

Polycom® CX5100 and CX5500 Unified Conference Stations for Microsoft® Skype™ for Business

Polycom announces the release of version 1.3.0 software for the Polycom® CX5100 and CX5500 Unified Conference Stations for Microsoft® Lync and Skype for Business. This document provides the latest information about the Polycom CX5100 and CX5500 systems.

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Overview

The Polycom CX5100 and CX5500 Unified Conference Stations enable you to use the collaboration capabilities of Microsoft Lync or Skype for Business voice, video, and content while automatically tracking the flow of conversation to support richer, more interactive communication. The following figure shows the CX5500 tabletop unit with LCD panel, the CX5100 tabletop unit, and the power data box for both systems.

Polycom CX5500 and CX5100 Unified Conference Stations for Microsoft Lync or Skype for Business



During a call, the integrated cameras capture the active speaker as well as the entire panoramic view of your conference room, and the integrated microphones capture the voices coming from any location around the table. For larger conference rooms, you can add optional satellite microphones.



Note: The CX5100 and CX5500 unified conference stations do not support the Microsoft Surface Hub.

What's New in Release Software 1.3.0

The following new features are available in the 1.3.0 release:

- [User Interface Update](#)
- [Support for Mac OS](#)
- [Optimized Dial Pad Layout](#)
- [Microphone LED Status Indicator](#)
- [Export Configuration File to USB Flash Drive](#)
- [Capture the Wireshark Trace using Flag File to USB Flash Drive](#)
- [Capture Wireshark Trace through Telnet Command](#)
- [Caller Details on CX5500 Unified Conference Station](#)
- [RealPresence Resource Manager Integration](#)

User Interface Update

The new user interface colors and icons are consistent with that of Skype for Business. When you sign in to the device using a Skype for Business account, the touch panel's user interface automatically switches to the new user interface.



Note: You cannot change the user interface from the control panel using a personal computer.

Support for Mac OS

This release supports active speaker detection and panoramic view overlay for Mac OS computers connected to the CX5100 and CX5500 systems. The active speaker is sent to the main video layout, and participants connected to the conference can be seen through panoramic view at the bottom of the active speaker video. The supported Mac OS versions include:

- OS X 10.9
- OS X 10.10
- OS X 10.11
- OS X 10.12



Note: The panoramic view overlay feature is supported only when the UVC output resolution is 1080p or 720p.

Optimized Dial Pad Layout

The CX5500 unified conference station now features an optimized layout for the dial pad. You can view the dial pad in large text. The call history tab is removed and the dialer is moved to the center in large text.

Microphone LED Status Indicator

The microphone LED status indicator now also allows you to know the health of the monitored hardware components. When the POST check fails during system boot-up, the microphone LED light flashes in amber color to let you know the issue is with the monitored hardware component.

Export Configuration File to USB Flash Drive

You can export the configuration file to a FAT32 formatted USB flash drive. The USB flash drive must be connected before you turn on the system. Once the system is turned on, the configuration file is exported to the USB flash drive automatically.

Capture the Wireshark Trace using Flag File to USB Flash Drive

You can capture the Wireshark trace to a FAT32-formatted USB flash drive after the system is turned on.

When the system detects a USB flash drive attached with a `plcm_tcpdump_in_seconds.cfg` file, the system starts to capture the Wireshark trace automatically.



Note: The value of the parameter in `plcm_tcpdump_in_seconds.cfg` must be within the range of 1 to 300 seconds.

Once the time interval exceeds the value of the only parameter in the file, the system stops capturing the trace. You can save the captured logs to the USB flash drive and then remove the drive.

Capture Wireshark Trace through Telnet Command

You can capture the Wireshark trace to a FAT32-formatted USB flash drive through Telnet command by setting the value of the `diags.pcap.enabled` and `diags.telnetd.enabled` parameters to 1 in the configuration file.

After you configure the parameter, connect the USB flash drive to the system and use the following commands to capture the trace through Telnet:

- `pcapFilterSet` - Sets the capture filter to be used with the USB flash drive
- `pcapStart` - Starts the capture to the USB flash drive
- `pcapStop` - Stops the capture to the USB flash drive

The Wireshark trace capture is written out to a file with the naming convention `<MAC>-<date>-<time>.pcap` and is saved in the root directory of the USB flash drive.

Caller Details on CX5500 Unified Conference Station

The CX5500 unified conference station now displays the caller details during the call. When you place or receive a Skype for Business call from the CX5500 unified conference station, the caller's name, title, and call duration is displayed on the CX5500 unified conference station touch panel.

RealPresence Resource Manager Integration

The CX5100/CX5500 unified conference stations can be dynamically managed in the RealPresence Resource Manager system, which provides the secure way to remotely provision and upgrade CX5100/CX5500 systems as other dynamically managed Polycom video endpoints. The dynamic management from the RealPresence Resource Manager system is client-to-server over HTTPS which makes it more secure and firewall-friendly.

This function allows you to perform the following operations from the RealPresence Resource management server:

- **Software upgrade** - Allows you to update the CX5100/CX5500 systems software from RealPresence Resource Manager portal as other dynamically managed video endpoint.
- **Monitoring the online/offline device** - Allows you to monitor the CX5100/5500 online or offline status together with the endpoint details such as name, IP address, MAC address, software version, and so on.
- **Provisioning** - Allows you to change the basic CX5100/5500 settings from RealPresence Resource Manager including time zone, time format, time server, and so on.



Note: The RealPresence Resource Manager provisioning does not support if the base profile for CX5500 system is set to **Skype**. Make sure to set the base profile to **Generic**.

The following parameters support the RealPresence Resource Manager to provision the CX5500 system:

- `tcpIpApp.sntp.daylightSavings.enable`
- `lcl.datetime.time.24HourClock`
- `tcpIpApp.sntp.address`
- `tcpIpApp.sntp.address.overrideDHCP`
- `tcpIpApp.sntp.gmtOffset`
- `tcpIpApp.sntp.gmtOffset.overrideDHCP`
- `device.prov.serverName.set`
- `device.prov.serverName`
- `device.masterConfigFile.LogFileDirectory`

For more information on configuring these parameters, see *Polycom CX5500 Unified Conference Station Administrator Guide*.

Configure the RealPresence Resource Manager to Provision the CX5500 System

Before you begin to configure the RealPresence Resource Manager (RPRM) to provision the CX5500 unified conference station, make sure you do the following:

- The `device.prov.lyncDeviceUpdateEnabled` parameter value must be set to 0.
You can also export the CX500 system device settings configuration file through Web Configuration Utility to set the value of the parameter.
- The **Base Profile** for the CX5500 unified conference station is set to **Generic**.
- The RealPresence Resource Manager 10.1 and above supports provisioning the CX5500 unified conference station.



Note: The value of the `device.prov.lyncDeviceUpdateEnabled` parameter is already set to 0, if you do not find the parameter in the CX5500 system device settings configuration file when exported through Web Configuration Utility.

You can configure the RPRM server to provision the CX5500 system, allowing you to perform a software upgrade and monitor the online/offline devices using the following methods:

- Provision the CX5500 system through FTP
- Provision the CX500 system through Web Configuration Utility

Provision the CX5500 system through FTP

You can configure the RPRM server to provision the CX5500 system through FTP by storing the configuration files in the FTP root directory.

To provision the CX5500 system through FTP:

- 1 Configure the FTP server address, username and password to store configuration files.
- 2 Prepare the following files to configure RPRM as the management server:
 - `<MACaddress>.cfg`
 - `CustomizedProfile.cfg`If the configuration files are already available on the FTP server, download the files to your system.
- 3 Edit the `<MACaddress>.cfg` file name with the systems MAC address.
- 4 Save the `<MACaddress>.cfg` file.
- 5 Edit the following parameters in the `CustomizedProfile.cfg` file with the RPRM server details:
`device.cma.serverName`
`device.logincred.user`
`device.logincred.password`
- 6 Save the `CustomizedProfile.cfg` file.
- 7 Copy the following configuration files to the FTP root directory:
 - `<MACaddress>.cfg`
 - `CustomizedProfile.cfg`
- 8 Login to the RPRM server to view the CX5500 systems status.

For more information on configuring the FTP server, see *Polycom CX5500 Unified Conference Station Administrator Guide*.

Provision the CX5500 system using Web Configuration Utility

You can configure the RPRM server to provision the CX5500 system using Web Configuration Utility by importing the edited configuration file to the CX5500 system.

To provision the CX5500 system using Web Configuration Utility:

- 1 Prepare the following file to configure RPRM as the management server:
 - `CustomizedProfile.cfg`
- 2 Edit the following parameters in the `CustomizedProfile.cfg` file with the RPRM server details:
`device.cma.serverName`
`device.logincred.user`
`device.logincred.password`
- 3 Save the `CustomizedProfile.cfg` file.

- 4 Login to the Web Configuration Utility of CX5500 system and navigate to **Settings > Utilities > Import & Export Configuration > Import Configuration**.
- 5 Click **Choose File** and select the edited CustomizedProfile.cfg file.
- 6 Click **Import**.
- 7 Login to the RPRM server to view the CX5500 systems status.

For more information on Web Configuration Utility, see *Polycom CX5500 Unified Conference Station Administrator Guide*.

Release History

This following table lists the release history of the Polycom CX5100 and CX5500 Unified Conference Stations.

Software Version	Release Date	Description
1.3.0	March 2017	Added the following features: <ul style="list-style-type: none"> • User Interface update • Mac OS 10.12 support • Optimized Dial Pad Layout • RealPresence Resource Manager Integration • Export configuration file to USB flash drive • Capture Wireshark trace using flag file to USB flash drive • Capture Wireshark trace to USB flash drive using Telnet command
1.2.3	July 2016	Resolutions for some known issues.
1.2.0	April 2016	Added the following features: <ul style="list-style-type: none"> • Mac OS support • Windows 10 support • Health Monitor • Central Provisioning Management • Remote Log Collector • Dial Pad screen • Polycom TLS Certificate Support • Microsoft Office 365 and Skype for Business Online
1.1.6	January 2016	Resolutions for some known issues.
1.1.5	October 2015	Added new part numbers for the CX5500 touchscreen and codec. Added the hardware and software compatibility check. Resolutions for some known issues.
1.1.4	August 2015	Added the Downgrade Software and Fisheye Correction features. Resolutions for some known issues.
1.1.3	April 2015	Solutions for OpenSSL vulnerabilities. CX5500: Localization for the Incoming Lync Call Notification feature.

Software Version	Release Date	Description
1.1.2.1	January 2015	Resolutions for some known issues.
1.1.2	October 2014	CX5500: <ul style="list-style-type: none"> Incoming Lync call notification and answer. BroadSoft and Open SIP certification.
1.1.1	September 2014	Solutions for OpenSSL vulnerabilities.
1.1.0	May 2014	CX5100: Resolutions for some known issues. CX5500: Initial release.
1.0.0	December 2013	CX5100: Initial release.

Hardware and Software Requirements

System performance can vary based on the connected computer, your network connection, and your Lync client version. The computer connected to the system should meet the minimum hardware and software requirements shown in the following table.

Minimum Requirements for the Connected Computer System

Category	Requirement
Windows	<ul style="list-style-type: none"> Windows 10 (32-bit or 64-bit) Windows 8.1 (32-bit or 64-bit) Windows 8 (32-bit or 64-bit) Windows 7 (32-bit or 64-bit)
Mac OS	<ul style="list-style-type: none"> OS X 10.12 OS X 10.11 OS X 10.10 OS X 10.9
Desktop Client	<ul style="list-style-type: none"> Microsoft Skype for Business 2016 Microsoft Skype for Business for Mac, version 16.x.x Microsoft Skype for Business 2015 Microsoft Lync 2013 (required for 1080p video) Microsoft Lync 2010 Microsoft Lync for Mac 14.3.3 (160216), with native Safari web access
Processor	<p>Basic Video Transmit</p> <ul style="list-style-type: none"> 2.0 GHz or higher <p>HD Transmit (720p active speaker video)</p> <ul style="list-style-type: none"> Quad core, 2.0 GHz or higher <p>For Skype for Business 2013 client requirements, see Microsoft Lync Client Software Support in Lync Server 2013.</p> <p>For Lync 2010 client requirements, see Microsoft Client and Device Software and Infrastructure Support.</p>

Minimum Requirements for the Connected Computer System (continued)

Category	Requirement
RAM	2 GB
Hard drive space	1.5 GB
Video card	128 MB RAM with support for full hardware acceleration
Monitor	1024 x 768
USB connector	USB 3.0 is required for 1080p calling. Connecting the system to a USB 2.0 or USB 1.0 port can result in reduced performance. If you see a message that your computer could run faster when you connect the CX5500 system, the system is connected by USB 2.0.
USB driver	Check that your computer has the latest USB driver available for your computer. <ul style="list-style-type: none"> Windows 8 or later: Use Windows Update to ensure that you have the latest driver. Windows 7: Check the web site of your computer's manufacturer to ensure that you have the latest driver.

Products Tested with this Release

The Polycom CX5100 and CX5500 Unified Conference Stations are tested with a wide range of products. The following list is not a complete inventory of compatible equipment. It indicates the products that have been tested for compatibility with this release.



Note: Polycom recommends that you upgrade your Polycom devices with the latest software versions, as compatibility issues may already have been addressed by software updates. Refer to the [Current Polycom Interoperability Matrix](#) to match Polycom devices with the latest software release.

Products Tested with This Release

Product	Tested Versions
Microsoft Lync Server 2010	4.0.7577.230 (CU12)
Microsoft Lync for Mac 2011	14.3.3 (160216)
Microsoft Lync Server 2013	5.0.83.08 (CU5)
Microsoft Skype for Business Server 2015	6.0.9319.72
Broadsoft R21 (VoIP)	SP1
Polycom® CX8000	15.15.03
RPRM server	10.1
USB extender	UNITEK USB3.0 Y-3005 / Icron USB2.0 Ranger 2304

Set Up the System

Place the device in the center of the conference room table, and connect the cables according to the configuration shown in the setup sheet shipped in the box with the system. You can also find the setup sheet at [Polycom Voice Support](#).

To start up the system:

- 1 Connect the power cable to a power outlet.
Green indicator lights flash during the startup process. When the green indicator lights stop flashing, the system is ready to use.
- 2 Power on the computer and connect the USB cable from the CX5100 or CX5500 system to your computer after the computer has started.
Microsoft Lync or Skype for Business automatically detects the system and selects it as the video and audio device for conferences.

You do not need to power the system on and off.

Configure the CX5100 or CX5500 System

For instructions on configuring the conference phone capability of the CX5100 or CX5500 system, refer to the *Polycom CX5100 Unified Conference Station Administrator Guide* or *Polycom CX5500 Unified Conference Station Administrator Guide*, available at [Polycom Voice Support](#). The administrator guides discuss how to configure the systems using a provisioning server, the Web Configuration Utility, or CX5100/CX5500 Control Panel.

Update the Software

Update your system to the most current software in order to ensure optimum performance. Check [Polycom Support](#) for software updates. When an update is available, you can update the software using a USB flash drive or the Web Configuration Utility.

The update takes up to 40 minutes to complete. During this time, the system reboots several times. Do not power the system off during an update. Wait at least 40 minutes to make sure the update has completed.



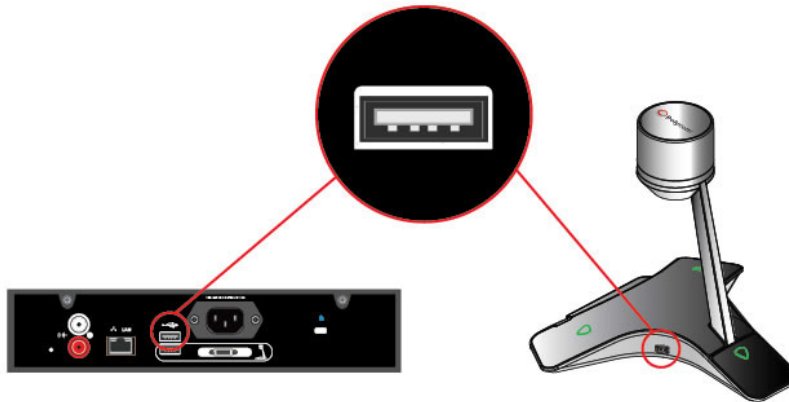
Note: When CX5100 and CX5500 unified conference stations are running on a version lower than software version 1.3, system restore to software version 1.3 factory settings through a USB is not supported.

To update the software manually by downloading the software to a flash drive:

- 1 Format a USB flash drive as FAT32. Polycom recommends that you use a USB 2.0 flash drive.
If you are using a drive that is already formatted, ensure that previous software updates are deleted from the flash drive.
- 2 From the Polycom Support site, download the software package to the flash drive. The software package has a .tar extension.

- 3 Connect the USB flash drive to the USB 2.0 port on the tabletop unit or on the power data box. If you choose to connect to the power data box, first remove the rubber plug from the USB port.

The locations of the ports are shown in the following diagram.



- 4 On the CX5500 system, respond to the software update request displayed on the LCD touch screen.

The system detects the flash drive and starts the update within 30 seconds. The indicator lights begin to flash, indicating that the update has started.

The system reboots several times during the update. The indicator lights flash in several different patterns.

The update is complete when the indicator lights stop flashing.



Note: If the base profile of the CX5500 system is set to **Lync**, you must enable access to the Web Configuration Utility. Refer to the *Polycom UC Software in a Microsoft Lync Server Environment Deployment Guide* for directions.

To update the software on the system through the Polycom Web Configuration Utility:

- 1 In the address field of a web browser, enter the IP address of the CX5100 or CX5500 system. You can find the IP address of the system by navigating to **Settings > Status > Platform > Phone**.
- 2 Log in as an administrator by selecting **Admin** and entering your password. The default password is 456. Check with your administrator to see if the password has been changed.
- 3 Select **Utilities > Software Update** and choose how to update your system.
 - Automatic: Select the date and time to perform the automatic updates and click **Save**.
 - Manual: Specify whether the update package is located on the Polycom Hosted Server or on a location you specify, and click **Update Now**. Follow the prompts to complete the update.
- 4 When an update starts, the indicator lights begin to flash.

The system reboots several times during the update. The indicator lights flash in several different patterns.

The update is complete when the indicator lights stop flashing.

Resolved Issues

The following table lists the issues that have been resolved in version Software 1.3.0.

Category	Issue ID	Release Found In	Description
Skype	MIL-1937	1.2.3	The CX5500 systems registered to Lync and Skype for Business servers are sometimes unable to transfer calls in a federated environment.
USB	MIL-1945	1.2.3	On rare occasions, the CX5100 or CX5500 system is unable to upgrade software using USB devices.
USB	MIL-1953	1.1.6	The mute button on the CX5100 system does not respond and the LED indicator continues to flash in green color.
User Interface	MIL-1882	1.2.0	The CX5500 system displays extra characters in Tabletop Hardware Version.
User Interface	VIDESC-16600	1.2.3	The Softkey to mute and unmute the microphone on the CX5500 system fails to unmute the microphone in a Skype for Business call.
Web Configuration Utility	MIL-1895	1.2.0	In the Web Configuration Utility for the CX5100 system, an incorrect information displays for the Network Ethernet settings.
Web Configuration Utility	MIL-2002	1.2.3	The CX5500 system does not support software upgrade using HTTPS.

Known Issues

The following table lists all known issues and suggested workarounds for release Software 1.3.0.

Category	Issue ID	Release	Description	Workaround
Audio	MIL-1960, VIDESC-16276	1.1.6	In a Skype meeting, the CX5100/CX5500 unified conference stations are not recognized as an audio/video device when connected to a personal computer.	Restart the CX5100/CX5500 systems.
Audio	MIL-1987	1.3.0	Downloading logs during the call on CX5500 system results in a noisy output.	Download logs after the call.

Category	Issue ID	Release	Description	Workaround
Audio	MIL-1994	1.3.0	When making a Skype for Business call from a Mac computer, the speaker using CX5100/CX5500 systems receives no audio.	Restart the Mac computer.
Content	MIL-2015	1.3.0	When content sharing is stopped in a conference, the microphone status of Lync clients using a Mac computer becomes unmuted.	Manually mute the microphone on Lync.
Configuration	MIL-1634	1.2.0	When you attempt to access system log files using the Web Configuration Utility or view log files uploaded to the provisioning server, the debug.xml file does not contain the latest information for the system.	Connect a USB flash drive to the system to retrieve logs. The debug.xml file is updated on the provisioning server and in the Web Configuration Utility.
Control Panel	MIL-1873	1.2.0	Some time zone options display incorrectly in the CX5100-CX5500 Control Panel.	
Hardware	MIL-1996	1.3.0	When using the CX5100/CX5500 systems in a peer-to-peer Skype for Business call on a Mac computer, the mute button on the CX5100/CX5500 systems fail to respond.	Use Skype for Business client to mute and unmute the call.
IP Phone	MIL-1999	1.3.0	When you sign in to the Skype for Business account on a CX5500 system and the provisioning server is not reachable when enabled, the CX5500 system's touch panel responds slowly followed by a system restart.	You must unplug the ethernet cable and restart the CX5500 system. Disable the provisioning server if enabled or use the correct provisioning server using the CX5500 system's touch panel. Restart the CX5500 system after you plug the ethernet cable back to the system.
User Interface	MIL-1992	1.3.0	The CX5500 system fails to display the contact added from Skype for Business directory to the contact list.	Restart the CX5500 system.
USB	MIL-1946	1.2.3	On rare occasions, the CX5100 or CX5500 system locks when upgrading software using USB devices and the software upgrade is unable to complete.	Enable the phone lock feature by navigating to Settings> Basic> Lock Phone .

Category	Issue ID	Release	Description	Workaround
USB	MIL-1879	1.2.0	If there is at least 10 GB of data on a connected USB flash drive, the system is unresponsive during some tasks like locking or unlocking the system, retrieving logs, or upgrading the system software.	Make sure that the USB flash drive has limited data on it.
USB	MIL-2027	1.3.0	When the CX5100/CX5500 systems are connected to a Windows desktop through a USB express card, the Windows operating system is unable to recognize the CX5100/CX5500 systems as an audio/video device.	Connect the CX5100/CX5500 systems to any USB port of desktop.
User Interface	MIL-1640	1.2.0	When you connect a CX5500 system to a Mac computer, the device name displays as CX5100.	

Get Help

For more information about installing, configuring, and administering Polycom products, refer to Documents and Downloads at [Polycom Support](#).

To find all Polycom partner solutions, see [Polycom Global Strategic Partner Solutions](#).

The Polycom Community

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