



## **User Guide for Cisco UC Integration for Microsoft Lync and Cisco Virtualization Experience Media Engine for SUSE Linux Release 9.7**

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## CHAPTER

# 1

# Get started with Cisco UC Integration for Microsoft Lync

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## Cisco UC Integration for Microsoft Lync

Cisco UC Integration for Microsoft Lync is a Microsoft Windows desktop application that provides access to Cisco Unified Communications from Microsoft Lync. The solution extends the presence and instant messaging capabilities of Microsoft Lync by providing access to a broad set of Cisco Unified Communications capabilities; including software phone standards-based video, unified messaging, conferencing, desktop phone control and phone presence.

Key features of Cisco UC Integration for Microsoft Lync include:

- Make and receive video calls using the Cisco Precision Video engine.
- Make and receive phone calls through Cisco Unified Communications Manager.
- Drag and drop and right-click integration with the Microsoft Lync contact list.
- Instant Messaging and Presence integration with Microsoft Lync.
- Mute, hold, and transfer during calls.
- Software phone or desktop phone mode selection.
- Communications history of missed, placed, and received calls.
- Audio and visual notification of incoming calls.
- Ad hoc conferencing.

- Visual voicemail.
- Click to Call from Internet Explorer, Microsoft Outlook and other Microsoft Office applications.

## Docked Window

Cisco UC Integration for Microsoft Lync now includes a user interface option that displays a small window at the top of the screen and allows users to quickly access common functions.

Select **View > Show docked window** to show or hide the docked window.

Select **View > Position docked window** to position the docked window and then select one of the following:

- **Top left**
- **Top center**
- **Top right**

The docked window provides access to the following functions:

- Contact search
- Direct dialing of phone numbers
- Call history
- Voicemail
- Hub display



### Restriction

Users must not position the Microsoft Windows taskbar on the top of the screen. The docked window displays only at the top of the screen. If users position the Windows taskbar at the top of the screen, the taskbar might overlay the docked window. If the taskbar overlays the docked window, the users cannot access the docked window.

## Incoming Call Window

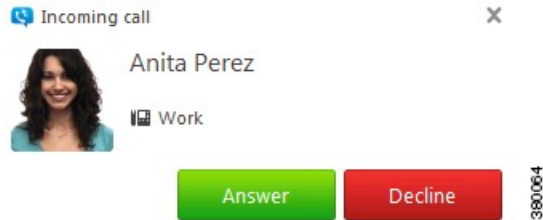
The Incoming Call window displays when you receive an incoming call. This window provides options for:

- Accepting a call

Select **Accept** to connect the call and begin a conversation. The Call window is displayed after the call is connected. See [Call Window](#), on page 3 for more information.

- Declining a call

Select **Decline** to not answer the call. Declined calls are sent to voicemail if it is configured. See [Voicemail](#), on page 11 for more information.



## Call Window

The Call window is displayed during every connected call. This window provides options for control of the call and displays video during video calls. See [Options Window, on page 5](#) for information on how to control how video is displayed when a call is connected.



The Call window provides the following call controls:

- **Start my video**  
Starts sending video in calls where video is not automatically sent.
- **Full screen**  
Expands video display to a full screen view.
- **Toggle self-view**  
Opens a small video display that shows the video you are sending.
- **Keypad**  
Opens a keypad to enter digits.
- **Mute**  
Mutes the audio.
- **Hold**

Places the current call on hold.

- **Transfer**

Provides options to transfer the call to a different number.

- **Merge**

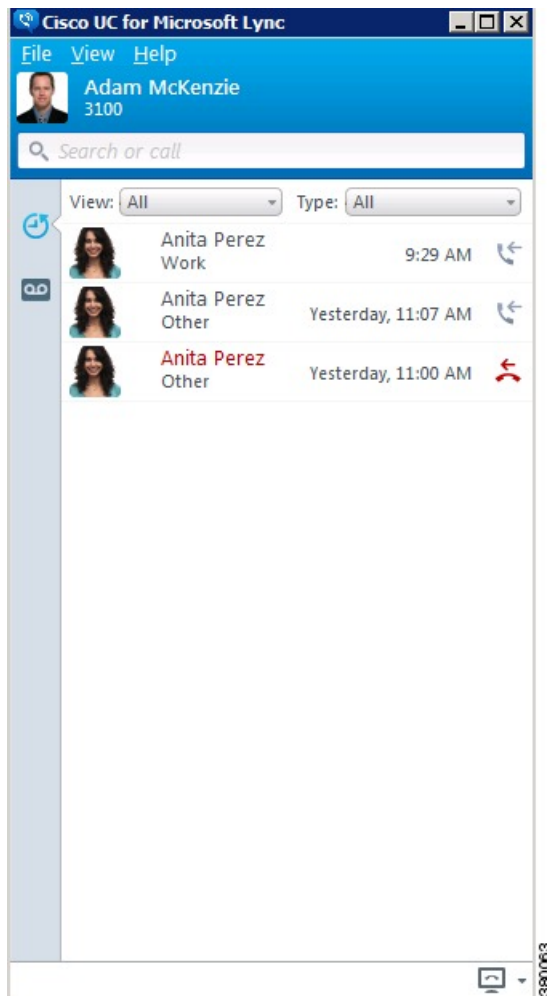
Provides options to merge the current call with another.

- **Conference Call**

Provides options for creating a conference call.

## Hub Window

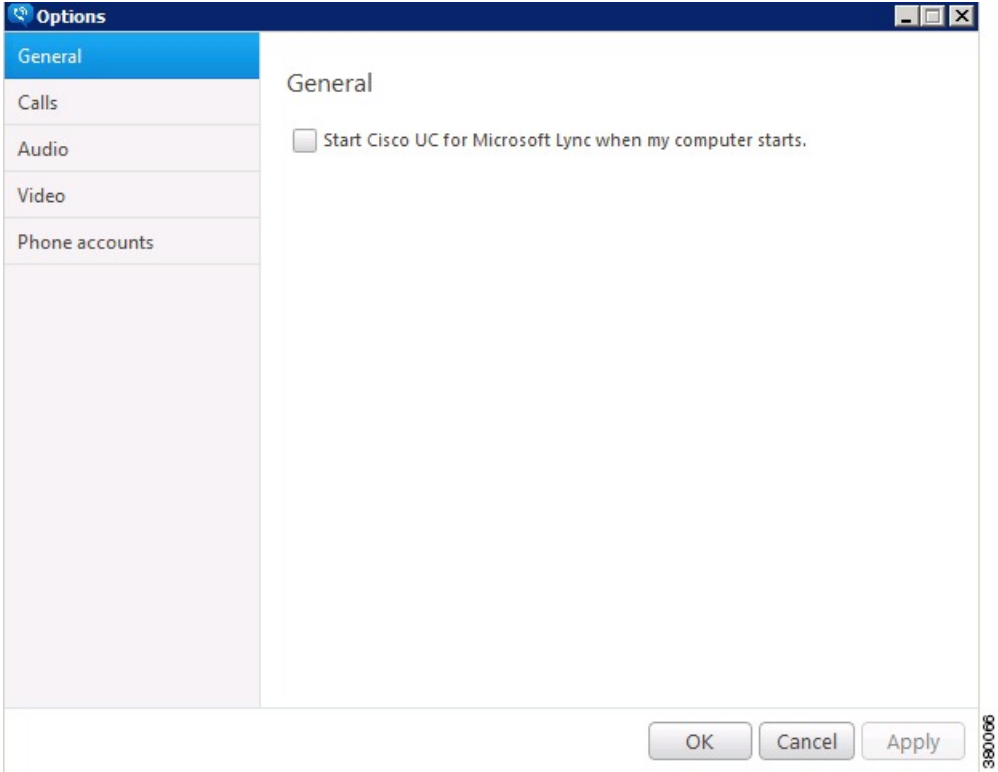
The Hub window displays call history and voicemails. Phone configuration is also performed on this window. The Hub window is displayed when the user first logs into the application but can be hidden by closing it. Use the Docked window when the Hub window is closed to access the Hub window functions. See [Docked Window](#), on page 2 for more information.





# Options Window

The Options window is used to configure Cisco UC Integration for Microsoft Lync according to user preferences and deployment. Access the window by selecting **File > Options** on the Hub window. Select **Apply** or **OK** after making changes on this window to save those changes. Select **Cancel** to cancel any changes.



The following table lists the settings that can be configured on this window.

Category	Setting	Description
General	Start Cisco UC for Lync when my computer starts.	Starts the application automatically when the computer is started if selected.

Category	Setting	Description	
Calls	<b>Always start calls with video.</b>	Automatically sends video when a calls starts if selected. This is the default selection.	
	<b>Never start calls with video.</b>	Never sends video when a call starts if selected. Video can be started manually during the call.	
	<b>Audio</b>	<b>Speaker</b>	Select the speaker the application will use from the drop down list. Use the slider under the drop down list to adjust the volume.
		<b>Microphone</b>	Select the microphone the application will use from the drop down list. Use the slider under the drop down list to adjust the volume. The strength indicator under the drop down list indicates the current loudness of the microphone.
<b>Ringer/Alerts</b>		Select the device the application will use to play ringer and alert sounds from the drop down list. Use the slider under the drop down list to adjust the volume.	
<b>Advanced &gt;&gt;</b>		Select <b>Advanced &gt;&gt;</b> to arrange the order of preference for each audio device.	
Video	<b>Camera</b>	Select the camera the application will use from the drop down list. A video preview will be displayed if the camera is selected successfully.	
	<b>Advanced &gt;&gt;</b>	Select <b>Advanced &gt;&gt;</b> to arrange the order of preference for each camera device.	

Category	Setting	Description
Phone accounts	Voicemail	Enter the user name and password associated with your Cisco Unity Connection voicemail account. Consult your system administrator if you do not have this information. Select <b>Advanced</b> >> if you need to input Cisco Unity Connection server information. This information will be supplied by your system administrator if necessary.





## Features and Functionality

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### Contact Search

Perform the following procedure to place a call using the contact search.

#### Procedure

---

- Step 1** Select the dockable window.
  - Step 2** Begin typing the name of the contact in the search box.
  - Step 3** Select the desired contact from the search results.
  - Step 4** Use the call icon beside the contact name to place a call.
-

## Call History

Perform the following procedure to place a call using the call history.

### Procedure

---

- Step 1** Select the dockable window.
  - Step 2** Select the **Calls** icon.  
The Hub window opens.
  - Step 3** Select the desired phone number from the list.
  - Step 4** Use the call icon beside the phone number to place a call.
  - Step 5** Close the Hub window.
- 

## Direct Dial

Perform the following procedure to place a call using direct dialing.

### Procedure

---

- Step 1** Select the dockable window.
  - Step 2** Enter the phone number in the search box.
  - Step 3** Press **Enter**.
- 

## Drag and Drop Contacts

Perform the following procedure to place a call by dragging and dropping Microsoft Lync contacts.

### Procedure

---

- Step 1** Select Microsoft Lync.
- Step 2** Select and drag the desired contact to the dockable window.
- Step 3** Drop the contact on the dockable window.  
A call will be placed to the contact.

**Note** Drag and drop is not currently supported with Microsoft Lync 2013.

---

# Call a Contact From Microsoft Lync

Perform the following procedure to call a contact from within Microsoft Lync.

## Procedure

---

- Step 1** Select Microsoft Lync.
- Step 2** Perform one of the following actions to place a call:
- Right-click a contact and select **Place Call**.
  - Select **Show Participant List** from a Microsoft Lync instant messaging window. Right-click a participant and select **Place Call**.
  - Select several participants in a Microsoft Lync group chat and right click to make a conference call. This feature is only available with Microsoft Lync 2010.
  - Right-click a contact and display their Microsoft Lync Contact Card. Select **View more options for interacting with this person**. Use the presented option for making a call. This feature is only available with Microsoft Lync 2010.
- 

# Receive a Call

The Incoming Call window displays when you receive an incoming call. This window provides options for:

- Accepting a call

Select **Accept** to connect the call and begin a conversation. The Call window is displayed after the call is connected. See [Call Window, on page 3](#) for more information.

- Declining a call

Select **Decline** to not answer the call. Declined calls are sent to voicemail if it is configured. See [Voicemail, on page 11](#) for more information.

# Voicemail

The Voicemail tab on the Hub window provides access to your voicemail. This tab displays a list of all current voicemail messages.

Cisco UC Integration with Microsoft Lync provides access to your corporate voicemail. Select the Voicemail tab on the main window. This tab displays a list of all current voicemail messages. You can interact with the messages on this tab by:

- Selecting a message to play it.
- Selecting anywhere in the playback bar to reverse or advance playback.
- Pausing playback by selecting the **Pause** button.

Voicemail messages are deleted by selecting a message, right-clicking it, and selecting **Delete**.

The text of unplayed messages are bolded to distinguish them from played messages.

## Click to Call Functionality

Cisco UC Integration for Microsoft Lync integrates with Microsoft Outlook, Microsoft Excel, and Microsoft Internet Explorer to provide Click to Call functionality in those applications. Click to Call provides the ability to call phone numbers or contacts without leaving the application. The following features are provided:

- **Microsoft Outlook**

- Call the sender of the currently highlighted message in the main Outlook window using the button provided on the Ribbon (Microsoft Outlook 2010 only).
- Select a recipient of the currently highlighted message to call in the main Outlook window using the button provided on the Ribbon (Microsoft Outlook 2010 only).
- Call the sender of the currently read email from the Ribbon in the message window.
- Select a recipient of the currently read email to call from the Ribbon in the message window.
- Call the selected contact or recipients list directly or using the **Call With Edit** option with the Ribbon button.
- Right-click the sender or any recipient to call them using the **Additional Actions** right-click menu item. Senders or recipients can be called directly or using the **Call With Edit** option. This is a Smart Tag option only available in Microsoft Outlook 2003 or 2007.
- Right-click any user and call them. Use the **Contacts > Additional Actions** menu in Microsoft Office 2007. Contacts are accessed directly in Microsoft Office 2010. Contacts can be called directly or using the **Call With Edit** option.
- Call a contact from the **Contact** window using the buttons provided on the Ribbon.
- Call a contact from any **Calendar** item using the buttons provided on the Ribbon.

- **Microsoft Excel**

- Call a phone number highlighted in a spreadsheet using the button provided on the Ribbon.
- Right-click and call a phone number highlighted in a spreadsheet.
- Use the **Call with Edit** button in the Ribbon to modify a selected value or enter a different number.
- Use the **Call with Edit** item in the right-click menu to modify a selected value or enter a different number.

- **Microsoft Internet Explorer**

- Right-click and call a phone number highlighted on a web page.
- Use the **Call with Edit** item in the right-click menu to modify a selected value or enter a different number.

See *Software Requirements* in the *Cisco UC Integration for Microsoft Lync Release Notes* for information on the supported versions of each application.



## Set the Preferred Phone Device

Perform the following procedure to set the preferred phone device.

### Procedure

---

- Step 1** Select the dockable window.
- Step 2** Select the Hub window icon.
- Step 3** Select the phone device selection drop down list in the bottom right hand corner of the Hub window.  
**Note** This list is populated with all of your configured phone devices. If a device is not available and should be, contact your system administrator.
- Step 4** Select your preferred phone device.
- 

## Call Information Windows

Cisco UC Integration for Microsoft Lync has the ability to display contact and other information about connected incoming calls. These information windows are displayed after the call is connected in either a new Microsoft Internet Explorer tab or window. A new information window is displayed when the following occurs:

- An incoming call is connected.
- A call is transferred to you from another user.
- Participants are added to a conference call. An information window is displayed for each unique participant in a conference call.

These information windows are configured by your administrator. They will inform you if this functionality is available to you.

## Initiate a Chat Session

Perform the following procedure to initiate a Microsoft Lync chat session from Cisco UC Integration for Microsoft Lync.

### Procedure

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- Step 1** Right-click a contact in Cisco UC Integration for Microsoft Lync in either search results, the Call History tab, or the Voicemail tab.
- Step 2** Select **Chat**.  
**Note** This feature is only available with Microsoft Lync 2010.  
**Note** This feature will not work if Microsoft Lync is not running or the user is not signed in.





## Virtualization Experience Client Media Engine

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- [Device Management, page 16](#)
- [Audio, page 17](#)
- [Video Resolution, page 19](#)
- [Screen Lock Call Control, page 19](#)

### Cisco Unified Communications and the Virtual Environment

In a virtual environment, your Cisco Unified Communications application (such as Cisco Jabber or Cisco UC Integration for Microsoft Lync) runs on your hosted virtual desktop. The hosted virtual desktop is a form of desktop computing. Your hosted virtual desktop looks and functions like a regular desktop; however, your Windows desktop, other software, and your data reside in a central location called a data center. You access your hosted virtual desktop over a secure Citrix or VMware connection.

The hosted virtual desktop removes the need for typically more costly physical desktop PCs. Central hosting in the data center reduces the cost of providing the applications and computing services that you need. This type of setup is commonly referred to as a virtual environment.

In a virtual environment, Cisco Virtualization Experience Media Engine is required to support audio and video calls with your Cisco Unified Communications application. Cisco Virtualization Experience Media Engine also provides support for the following accessories:

- Logitech UC Keyboard K725-C
- Logitech Mouse M525-C
- Logitech Webcam C920-C
- Jabra Handset 450 Cisco
- Jabra Speak 450 Cisco

**Note**


If you use supported accessories other than those that are designed for Cisco, the function of these devices may be different from the function of the devices that are described in this document.

For a complete listing of supported audio and video accessories, see Unified Communications Endpoint and Client Accessories at [http://www.cisco.com/en/US/prod/voicesw/uc\\_endpoints\\_accessories.html](http://www.cisco.com/en/US/prod/voicesw/uc_endpoints_accessories.html).

For information about Cisco Virtualization Experience Client and the designed for Cisco Accessories, see *User Guide for Cisco Virtualization Experience Client 6215*.

## Device Management


Device management in a virtual environment differs from a local installation. Cisco Virtualization Experience Media Engine (VXME) includes a component called Device Selector. Device Selector is a menu that you use to manage your cameras and audio devices. You can view your currently active cameras and audio devices or change them. A list of audio devices appears first in the menu, followed by a list of cameras. The list of audio devices includes the thin client built-in audio device. Your active camera and audio device selections apply to all applications.

The icon for the Device Selector () appears in the notification area, in the bottom right corner of the screen. Some icons, including the Device Selector, can be hidden. Click the up arrow in the notification area to show hidden icons.

## View Your Active Camera or Audio Device

You can check to see which of your cameras or audio devices is currently selected.

### Procedure


In the Windows notification area, click . Check marks indicate the selected devices.

## Change Your Active Camera or Audio Device

Use the **Device Selector** menu to select a different active camera or audio device. You must have multiple devices connected.

### Procedure

#### Step 1

In the Windows notification area, click . Check marks indicate the selected devices.

#### Step 2

Click a device (camera or audio) to make it active.

#### Step 3

Click anywhere except on the **Device Selector** menu to close the menu.

# Audio

All audio from your Cisco Virtualization Experience Client and your hosted virtual desktop plays through your selected audio device. You can adjust the volume on the Cisco Virtualization Experience Client; however, each time you log in to your hosted virtual desktop, the volume setting synchronizes with the setting on your hosted virtual desktop.

## Default Audio Device Selection

When you start your Cisco Virtualization Experience Client for the first time, the default audio device is the first device in the following order:

- 1 Hands-free—If multiple hands-free devices are connected, the default is the first device in alphabetical order.
- 2 Headset—If multiple headsets are connected, the default is the first headset in alphabetical order.
- 3 Handset—If multiple handsets are connected, the default is the first handset in alphabetical order.
- 4 No devices connected—The default audio device is the Cisco Virtualization Experience Client built-in speaker.

The next time that you start your Cisco Virtualization Experience Client the default audio device is the last selected active device, provided that the device is still connected. Otherwise, Device Selector makes the first available device active (subject to the preceding order of selection.)

After you connect a new device, a “New device found” message appears in the notification area and the new device becomes the active device.

When you disconnect a device, a “Device disconnected message” appears in the notification area and the next device in the Device Selector list becomes active.

## Ringtone

When you have an incoming call, an incoming call notification appears on your screen and your active audio device plays the ringtone. Depending on your active device, the Cisco Virtualization Experience Client built-in speaker also plays the ringtone to ensure that you can hear it. If the hands-free speakerphone is the active device, the ringtone plays on the speakerphone. If the hands-free speakerphone is not the active device, or it is not connected, both the active device and the Cisco Virtualization Experience Client built-in speaker play the ringtone.

**Note**

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With some wireless headsets, you may not hear the ringtone. Some headsets play their own internal tone.

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## Device Ready Indicator

If you perform one of the following off hook actions and you have no incoming or in-progress calls, the active device plays a beep tone to indicate that the device is ready. The device becomes the active device if it was not already.

- Press the **Call** key on the Logitech UC Keyboard. If the headset is the active device, the beep plays on the Cisco Virtualization Experience Client built-in speaker.
- Press the **Call** key on a headset.
- Press the **Speaker** button on the Jabra Speak 450.
- Lift the Jabra Handset 450 from its cradle.

For example, if your current active device is your headset and you lift the handset from the cradle, the handset becomes the active device and plays the beep tone to indicate that it is ready. The UC Keyboard indicates your new selection.




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**Note**

You must be signed in to Cisco Jabber or Cisco UC Integration™ for Microsoft Lync.

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## Adjust Cisco Unified Communications Volume

You can adjust the volume settings for certain applications on your hosted virtual desktop, including Cisco Jabber or Cisco UC Integration™ for Microsoft Lync.




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**Note**

You can adjust the Cisco Unified Communication volume during a call by using the volume control on the call strip, in the active call window.

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### Procedure

---

**Step 1** In the notification area, click the **Speaker** icon.

**Step 2** Click **Mixer**.

**Step 3** Use the slider for Cisco Jabber or Cisco UC Integration™ for Microsoft Lync to increase or decrease the volume.

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## Adjust Settings for Jabra Bluetooth Devices

### Before You Begin

Jabra PC Suite must be installed.

## Procedure

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- Step 1** Open the Jabra Control Center.
  - Step 2** Click the Jabra device for which you want to modify the settings.
  - Step 3** Click **Softphone (PC)**.
  - Step 4** Check the **Open phone line on undock** check box.
  - Step 5** Under **PC audio control**, click **Automatic**.
  - Step 6** From the Softphone Vendor list, select **Other**.
  - Step 7** Click **Apply**.
- 

## Video Resolution

The only supported camera that features hardware encoding is the Logitech WebCam C920-C.

You must use this model camera with Cisco Jabber or Cisco UC Integration™ for Microsoft Lync and Cisco Virtualization Experience Media Engine to support video resolutions up to 720p (720 horizontal lines and an aspect ratio of 16:9) at 30 frames per second in the virtual environment. Other supported cameras only support video resolution up to 360p.

Numerous other variables, such as network traffic or far-endpoint video capability, can affect video quality.



---

**Note** Do not switch from a high definition (HD) camera with hardware encoding to a standard definition (SD) camera during a call. Video calls use the settings that are established at the start of the call. The higher setting for the HD camera causes video performance issues with an SD camera. If you want to switch to an SD camera, do so between calls.

---

## Screen Lock Call Control

While your hosted virtual desktop is in screen lock, you cannot make calls, but you can receive them. If you have an incoming call while your hosted virtual desktop is in screen lock, you can use one of your accessories to answer the call. With supported accessories, the following call control features are available during screen lock:

- Answer call
- End call
- Hold call
- Resume call
- Change active device (Logitech UC Keyboard feature)
- Toggle audio mute

- Toggle video start and stop (Logitech UC Keyboard feature)
- Adjust audio volume