



Integrate Cisco Jabber with Applications

- [Configure Presence in Microsoft SharePoint 2010 and 2013, on page 1](#)
- [Client Availability, on page 2](#)
- [Protocol Handlers, on page 3](#)

Configure Presence in Microsoft SharePoint 2010 and 2013

If your organization defines users' profiles where their IM address is different from their email address, then additional configuration is required to enable presence integration between the client and Microsoft SharePoint 2010 and 2013.

Before you begin

- For Cisco Jabber for Windows clients only.
- Ensure that all sites are in sync with Microsoft SharePoint Central Administration (CA).
- Ensure that synchronization between Microsoft SharePoint and Active Directory is set up.

Procedure

- Step 1** If you have Microsoft SharePoint 2013, update the SharePoint CA profile pages for users with the following information:
- a) For the **SIP Address** profile field, leave it blank.
 - b) In the **Work email** profile field, enter the user profile. For example, `john4mail@example.pst`.
- Step 2** If you have Microsoft SharePoint 2010, update the SharePoint CA profile pages for users with the following information:
- a) For the **SIP Address** profile field, enter the user profile. For example, `john4mail@example.pst`
 - b) In the **Work email** profile field, leave it blank.
-

Client Availability

Users can define whether their availability reflects their calendar events by setting an option to let others know they are in a meeting from the **Status** tab of the **Options** window from the client. This option synchronizes events in your calendar with your availability. The client only displays **In a meeting** availability for supported integrated calendars.

The client supports using two sources for the **In a meeting** availability:



Note Cisco Jabber for mobile clients support this meeting integration feature from Cisco Jabber 11.7 release.

- Microsoft Exchange and Cisco Unified Communication Manager IM and Presence Integration — Applies to on-premises deployments. The **Include Calendar information in my Presence Status** field in Cisco Unified Presence is the same as the **In a meeting** option in the client. Both fields update the same value in the Cisco Unified Communication Manager IM and Presence database.

If users set both fields to different values, then the last field that the user sets takes priority. If users change the value of the **Include Calendar information in my Presence Status** field while the client is running, the users must restart the client for those changes to apply.

- Cisco Jabber Client — Applies to on-premises and cloud-based deployments. You must disable Cisco Unified Communication Manager IM and Presence and Microsoft Exchange integration for the client to set the **In a meeting** availability. The client checks if integration between Cisco Unified Communication Manager IM and Presence and Microsoft Exchange is on or off. The client can only set availability if integration is off.

The following deployment scenarios describe how availability is created:

Deployment Scenario	You select In a meeting (according to my calendar)	You do not select In a meeting (according to my calendar)
You enable integration between Cisco Unified Communication Manager IM and Presence and Microsoft Exchange.	Cisco Unified Communication Manager IM and Presence sets availability status	Availability status does not change
You do not enable integration between Cisco Unified Communication Manager IM and Presence and Microsoft Exchange.	Client sets availability status	Availability status does not change
Cloud-based deployments	Client sets availability status	Availability status does not change

Additionally, the following table describes availability that is supported differently by each deployment scenarios:

Availability Enabled in the Client	Availability Enabled by Integrating Cisco Unified Communication Manager IM and Presence with Microsoft Exchange
Offline in a meeting availability is not supported.	Offline in a meeting availability is supported.
In a meeting availability is supported for non-calendar events.	In a meeting availability is not supported for non-calendar events.
<p>Note Offline in a meeting availability refers to when the user is not logged in to the client but an event exists in the user's calendar.</p> <p>Non-calendar events refer to events that do not appear in the user's calendar, such as instant meetings, Offline, or On a call.</p>	

Protocol Handlers

Cisco Jabber registers the following protocol handlers with the operating system to enable click-to-call or click-to-IM functionality from web browsers or other applications:

- XMPP: or XMPP://
Starts an instant message and opens a chat window in Cisco Jabber.
- IM: or IM://
Starts an instant message and opens a chat window in Cisco Jabber.
- TEL: or TEL://
Starts an audio or video call with Cisco Jabber.



Note TEL is registered by Apple native phone. It cannot be used to cross launch Cisco Jabber for iPhone and iPad.

- CISCOTEL: or CISCOTEL://
Starts an audio or video call with Cisco Jabber.
- SIP: or SIP://
Starts an audio or video call with Cisco Jabber.
- CLICKTOCALL: or CLICKTOCALL://
Starts an audio or video call with Cisco Jabber.

Registry Entries for Protocol Handlers

To register as a protocol handler, the client writes to the following locations in the Microsoft Windows registry:

- HKEY_CLASSES_ROOT\tel\shell\open\command

- HKEY_CLASSES_ROOT\xmpp\shell\open\command
- HKEY_CLASSES_ROOT\im\shell\open\command

In the case where two or more applications register as handlers for the same protocol, the last application to write to the registry takes precedence. For example, if Cisco Jabber registers as a protocol handler for XMPP: and then a different application registers as a protocol handler for XMPP:, the other application takes precedence over Cisco Jabber.

Protocol Handlers on HTML Pages

You can add protocol handlers on HTML pages as part of the `href` attribute. When users click the hyperlinks that your HTML pages expose, the client performs the appropriate action for the protocol.

TEL and IM Protocol Handlers

Example of the TEL: and IM: protocol handlers on an HTML page:

```
<html>
  <body>
    <a href="TEL:1234">Call 1234</a><br/>
    <a href="IM:msmith@domain">Send an instant message to Mary Smith</a>
  </body>
</html>
```

In the preceding example, when users click the hyperlink to call 1234, the client starts an audio call to that phone number. When users click the hyperlink to send an instant message to Mary Smith, the client opens a chat window with Mary.

CISCOTEL and SIP Protocol Handlers

Example of the CISCOTEL and SIP protocol handlers on an HTML page:

```
<html>
  <body>
    <a href="CISCOTEL:1234">Call 1234</a><br/>
    <a href="SIP:msmith@domain">Call Mary</a><br/>
    <a href="CISCOTELCONF:msmith@domain;amckenzi@domain">Weekly conference call</a>
  </body>
</html>
```

In the preceding example, when users click the *Call 1234* or *Call Mary* hyperlinks, the client starts an audio call to that phone number.

XMPP Protocol Handlers

Example of a group chat using the XMPP: protocol handler on an HTML page:

```
<html>
  <body>
    <a href="XMPP:msmith@domain;amckenzi@domain">Create a group chat with Mary Smith and Adam McKenzie</a>
  </body>
</html>
```

In the preceding example, when users click the hyperlink to create a group chat with Mary Smith and Adam McKenzie, the client opens a group chat window with Mary and Adam.



Tip Add lists of contacts for the XMPP: and IM: handlers to create group chats. Use a semi-colon to delimit contacts, as in the following example:

```
XMPP:user_a@domain.com;user_b@domain.com;user_c@domain.com;user_d@domain.com
```

Add Subject Lines and Body Text

You can add subject lines and body text to any of the protocol handlers so that when users click on the hyperlink to create a person-to-person or group chat, the client opens a chat window with pre-populated subject line and body text.

Subject and body text can be added in any of the following scenarios:

- Using any supported protocol handler for instant messaging on the client
- For either person-to-person chats or for group chats
- Including a subject and body text, or one or the other

In this example, when users click on the link below it opens a person-to-person chat window with a pre-populated body text of **I.T Desk**:

```
xmpp:msmith@domain?message;subject=I.T.%20Desk
```

In this example, when users click on the link below it opens a **Start Group Chat** dialog box with a topic of **I.T Desk**, and the input box for the chat window is pre-populated with the text **Jabber 10.5 Query**:

```
im:user_a@domain.com;user_b@domain.com;user_c@domain.com?message;subject=I.T%20Desk;body=Jabber%2010.5%20Query
```

Protocol Handler Supported Parameters

Cross Launch for Mobile Clients

The Cisco Jabber for mobile clients provide you with the ability to return to a specified application. For example if you create a ciscotel URI link that dials a number, you can add in the application name as a parameter and when the call has completed the user is prompted to return to that application.

```
ciscotel://1234567?CrossLaunchBackSchema=SomeAppSchema&CrossLaunchBackAppName=SomeAppName
```

- **CrossLaunchBackAppName**—Users are prompted with the name of an application that Cisco Jabber cross launches back to when a call ends.
 - *none* (default)—No application in the dialog box.
 - *app_name*—The application name that is displayed in the dialog box.
- **CrossLaunchBackSchema**—Specifies the schema used when a call is ended.
 - *none*(default)—You stay in Cisco Jabber.
 - *schema*—The schema used to cross launch back the application.

Supported Separators

When creating a URI link for HTML pages, you can use a semi-colon to separate the characters. This is supported with the SIP, Tel, CiscoTel and ClickToCall protocol handlers. In the following example, the link will create a conference call with the two numbers:

```
tel:123;123
```

The IM protocol supports the semi-colon separator. In the following example, the link will create a group chat with the two participants:

```
im:participant1@example.com,participant2@example.com
```

DTMF Support

Enter DTMF in the IM Window

In the conversation window of the client, you can enter a protocol handler including DTMF digits and the client will create a link that participants can use. The supported protocols are TEL, CISCOTEL, SIP, CLICKTOCALL, CISCOIM, IM, and XMPP. The supported parameters are numbers or SIP URIs.

In the following example, the number is 1800123456, the PIN for entry is 5678#, using the TEL URI link this example creates a meeting link:

```
tel:1800123456,,,5678#
```

Enter DTMF in an Active Call

During a call, users can copy and paste DTMF digits into the call window of the client. Users can easily enter Meeting IDs, Attendee IDs, and PINs from their meeting invitation. If you enter alphanumeric strings during an active call, they are interpreted as the corresponding numbers on the keypad, and commas represent a one second pause between DTMF signals.

Supported DTMF Signals

If a user enters a DTMF signal that isn't supported by the system that Jabber is calling, then Jabber will not send the input from the user.

Cisco Jabber for Windows and mobiles support the following DTMF signals:

- 0 to 9
- #
- *
- A to D