Intel Unite® Solution

Plugin Guide for Skype® for Business

Version 2.3
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## Revision History

<table>
<thead>
<tr>
<th>Revision</th>
<th>Date</th>
<th>Notes</th>
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<tr>
<td>0.1</td>
<td>June 12, 2015</td>
<td>First Draft with outline and content</td>
</tr>
<tr>
<td>0.2</td>
<td>June 12, 2015</td>
<td>Added Introduction</td>
</tr>
<tr>
<td>1.0</td>
<td>September 9, 2015</td>
<td>Changed Legal disclaimers, added audience and minor format changes</td>
</tr>
<tr>
<td>1.1</td>
<td>January 28, 2016</td>
<td>Updates based on released version</td>
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<tr>
<td>1.3</td>
<td>February 3, 2016</td>
<td>Update version #, footers, Hub</td>
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<tr>
<td>1.4</td>
<td>February 16, 2016</td>
<td>Added Lync –Join meeting images</td>
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<td>1.5</td>
<td>February 18, 2016</td>
<td>Added Troubleshooting section</td>
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<td>March 4, 2016</td>
<td>Added new icon images</td>
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<td>1.7</td>
<td>March 4, 2016</td>
<td>Fixed branding issues</td>
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<td>1.8</td>
<td>March 10, 2016</td>
<td>Added additional settings instructions for Skype for Business 2016. Changed document name to comply with legal requirements</td>
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<tr>
<td>1.9</td>
<td>April 4, 2016</td>
<td>Removed graphics for localization. Added Exchange Server information needed for plugin (section 3.2.2)</td>
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<tr>
<td>1.10</td>
<td>April 6, 2016</td>
<td>Changed the example for the entry of the Exchange Server (section 3.2.1)</td>
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<td>1.11</td>
<td>June 1, 2016</td>
<td>Updated for new version</td>
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<td>1.12</td>
<td>June 16, 2016</td>
<td>Accepted Format Changes</td>
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<tr>
<td>1.13</td>
<td>October 24, 2016</td>
<td>Added diagrams, screenshots, installation details</td>
</tr>
<tr>
<td>1.14</td>
<td>November 15, 2016</td>
<td>Added issue in Troubleshooting section and accepted doc reviews</td>
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<td>1.15</td>
<td>December 2, 2016</td>
<td>Added section Obtaining the Certificate Hash Value</td>
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<td>2.1</td>
<td>June 12, 2017</td>
<td>Removed references to Standalone</td>
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<td>Updated branding (Intel® Unite™ to Intel Unite®)</td>
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<td>Added pre-requisite for enterprise voice for dial out</td>
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<td>Added dial-out and ring-back</td>
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<td>Updated Appendix A with new configuration options and details about the new xml configuration</td>
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<td>Added new screenshots. Changed Admin Portal screenshots.</td>
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<td>Minor format changes</td>
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<td>2.2</td>
<td>September 8, 2017</td>
<td>Added the following new settings for v2.2: Camera/Mic Auto-start feature (section 5.9), the XML Settings for this feature (Appendix A -Configuration Options section) and updated the troubleshooting section (Appendix C).</td>
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1. Introduction

Welcome to the guide for the Intel Unite® Plugin for Skype® for Business. The guide contains detailed instructions on installing the plugin for Skype for Business as well as information on the key features of the Intel Unite plugin.

1.1 Audience

This document is designed for use by IT professionals within a corporate environment, who are responsible for installing the Intel Unite software and adding optional features to the application.

1.2 Overview

The plugin for Skype for Business is a solution for including people from an online Skype for Business meeting into an Intel Unite® app session. The plugin runs on the Hub of the Intel Unite software and manages a mail account specific to each instance in order to set, modify, join, and decline meetings. It also can be added to a Skype for Business conversation and, through user input, control audio and video devices that Skype for Business is configured to use.

An IT department that uses Microsoft Exchange® will add an Exchange account for the Intel Unite solution enabled room, which will allow meeting organizers to schedule the room just like any other resource. By default, the plugin will manage calendar invites, accepting new meetings and updated meetings, and declining invites that conflict with the Hub calendar. Alternatively, IT can disable this functionality in the plugin and manage the calendar using existing company tools.
This solution also allows users to connect to their own Skype for Business enabled meetings without having to schedule the room. Ad-hoc meeting functionality requires an additional plugin that is installed on the client system. When a user connects to a hub, the client-side plugin will read the client's exchange calendar and pass Skype for Business enabled meetings to the Intel Unite Plugin for Skype for Business running on the hub, and the user can have the hub join that meeting.
2. Plugin Flow

The plugin for Skype* for Business has been installed and configured on the Hub.

A Skype* for Business meeting is scheduled and invites the Hub → Hub automatically accepts the meeting (or declines when conflict exists) → 10 min before the meeting starts, the Hub will display the online meeting information

DISPLAY YOUR SCREEN WIRELESSLY

1. Install Intel Unite app
   http://gotosolution/unite
2. Enter PIN
3. Click Present
4. Start Collaborating!

Online Meeting: Logistics meeting (2:00 PM – 3:00 PM)

Client device starts the Intel Unite application by entering the PIN displayed on the monitor, the Skype for Business functionality will be displayed

When the app opens, the Join icon will be displayed → Joining the Skype for Business meeting → Meeting controls are displayed (if enabled, video, audio, and dial-out are present)
3. Plugin Installation

3.1 Hub Pre-requisites

The Intel Unite Plugin for Skype for Business will be installed on the Hub and has the following requirements.

Software requirements

➢ Microsoft® Exchange 2010 or greater
➢ Skype® for Business 2013 or greater
➢ Intel Unite® software for the Hub, version 3.1 or greater
➢ Optional (for Ad-hoc meetings): Intel Unite software must be able to accept incoming connections on TCP 36452

Note: The hub plugin is compatible with Microsoft Office 365 accounts. However, the plugin that is installed on the client to enable ad-hoc meetings does not support Microsoft Office 365.

Microsoft® Exchange Requirements

This plugin requires an email account and access to the Exchange Web Service (https://<server>/EWS/Exchange.asmx). Each hub requires a unique email/calendar that can be scheduled as a resource when creating a meeting. The account needs access to read/write its own calendar and access to sign into Skype for Business. By default, the plugin will manage calendar invites, sending accept messages for new and updated meetings, and sending decline messages for invites that conflict with existing schedules.

Alternatively, you can disable this functionality from the plugin and use your own tools to ensure the calendar is accurate. If you have an exchange email account, but you are unsure of how to get the Exchange Web Service URL, you can follow these steps:

1. Launch Outlook.
   Note: Outlook is not required to run on the hub, you can run this on any machine.
2. Press and hold the Ctrl key and right-click on the Outlook system tray icon.
3. You will see two new options in the context menu: Connection Status and Test E-mail Auto Configuration.
4. Click on Test E-mail Auto Configuration and then Test to check the email server configuration.
5. In the Results tab take note of the OOF URL to use as the server URL for the plugin (e.g. https://exchange.domain.com/EWS/Exchange.aspx).
Skype for Business Requirements

Skype for Business needs to be set to launch and sign in automatically. The Plugin will not automate logging into Skype for Business.

For the Dial-out capability to work, the Skype for Business account needs to have Enterprise Voice enabled. To enable this you will need to contact your Skype for Business administrator, or enable this feature through the Office 365 control panel.

Note: Ideally, the Microsoft Exchange and Skype for Business account is the same.

3.2 Client Pre-requisites

To enable ad-hoc meeting functionality, you need to install an additional plugin on Intel Unite client systems.

Software Requirements

➢ Microsoft® Exchange 2010 or greater
➢ Intel Unite® software for the Client, version 3.1 or greater
➢ Microsoft Exchange auto-discovery must be enabled (refer to Microsoft Documentation for details on enabling auto-discovery for Microsoft Exchange).

Note: The hub plugin is compatible with Microsoft Office 365 accounts. However, the plugin that is installed on the client to enable ad-hoc meetings does not support Microsoft Office 365.

3.3 Plugin Installation

On the Hub:

1. Close the Intel Unite application.
2. Run the Intel Unite Plugin for Skype for Business.msi.
3. In the Exchange Server Configuration window, enter the following information:
Intel Unite® Plugin Guide for Skype® for Business

1. **Exchange Server Name:** this is the Exchange Web Server URL described in the Pre-requisites, see the example shown above:
   https://<outlook.office365.com>/EWS/Exchange.asmx, where <outlook.office365.com> is your server name.

2. **Exchange user name for the Hub:** this is the unique email address for the unique Exchange account for the Hub. In the example shown above, it is uniteroom1@onmicrosoft.com.

3. **Enter the password:** The password assigned to the Exchange user name for the Hub.

4. Click on **Test Connection** to ensure the account information is configured correctly, ensure Skype for Business is running and logged in.
   a. If you have the Skype for Business 2016 client, go to **Settings >Tools>Options**, in the **General** tab, uncheck **Show call controls when Skype for Business is in the background**.

5. Launch the Intel Unite application.

6. Ensure the plugin can automatically join and leave meetings by setting up a test meeting as follows:
   **Note:** By default, the Skype for Business Client does not automatically join or end meetings.
   a. Have a keyboard and mouse attached to the hub for this initial setup (you will not be required to have a keyboard and mouse attached after this initial process).
   b. On a client machine, schedule a Skype for Business meeting for the current date/time and invite the email address for the hub (use the same email address you used in the previous steps).
   c. Ensure the email address for the hub that you sent the meeting invite to, accepts the meeting.
   d. On the client machine, open the Intel Unite app and connect using the PIN.
   e. Click on the plugin icon and select **Join**. This will cause the hub to attempt to join the meeting but there will be some popup messages. Use the mouse to select **Don't show this again** in the Join Meeting Audio screen.

7. The plugin has been installed, you can customize it if you wish.

**On the Client:**

1. Close the Intel Unite application.
2. Run the **Intel Unite Plugin for Skype for Business for Client.msi.**
Note: This step is only required if you are enabling the ad-hoc meeting functionality.

3.4 Admin Portal Configuration

It is recommended to obtain and use key values for plugins vs the default value (default value = blank), as key values add security and prevent malicious plugins from being installed and run on Hubs.

NOTE: For a test environment, you could use the default key value, but this is not recommended for a production environment.

Obtaining the Certificate Hash Value

1. In the Intel Unite\Hub\Plugins folder, right click on the Skype for Business / lync dll file and choose Properties.
2. When the plugin Properties window opens, open the Digital Signatures tab.
3. Select Intel Unite Plugin and click on Details.
5. In the Certificate window, select the Details tab and scroll down until you see Thumbprint.
6. Select Thumbprint. Once the value is displayed, copy and paste it into a notepad or a text file, remove the spaces and save it.
7. This information will be used when you create the Profile for your plugin on the Admin Web Portal. The key value can also be created and entered after the profile has been created.

Profile Configuration

1. Go to the Admin Web Portal, under Groups, select Profiles.
2. Under the **Profile Name** list, find the Profile where you want to create the new key and click on the **View Details** icon (located on the last column on the right), alternatively, you may want to create a new Profile instead of using an existing one.

![Profiles](image)

**Important Note:** The **Default** profile must be used to enable the client plugin required for the ad-hoc meeting feature.

3. Create a Key for the Skype for Business/Lync Plugin Certificate Hash by clicking on **Add Profile Property**, when the window opens, enter the following:

   ![Add Profile Property](image)

   - **Key:** PluginCertificateHash_LyncPlugin
     (The format is PluginCertificateHash_XXXX, where X is the name you are giving the plugin)
   - **Data Type:** String
   - **Unit:** Text
   - **Value:** Paste the value saved in the notepad or text file (Thumbprint value). This data can also be entered after creating the key.

4. Click on **Save**.
5. In the **Profile** window, you will see the new plugin key, you can click on **Edit** to enter its value (if you haven't added it) or to edit this key.
6. You must also ensure the **Verify Plugin Certificate Hash** key is set to **True**, if you want it enabled. If the value is set to **False**, the hub will not check the signing certificate of the installed plugins.

   ![Profile:Room101 Used for meetings with Skype]

   **NOTE:** For a test environment you could disable the certificate check, in a production environment, the recommendation is to set the value to **True**.

Once the profile has been updated with the Skype for Business plugin data, remember to assign it to the Hub devices where you want it enabled.

### 3.5 Customizing Your Installation

This plugin allows you to customize the available features, icon and name so that you can easily tailor the user experience to your organization's capabilities. Refer to Appendix A. Configuration Options for customization options.

If you need to change the Exchange username or password after installation, you have two options:

1. Uninstall and re-install the plugin
2. Manually update the configuration file. Please refer to Appendix B. XML File Settings for directions on how to do this.
4. Using Skype for Business on your Client device

A Skype for Business meeting has been scheduled, inviting the user name/exchange account of the Hub, and the meeting invite has been accepted by the Hub (Hub where the plugin has been installed).

When meeting participants enter an Intel Unite solution enabled room that has a meeting scheduled and accepted, the Online Meeting message will be displayed on the screen or monitor 10 min before the meetings starts, and will last until the meeting ends.

1. Open the Intel Unite® app and enter the PIN displayed on the Hub.
2. Click on Skype for Business.
3. Click Join, this action will cause the Hub to join the Skype for Business meeting.
4. If audio or video devices are attached and available to Skype for Business, users connected to the Intel Unite application will be able to control those devices by clicking on the displayed icons.
5. If the Skype for Business icon is not displayed on the Intel Unite app (on your Client machine), there is no Skype meeting scheduled or it has ended. Alternatively, ensure the Skype meeting has been accepted by the Hub.
6. If enabled by the IT department or the system administrator, the plugin will also display a phone dial icon, so you can make calls to other participants, this is the Dial-out functionality.

See the flow below:
A Skype for Business session is available

Join the Skype for Business session

Leave the Skype for Business session

When available, controls will be displayed

Dial-out functionality

Return to the meeting

End the call
5. Plugin Key Features

5.1 Scheduled Meetings

When users use Microsoft Outlook* to schedule a meeting, the plugin will help manage the exchange calendar by accepting meetings. It will not accept meetings which conflict with previously scheduled meetings.

Meetings can be modified in order to cancel, extend or shorten them. The plugin for Skype for Business must be running on the Hub to accept all meeting changes and update the information on the calendar. If a meeting is sent to the plugin while the Hub is offline it will be declined when the Hub comes back online regardless of the validity of the meeting request.

Alternatively, you can have a different system manage the calendar invites. To disable the plugin from managing the calendar, you must set the correct configuration (see Appendix A. Configuration Options).

5.2 Join a Skype for Business Meeting

When a scheduled Skype for Business meeting is in progress, users connected to the Intel Unite application will be able to join the Hub to the Skype for Business meeting using the plugin for Skype for Business.

Users are allowed to join a meeting 10 minutes before the start time. When a meeting is available, the plugin icon will show an indicator that a meeting is ready. In addition, the hub will display the meeting subject and time in the blue status bar at the bottom.

To connect to a meeting from the Intel Unite app, click on the plugin icon and select Join. A toast message will be displayed on the hub indicating that the room is joining the meeting, and within 5 seconds the Skype for Business window should be full screen and in front.

5.3 Answer a Skype for Business Call

When a Skype for Business user initiates an audio or video call with the hub running the Intel Unite application, users connected to the Intel Unite app will be able to answer the call. When this happens, a message is displayed on the hub with the name of the person initiating the call. To accept the call, click on the plugin within the Intel Unite app and select Answer. Within 5 seconds, the Skype for Business window should be full screen and in front.

5.4 Share Content

When content is shared by a Skype for Business participant, the content will be displayed on the Hub on the attached primary display, so that Intel Unite client participants can view, and displayed to all Skype for Business participants.
When content is shared by an Intel Unite client, the Hub will share that content to the Intel Unite application and displayed to all Skype for Business meeting participants.

5.5 Video Control

If a Skype for Business-enabled camera is attached to the Hub, users attached to the Intel Unite application will be able to start and stop the video through the plugin for Skype for Business. To do this, click on the plugin icon within the Intel Unite app, and click on the Camera button.

5.6 Audio Control

When a Skype for Business-enabled audio device is attached to the Hub, users attached to the Intel Unite application will be able to mute and unmute the microphone, or turn the volume up or down, all of these through the plugin for Skype for Business. To do this, click on the plugin icon in the Intel Unite app, select the Microphone button, adjust the volume as needed.

5.7 Dial-out

For hubs that have a Skype for Business account with enterprise voice enabled, you can enable a dial-pad within the Skype for Business plugin which will allow users connected to the Intel Unite app to dial phone numbers.

To use this feature, enable the Dial-out configuration option, please refer to Appendix A. Configuration Options.

5.8 Ring back

This feature configures the hub so that Skype for Business will ring-back the existing phone in the room every time the hub connects to a scheduled meeting. To use this feature, the Skype for Business solution must have the ability to dial phone numbers.

5.9 Camera/Mic Auto-start

When Skype for Business joins a meeting, typically the default state of the camera is off, and the microphone is muted. To enable a more automatic user experience, this plugin will allow you to specify the desired state of the camera and microphone when Skype for Business joins a meeting.

To specify the states, refer to the Appendix A. Configuration Options.

5.10 Ad-hoc Meetings

This feature enables a user to join the hub to Skype for Business meetings scheduled from the user’s calendars, even if the hub hasn't been scheduled.
To enable this feature, the client plugin must be installed and enabled. In addition, 
**EnableExternalMeetings** must be set to true on the hub plugin configuration (refer to *Appendix A*).

When a user connects to a hub, the client plugin will read the user's exchange calendar and pass Skype for Business meetings to the plugin running on the hub. The user can open the Intel Unite app, select the Intel Unite Plugin for Skype for Business icon, and join their meeting.

**Note:** The plugin on the hub will receive calendar information over a SSL-encrypted connection. You may need to enable firewall rules which will allow the Intel Unite app on the hub to receive an incoming connection on TCP 36452.

### 5.11 Meeting Schedule

This feature helps users with meeting time management by showing them upcoming appointments and providing toast messages when the end of a scheduled meeting is near.

All configuration options are disabled by default. You can enable features by enabling them in *EffectiveMeetingsConfig.xml*. See Configuration Options in *Appendix A* for a full list of configuration options.
Appendix A. Configuration Options

This section describes the XML settings file which will help you customize your installation.

The settings files are located in the same directory as the plugin and are generated during installation:
C:\Program Files (x86)\Intel\Intel Unite\Hub\Plugins\ 

**Note:** Previous versions of the plugin used registry keys are located in
"HKLM\Software\Intel\Unite\S4BPlugin" to customize the installation. These registry keys will override values set in the configuration file to ensure you keep your settings when you upgrade.

CFCLyncPluginConfig.xml

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<th>VALUE</th>
<th>DESCRIPTION</th>
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<tr>
<td>Debug (Boolean)</td>
<td>True = debug mode is enabled. Provides a debug console, a log button, and a toggle button which will allow you to toggle the Intel Unite app screen transparency so that you can view the log. False = No debug mode.</td>
<td>False</td>
</tr>
<tr>
<td>UrlKeyWords (string)</td>
<td>This is a comma-separated list of keywords to search for in the body of an invitation to find the Skype for Business Join URL. Only set this if your organization customizes the Skype for Business Join URL (see additional information on <a href="https://technet.microsoft.com/en-us/library/gg398287(v=ocs.15).aspx">https://technet.microsoft.com/en-us/library/gg398287(v=ocs.15).aspx</a>)</td>
<td>None</td>
</tr>
<tr>
<td>Icon (string)</td>
<td>Specify a valid path to an image. This provides a way for IT departments to customize the icon that is shown in the Intel Unite client plugin section. Note: Instead of the registry, you can also place an image named &quot;s4bpluginicon.png&quot; in the plugin directory (C:\Program Files (x86)\Intel\Intel Unite\Hub\Plugins\s4bpluginicon.png)</td>
<td>None</td>
</tr>
<tr>
<td>Name (string)</td>
<td>This provides a way for IT departments to customize the name that is displayed in the Intel Unite client plugin section (just below the icon). You can provide any string. If not specified, the default plugin name will be: “Skype™ for Business”</td>
<td>None</td>
</tr>
<tr>
<td>Setting</td>
<td>Description</td>
<td>Default</td>
</tr>
<tr>
<td>-------------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>DialBackNumber (string)</td>
<td>Enter the phone number for your conference room. If you set this, you must start the Intel Unite app so that it can re-configure Skype, after which you MUST restart Skype for Business or reboot the Hub. No value will cause the plugin to set Skype for Business to use the default audio device.</td>
<td>None</td>
</tr>
<tr>
<td>EnableDialer (Boolean)</td>
<td>True = Enables the dial-out capability. Only enable this if you have Enterprise Voice enabled for the Skype for Business account that is running on the hub. False = Dial-out capability is disabled.</td>
<td>False</td>
</tr>
<tr>
<td>EnableRoomMeetings (Boolean)</td>
<td>True = Enables the ability to join calendar events. False = The ability to join calendar events is disabled. Note: If you disable this, you will not be able to join scheduled meetings. Only disable if you have Enterprise Voice enabled and you want the plugin User Interface to only show the Dial-out view.</td>
<td>True</td>
</tr>
<tr>
<td>ToastIncomingIMs (Boolean)</td>
<td>True = The plugin will receive an incoming IM and show the message as a toast message on the hub. False = The plugin will not receive incoming IMs.</td>
<td>False</td>
</tr>
<tr>
<td>IMThePin (Boolean)</td>
<td>True = When the hub has joined a Skype for Business call, the plugin will IM the PIN of the hub every time the PIN changes. False = The plugin will not IM the PIN of the hub when changes occur.</td>
<td>False</td>
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<tr>
<td>AutoStartVideo (Boolean)</td>
<td>Will force the camera state when Skype joins a meeting. True = Start the camera False = Use Skype Default</td>
<td>False</td>
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<td>Parameter</td>
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<tr>
<td>StartUnMuted (String)</td>
<td>Will force the microphone mute state when Skype joins a meeting.</td>
<td>none</td>
</tr>
<tr>
<td></td>
<td>none = Use Skype Default</td>
<td></td>
</tr>
<tr>
<td></td>
<td>mute = Start Muted</td>
<td></td>
</tr>
<tr>
<td></td>
<td>unmute = Start Unmuted</td>
<td></td>
</tr>
<tr>
<td>UseIE (Boolean)</td>
<td>When the plugin launches a Skype for Business, the default behavior is to translate the Join URL into a SIP URI. In rare cases, the SIP URI translation doesn't happen correctly. This setting will allow you to use the Join URL instead of the SIP URI.</td>
<td>False</td>
</tr>
<tr>
<td></td>
<td>True = Use Join URL</td>
<td></td>
</tr>
<tr>
<td></td>
<td>False = Use SIP URI</td>
<td></td>
</tr>
<tr>
<td>EnableHubFullScreen (Boolean)</td>
<td>This will enable the hub to receive meetings from a client that has the client-side plugin installed</td>
<td>False</td>
</tr>
<tr>
<td>EnableExternalMeetings (Boolean)</td>
<td>This will enable the hub to receive meetings from a client that has the client-side plugin installed</td>
<td>False</td>
</tr>
<tr>
<td></td>
<td>True = Enable Ad-hoc meetings</td>
<td></td>
</tr>
<tr>
<td></td>
<td>False = Only display scheduled meetings</td>
<td></td>
</tr>
<tr>
<td>VALUE</td>
<td>DESCRIPTION</td>
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<td>--------------------------------------------</td>
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</tr>
<tr>
<td>ExchangeCheckIntervalSeconds (Integer)</td>
<td>This specifies, in seconds, how often the plugin should check Microsoft Exchange for new meetings.</td>
<td>60</td>
</tr>
<tr>
<td>ManageCalendar (Boolean)</td>
<td>True = The plugin will manage the calendar. False = The plugin won't manage the calendar. By default the plugin will manage incoming calendar invites (accepting and declining invitations) to ensure that there are no conflicts. IT departments may want to use a different tool or method to manage the calendar, so this setting provides a way to disable the default functionality.</td>
<td>True</td>
</tr>
<tr>
<td>RoomEmail (String)</td>
<td>This setting allows you to specify a different calendar to manage.</td>
<td>The exchange username specified during installation</td>
</tr>
<tr>
<td>EndOfMeetingToastWarning</td>
<td>Specifies if the plugin should show a toast message when the end of the meeting is near. True = Show toast messages (the next two settings specifies the timing) False = Do not show toast messages</td>
<td>False</td>
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<tr>
<td>MinutesBeforeEndOfMeetingToAlert (Integer)</td>
<td>This specifies, in minutes, how early the plugin will warn the room that a meeting is coming to an end.</td>
<td>5</td>
</tr>
<tr>
<td>ToastEverySeconds (Integer)</td>
<td>This specifies how often, in seconds, the plugin will show a warning toast message that the end of the meeting is near.</td>
<td></td>
</tr>
</tbody>
</table>
| ShowHubText (Boolean) | This specifies if the plugin should show the next meeting in the blue status bar of the Intel Unite app.  
True = Show all meetings in the status bar  
False = Do not show all meetings | False |
| ShowUI | This specifies if the plugin should show an additional UI component on the Intel Unite client app that will display the room's schedule.  
True = Show the additional UI  
False = Do not show the additional UI | False |
Appendix B. XML File Settings

This section describes the XML settings file the plugin will read to connect to exchange.

The settings file is located in the same directory as the plugin and is generated during installation. It is located in C:\Program Files (x86)\Intel\Intel Unite\Hub\Plugins\ExchangeConfig.xml.

During installation, the username and password are encrypted to the local system using the Microsoft Data Protection API. You need to make sure that you properly secure this file.

If you want to update the username/password after the installation, you can follow these steps:

1) Exit the Intel Unite app on the hub
2) Ensure that the user making changes has write access to the settings file
3) Edit the settings file:
   a. Modify the XML elements:
      <email>yourNewAddress@yourdomain.com</email>
      <password>yourNewPassword</password>
   b. Add or modify the XML element:
      <encrypt>true</encrypt>
4) Start the Intel Unite application (when the plugin starts, it will re-encrypt the username/password fields and set <encrypt> to false)
5) If you changed file settings, you will need to re-secure the settings file
## Appendix C. Troubleshooting

This section will walk you through common issues, possible causes, and their resolution.

<table>
<thead>
<tr>
<th>ISSUE</th>
<th>POSSIBLE CAUSES &amp; RESOLUTION</th>
</tr>
</thead>
</table>
| The plugin does not appear in the Intel Unite app or The plugin appears but when you click in the plugin window it says, “Not Connected” | There are a few reasons why that can happen. The easiest way to determine what is happening is to enable debug mode for the plugin and launch the Intel Unite app in debug mode.  
To enable debug mode for the plugin, refer to the registry setting in Appendix A.  
To launch the Intel Unite app in debug mode, open a command window and launch Intel Unite.exe with the debug flag by typing the following (including the quotes):  
"C:\Program Files (x86)\Intel\Intel Unite\Hub\Intel Unite.exe" /debug  
There will be 2 debug consoles, one looks like a text document and is the Intel Unite app console, the other is a window that looks like a CMD window and will give more information.  
Possible issues and resolutions:  
1) The plugin is not trusted.  
Refer to the section *Obtaining the Certificate Hash Value* or the Enterprise Deployment Guide.  
2) The plugin was unable to connect to the Exchange Server.  
Uninstall/Reinstall the plugin and ensure you use the “Test Connection” button to ensure you have the correct settings.  
3) The plugin was unable to interact with Skype for Business.  
Ensure Skype for Business is installed and logged in before the Intel Unite app starts on the hub. |
| The Join button doesn’t appear inside the plugin window | This indicates that the plugin doesn’t find a Skype for Business meeting in the current schedule.  
Verify that a Skype for Business meeting is scheduled for the current time and was accepted by the Skype for Business user associated with the Hub you are connected to.  
Verify that the Skype for Business URL is not included in the body of the email. For this plugin to work, the “Join” URL must be included in the body of the email. |
<table>
<thead>
<tr>
<th>Issue</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Join button appears, but doesn't do anything</td>
<td>This indicates that the plugin is unable to launch the meeting.</td>
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<td>To join a meeting, the Plugin attempts to launch the meeting using</td>
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<td>Internet Explorer (on the hub). Ensure that Internet Explorer is</td>
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<td></td>
<td>installed.</td>
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<td>In addition, you can enable debug mode, which will give you an</td>
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<td></td>
<td>additional “Toggle” button which will allow you to toggle the screen</td>
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<td></td>
<td>(which hides Intel Unite) and attempt to join the meeting. In doing</td>
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<td></td>
<td>so, you may be able to better identify if Skype for Business is failing</td>
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<tr>
<td></td>
<td>to join the meeting for a different reason.</td>
</tr>
<tr>
<td>The scheduled meeting was not accepted or was declined by the plugin for Skype for Business.</td>
<td>The system may have been offline when the meeting invite was sent or the Skype for Business app was not installed.</td>
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<tr>
<td></td>
<td>Close the Intel Unite application. Verify that Skype for Business is</td>
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<td></td>
<td>running and logged in as the appropriate user and then start the</td>
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<tr>
<td></td>
<td>Hub of the Intel Unite app. Resend the meeting invite and verify that</td>
</tr>
<tr>
<td></td>
<td>the meeting was accepted.</td>
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<tr>
<td>The Camera and/or Microphone controls do not show up inside the plugin window.</td>
<td>The plugin will only show the Camera and Microphone buttons when</td>
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<td>connected to a meeting, and only if Skype for Business is configured to</td>
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<tr>
<td></td>
<td>use the devices.</td>
</tr>
<tr>
<td></td>
<td>To troubleshoot this, you may need to re-configure Skype for Business to use the devices.</td>
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<tr>
<td>Somebody requested control through Skype for Business while the Hub was presenting</td>
<td>When this happens, the request will eventually time out. The plugin</td>
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<td></td>
<td>currently doesn't handle these types of requests.</td>
</tr>
<tr>
<td>Issue</td>
<td>Resolution</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>The meeting does not appear on the Hub display, or appointment count is 0 (zero) in the log file, even though meeting is scheduled.</td>
<td>Verify meeting is scheduled for current time and that the meeting is accessible via hub, i.e. open the outlook calendar for the account that runs on the hub and view the meeting invite. The body of the meeting should not be blank but contain the meeting invite/skype link. If the meeting invite is blank, it means that the exchange server has a setting to remove the body of the invite and the setting has to be removed so that the plugin can read the meeting invitation. If the link is in the body of the invite for the account, it may have a customized Simple URL format (<a href="https://technet.microsoft.com/en-us/library/gg398287(v=ocs.15).aspx">https://technet.microsoft.com/en-us/library/gg398287(v=ocs.15).aspx</a>). By default, the plugin looks for the “meet” keyword. If your Skype/Lync server is customized, you may use a different keyword. You can configure the plugin and specify a comma-separated list of keywords to search for using the URLKeyWords configuration option (see Appendix A. Configuration Options).</td>
</tr>
<tr>
<td>The plugin user interface is slow or unresponsive</td>
<td>This is usually bandwidth related. When you press a button in the user interface, it must send a message back to the plugin on the hub, and then the plugin sends a user interface update back to the client. If you are seeing very slow responses, it may be that the connection between the hub and the client is not optimal.</td>
</tr>
<tr>
<td>The Skype for Business meeting launches, but is unable to join the meeting. A yellow bar with an error message at the bottom of the Skype for Business window may be present.</td>
<td>This is usually because either the Skype for Business URL is not valid, or the SIP URI translation failed. You can set &quot;UseIE&quot; to true.</td>
</tr>
</tbody>
</table>