client**

This feature specifies the following limitation:

- If the SIP dialog between Cisco Unified Communications Manager and the Cisco Mobile VoIP Client is not complete, the dialog cannot be used for further midcall feature invocations. The user can, however, invoke midcall features through the DTMF interface.

**DVO Optimization Settings**

This feature supports a pre-configured policy to determine which mobile origination call (DVO-R or DVO-F) yields the least cost to the enterprise; this determination is typically based on locations. This feature benefits the mobile user by allowing the user to find the least cost when making a mobile call. The DNIS pool provides a list of Direct Inward Dialing (DID) numbers so that the user, if roaming, can choose a non-international number for the mobile call. Least cost routing negotiates with Cisco Unified Communications Manager to determine whether DVO-R or DVO-F generates the least cost, then chooses the less costly method for making the call.
**Reasons for Least Cost Routing and DNIS Pool**

The following reasons make this feature desirable:

- Administrator can decide upon the DVO call type, DVO-F or DVO-R, for least cost call routing. In certain regions and with certain service providers, DVO-F can be more economical for mobile users; in other regions, DVO-R can be more economical. For example, in regions where incoming calls are free for mobile phone users, configuring a DVO-R call for mobile phone users achieves least cost call routing.

- Scalability - Multiple users in a given region can use a single mobility profile, which comprises region, service provider, location, and so forth. Here, "users" refers to the clients under actual end users. The administrator does not need to create a mobility profile for each end user.

- Single DID within a cluster for all DVO-F calls - For such DVO-F calls, the client makes an incoming call to Cisco Unified Communications Manager by using a particular DID.

- Multisite cluster - For a multisite cluster, a client in cluster A (such as the UK) uses the DID of cluster B (such as San Jose) for DVO-F calls, which incurs costs.

- DVO-R - Trunk allows calls that originate from a local DID. At times, when a client makes an outgoing DVO-R call, the client trunk may not allow an outgoing call if the caller ID does not lie in a specific range. For example, if a UK client invokes DVO-R, the callback call from the trunk at the San Jose cluster shows 408. When this call reaches the UK, the service provider trunk may not recognize the 408 and therefore not allow the call. Therefore, the caller IDs need to specify the local identifiable values.

**Characteristics of DVO Optimization Settings for Toll Reduction**

This feature involves the use of mobility profiles, which the administrator configures by using the Call Routing > Mobility > Mobility Profile menu path in Cisco Unified Communications Manager Administration. See the Mobility Profile Configuration for additional details about mobility profiles.

The DVO Optimization Settings for Toll Reduction feature does not change the alternate callback mechanism that DVO-R calls use: the client continues to control alternate callback.

**Limitation of DVO Optimization Settings for Toll Reduction**

The DVO Optimization Settings for Toll Reduction feature specifies the following limitation:

- Least Cost Routing (LCR) rules are applied after application dial rules. Called party transformations and call forward scenarios do not get considered for LCR.

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**Enable or Disable Cisco Unified Mobility From Mobile Phone**

The Cisco Mobile VoIP Client can update its Cisco Unified Mobility status directly.

**Interactions and Limitations**

Be aware that most standard Cisco Unified Communications Manager features are fully compatible with Cisco Unified Mobility features. See the chapter for Cisco Unified Mobility for details of any exceptions.

**Related Topics**

- Cisco Unified Mobility
System Requirements

See the Cisco Mobile release notes for detailed system requirements.

Configure Cisco Mobile VoiP Clients

For details about configuring the Cisco Mobile VoiP Clients, see the configuration guides for Cisco Mobile VoiP Clients.