

Release Notes

Polycom® RealPresence™ Mobile, Version 1.0.2, Apple® iPad®



The RealPresence Mobile application is designed for business professionals who use a tablet device and need to share visual experiences with others without actually being there. It is an easy-to-use video application that provides premium quality audio and visual experiences. Unlike proprietary applications, the RealPresence Mobile application is standards-based and extends your organizations video network, giving you an engaging experience, just like being there.

This document provides the latest information about the RealPresence Mobile application, version 1.0.2 for iPad2.

Software Version History

Version	Release Date	Features
1.0.2	October, 2011	Feature enhancement. Added automatic CMA server detection.
1.0.1	October, 2011	Initial release.

Hardware and Software Requirements

Apple	iPad2
Operating System	iOS 4.3.2 or later
Synchronization Requirements	iTunes version 10.2 or later Computer: <ul style="list-style-type: none">• Mac OS X 10.2 or later• Windows XP SP3 or later
Network Requirements	Wireless Local Area Network (WLAN, 802.11 a/b/g/n) (Recommended) 3G
Peripheral Devices (optional)	3.5 mm headset Stereo Bluetooth® headset

Interoperability

Type	Product	Version
NAT/Firewall/Border Controller	Polycom VBP® 5300-ST	9.1.5.3
Gatekeeper, Gateways, External MCU, Bridges, Call Managers	Polycom® Distributed Media Application™ (DMA™) 7000	V3.0.0
	Polycom® Converged Management Application™ (CMA®) 5000	5.3 5.0
	Polycom® Converged Management Application™ (CMA®) 4000	5.4 or later
	Polycom® RMX® 4000	7.2 or later
	Polycom RMX 2000	7.2 or later
	Polycom RMX 1000	2.4.2 or later
	Broadsoft SIP r17 Server	SP2
	Broadsoft SIP r16 Server	
	DeltaPath	2.9.2
Endpoints	Polycom HDX Systems	3.0.2 or later
	Polycom® RealPresence Mobile	1.0.0 or later (Android and iOS)
	Polycom® Telepresence m100	1.0.0 or later
Content Sharing Applications	Polycom® People+Content™ IP	1.2.3

Interoperability with the Polycom CMA System

At this time, the Polycom RealPresence Mobile application registers with the CMA system gatekeeper as an endpoint type of Other. As such, the CMA system can schedule and perform limited monitoring of these systems, but it cannot fully manage, provision, or update these systems.

Setting Up the RealPresence Mobile application

You need to configure network and server settings before you can use the RealPresence Mobile application. You can enter settings manually, or register to a CMA server to obtain your settings.





You can use the RealPresence Mobile application without registering to a CMA server. However, to use advanced features such as content receiving, AES, LDAP, and H.460 firewall traversal, you need to register to a CMA server.

To install the RealPresence Mobile application:

- 1 From App Store, search for 'polycom' or 'video conferencing' to find the RealPresence Mobile application.
- 2 Touch **Free** then touch **INSTALL APP**.



To uninstall the RealPresence Mobile application:

- 1 Touch and hold  **Video** until it begins to jiggle.
- 2 Touch  and then touch **Delete**.





Your user data is deleted when you uninstall the application.

To configure the RealPresence Mobile application manually without registering to a CMA server:

- 1 From the Application list, touch  **Video**.
- 2 Touch .
- 3 Configure these Network settings:

Setting	Description
WLAN Call Rate	Specifies call rate to use for calls using a wireless LAN.
3G Call Rate	Specifies the call rate to use for calls using a 3G network.

- 4 Configure these H.323 settings:

Setting	Description
Gatekeeper Registration	Specifies whether to register your system with a gatekeeper: -  : gatekeeper registration disabled. -  : gatekeeper registration enabled.
Gatekeeper Choice	Lets you choose whether to use the Internal or External Server to make calls.
Internal Gatekeeper External Gatekeeper	Specifies the IP address or name of the internal and external gatekeepers. For example, 10.11.12.13 or gatekeeper.company.com.

Setting	Description
H.323 Name	Specifies the name that gatekeepers use to identify this system. You can make Point-to-point calls using H.323 name if both systems are registered to a gatekeeper.
H.323 Extension	Specifies the extension that gatekeepers and gateways use to identify this system.



5 Configure these SIP settings:

Setting	Description
Enable SIP Call	Specifies whether to enable SIP calls.
SIP Registration	Specifies whether to register your system with a SIP server.
SIP Proxy Server	Specifies the DNS name or IP address of the SIP Proxy Server.
SIP Registrar Server	Specifies the DNS name or IP address of the Registrar Server.
Domain	If you use Broadworks SIP server, specifies the domain name for authentication with a Registrar Server. If you use Polycom DMA server as the SIP server, leave the domain blank.
SIP User Name	Specifies the user name for authentication with a Registrar Server.
Authorization Name	Specifies the name to use for authorization when registering with a SIP Registrar Server. If you leave this field blank, the SIP User Name is used for authorization.
SIP Password	Specifies the password for authentication with a Registrar Server.
Transport Protocol	Indicates the protocol the system uses for SIP signaling. <ul style="list-style-type: none"> • TCP provides reliable transport via TCP for SIP signaling. • UDP provides best-effort transport via UDP for SIP signaling.

Configuring the RealPresence Mobile application by registering to CMA server

You can register to a CMA server to obtain your settings. To configure the CMA server, you can either specify the CMA server settings manually, or provide your email account and let the RealPresence Mobile application to find the available CMA server for you.

To configure the RealPresence Mobile application by registering to a CMA server:


- 1 From the Application list, touch  **Video**.
- 2 Touch .
- 3 Specify how to find the CMA server:
 - To register to the CMA server manually, disable **Automatic Configuration** and enter **CMA Server Address**. For example, 10.11.12.13.
 - To let the system locate the CMA server, enable **Automatic Configuration** and enter the **Sign-in Address**. For example, abc@company.com.
- 4 Enter your **User Name, Password**., and then touch **Sign in**.
- 5 Configure these Network settings:

Setting	Description
WLAN Call Rate	Specifies call rate to use for calls using a wireless LAN.
3G Call Rate	Specifies the call rate to use for calls using a 3G network.


- 6 The CMA server configures the rest of the settings for you.

Checking Your Mobile or WLAN Link

To check your current connection status and IP address:

>> Touch  on the bottom of your screen.



In case of a network connection problem,  appears at the bottom of your screen.

What's new in 1.0.2

The version 1.0.2 software provides usability enhancement to the RealPresence Mobile application.

Features in 1.0.1

The version 1.0.1 provides the following features:

- Dual stack operation that allows the Polycom RealPresence Mobile to connect to SIP or H.323 systems.
- H.264 decode at up to 720p.
 - Send people video at up to 480x352, 15fps
 - Receive people video at up to 480x352, 30fps
 - Receive content at up to 720p, 7.5 fps
- Support for Polycom Constant Clarity™ technology, such as Polycom® Siren™ Lost Packet Recovery, which can effectively improve the decreased audio quality caused by packet loss.
- Ability to receive content using H.239 and BFCP when you are registered to a CMA server.
- Ability to support AES encryption for H.323 calls when you are registered to a CMA server.
- Configurable network and bandwidth settings that make the RealPresence Mobile operate well in virtually any network.
- Support for automatic gain control and echo cancellation.
- Support for H.460 firewall traversal when you are registered to a CMA server.
- Support for pausing your video during a call.
- Ability to view network quality during a call.
- Ability to allow the CMA server to supply configuration settings automatically when you are registered to a CMA server.
- Ability to create a local address book when you are registered to a CMA server.

Using the RealPresence Mobile Application



The RealPresence Mobile application allows you to place and receive point-to-point calls. You can also join multipoint calls hosted by multipoint conferencing systems, such as Polycom RMX systems and by endpoints with multipoint capabilities, such as Polycom HDX systems.

You can call contacts from your recent calls list or enter the contact numbers manually. If you are registered to a CMA server, you can call contacts from your corporate directory. During a call, you can control your video, volume, and camera using the in-call toolbar.

Placing a Video Call

For best results, Polycom recommends using a WLAN network to place calls.



To place a call from your corporate directory:

- 1 Touch .
- 2 Enter the name or part of the name of the contact you want to find and then touch **Search**.
- 3 Touch the contact name from the search results.
- 4 Touch the device name of the contact on the left of , then touch **Place Call (H.323)** or **Place Call (SIP)**.



You can place calls from your corporate directory only when you are registered to a CMA server.

To place a call by entering the contact number manually:

- 1 Enter the name or number to call. Depending on the system you are calling, the dialing information could look like one of these examples:
 - 2555 (SIP, or E.164 extension for H.323)
 - stereo.polycom.com (DNS name)
 - user@domain.com (SIP)
 - 10.11.12.13##2555 (signal IP##conference ID, for H.323)
 - 10.11.12.13 (IP address – include the dots)
 - 1234@10.11.12.13 (SIP user name@IP address)
- 2 Touch the call type if necessary.
- 3 If you need to enter an extension or password, touch  and enter the number.
- 4 Touch  to start the call.

To place a call from your recent calls list:

- 1 Touch .
- 2 Touch the number to call.




Your recent calls list can contain up to 100 entries.

Answering a Call

When you receive a call, you see a call notification that tells you who is calling.

To answer a call:



>> Touch .

Managing contacts

You can register your RealPresence Mobile application to a CMA server and get LDAP service.




With LDAP service, you can call contacts in your corporate directory or add them to your local address book. You can add, delete, or edit contacts in your local contact book.

To add contacts from the corporate directory to your local address book:



- 1 Touch .
- 2 Enter the name or part of the name of the contact you want to add, then touch **Search**.
- 3 Touch the name of the contact from the search results.
- 4 Touch the device name of the contact on the left of , then touch **Add to contacts**.

Tip: To go back to the corporate directory, touch **Directory**.

To add contacts from recent calls list to your local address book:


- 1 Touch  and then touch the contact number.
- 2 Touch  to view the detail information of the contact device.
- 3 Touch  to add the contact to your local address book.
- 4 Complete contact information.
- 5 Touch **Done**.

To add a new contact to your local address book manually:

- 1 Touch  and then touch .
- 2 Enter contact basic information such as **Display name**, **Phone**, and **Email**.
- 3 Enter contact **Device Name** and **IP Address**.
- 4 If you want to place H.323 calls to this contact, enter **H.323 Extension**, **H.323 Name**, and **H.323 URL**.

- 5 If you want to place SIP calls to this contact, enter **SIP URI**.
- 6 Touch **Done**.


To edit a local contact:

- 1 Touch  and then touch the contact you want to edit.
- 2 Touch **Edit**.
- 3 Edit the contact information and then touch **Done**.



If you add this contact again from your corporate directory to your local address book, all your changes to this contact will be lost.

To delete a contact from your local address book:

- 1 Touch  and then touch a contact.
- 2 Touch **Edit**.
- 3 Touch **Delete Contact**.
- 4 Touch **Delete**.

To quickly locate a contact:





- >> Touch a letter to view names that start with that letter.

Working with Content

When you are registered to a CMA server, your RealPresence Mobile application allows you to view content sent by others in the call. The people video and the content you receive appear in separate windows. You can rearrange the people video and content windows by dragging them.




Controlling Video

You can use the in-call toolbar to customize the way the RealPresence Mobile screen looks, switch cameras, and stop sending video to others in the call.

- Drag the window to view people or content full screen.
- Touch  to turn the Picture-in-Picture (PIP) on and off.
- Touch  to switch between your front and back cameras.
- Touch  to mute your video. When your video is muted, you see .

Controlling Audio

You can adjust the sound you hear and mute the microphone if you do not want the far site to hear you.


- Touch  on the in-call toolbar. When your audio is muted, you see .
- Touch the slider above  to adjust the volume of the sound you hear. You can also press the volume buttons of your tablet to adjust the volume.

Solving Problems

Problem	Possible Cause	Workarounds
Video quality is poor.	Public wireless network is overloaded, causing packet loss.	<p>Try the call again using a lower call rate.</p> <p>Set up a private wireless network with a private key for RealPresence Mobile.</p> <ol style="list-style-type: none"> 1 From the Applications list, touch Settings > WLAN. 2 Choose your private wireless network. 3 Enter your username and password and touch Join.
Audio is noisy in calls from one tablet to another.	Tablet is too close to the other tablet causing audio loopback.	Mute the audio on one tablet.
Unable to place call Video is not available	The mobile network is experiencing problems.	<p>Do one of the following:</p> <ul style="list-style-type: none"> - Check your mobile network and registration information, and then try the call again. - Check whether your WLAN connection is lost. If yes, turn off the WLAN, and then turn it on again
Unable to receive content	<p>Content is H.263 format.</p> <p>Call is using SIP protocol.</p> <p>You are not registered to a CMA server.</p>	<p>Ask the far site to send content in H.264 format.</p> <p>Try the call again using H.323.</p> <p>Register to a CMA server.</p>
Cannot sign in to a CMA server using Automatic Configuration .	The DNS server may be unable to resolve your domain name.	Contact your network administrator for help.



Viewing Media Statistics

To see media statistics:



>> Touch  on the in-call toolbar.

Recovering from Problems with the Application

If a problem causes the RealPresence Mobile to freeze, or if you see the 'application not responding' message, follow these steps to recover:

- 1 Touch **Home** to return to the **Home** screen.
- 2 Double-touch **Home**.
- 3 Touch and hold  **Video**.
- 4 Touch .

To recover from problems registering to the gatekeeper:

- 1 Touch  and touch your **Server Settings**.
- 2 Touch **Gatekeeper Registration** to unregister from the gatekeeper.
- 3 Enter the Gatekeeper Registration settings again, then enable **Gatekeeper Registration**.
- 4 If the registration fails,  appears at the bottom of the screen. If the registration continues to fail, try one of the following:
 - Change the H.323 Name and H.323 Extension and try again.
 - Check whether your WLAN connection is lost. If yes, turn off the WLAN, and then turn it on again.
 - Wait three minutes or longer, then turn off and turn on registration again.



If the registration fails when you are signed in to a CMA server, sign out and then sign in again.

Known Limitations

The following table lists the known feature limitations for the release. If a workaround is available, it is noted in the table.

Category	Issue ID	Description	Workaround
Calling	CMAD-4555	Sometimes you may not be able to place calls when RealPresence Mobile is registered to a 3G public gatekeeper.	Check network quality and try again while 3G signal is better.
Calling	CMAD-4549	Without registration to a SIP server, you cannot place SIP calls to another RealPresence Mobile application using transport protocol UDP.	Register to a SIP server and place SIP calls.
Calling	CMAD-4654	When you place a SIP call using DTMF to join a conference call hosted by RMX1000, your call cannot be placed, or you cannot receive far end video.	Try one of the following: - Place H.323 calls; - Place SIP calls using this format: Conference room ID@RMX IP address.
Calling	CMAD-4567	When you are in a Broadsoft SIP call, and the far end transfers the call to a HDX8000 system, you receive no far end video.	None.
Calling	CMAD-4566	When two RealPresence Mobile applications registered to DeltaPath are in a SIP call and one of them tries to transfer the call to a third RealPresence Mobile application, the two way audio cannot be established.	None.
Calling	CMAD-4639	When you are registered to a CMA server and search for contacts in the Directory, only contacts who support the specified call type are shown.	None. This is the designed behavior.
Call Control	CMAD-4228	After you switch from a Polycom official gatekeeper to a VBP one, gatekeeper registration fails.	Change H.323 extension and H.323 name settings and register again.
Call Control	CMAD-4550	RealPresence Mobile sometimes cannot place SIP calls using TCP protocol when network quality is poor.	Change the protocol type to UDP for SIP calls, or hang up and call again.
Call Control	CMAD-4581	With two gatekeepers configured in the CMA server and you are registered to the primary gatekeeper, you cannot register to the backup gatekeeper when the primary one is down.	None.

Category	Issue ID	Description	Workaround
Configuration	CMAD-4570	When you move from one WLAN network to another, the CMA server doesn't configure your settings automatically for 20 minutes or more.	Configure your settings manually.
Content	CMAD-4569	You cannot receive content from the far end when there are two WLAN networks available, and you are disconnected within several minutes.	Move to a location where only one WLAN network is available and try again.
General	CMAD-3912	If RealPresence Mobile is running in the background, the application shuts down after 10 minutes.	None.
General	CMAD-4638	When you log into a CMA server, you are registered as two users in the CMA server: CMA Desktop and Polycom RealPresence Mobile.	None.
General	CMAD-4659	When the DNS server is down, you cannot sign in, sign out, or register to a gatekeeper or SIP server using a domain name.	Change to an available DNS server.
Interoperability: Polycom RMX1000	CMAD-4558	When you place a H.323 call to join a conference call hosted by RMX1000, your call ends automatically after about 40 seconds.	Call again.
Interoperability: Polycom SoundPoint IP 670	CMAD-4553	When the RealPresence Mobile application is invited to join a call between two SoundPoint IP 670 devices, the three-way audio cannot be established.	None.
Interoperability: Polycom HDX8000	CMAD-4551	When you join a multipoint call hosted by a HDX 8000 system and packet loss occurs, the redundant packet request sent from the RealPresence Mobile application is not always received by HDX8000 and Polycom LPR doesn't work as expected.	Wait a moment and retry.
Languages	CMAD-3393	<p>The user interface is supported in English only, though the system can run on other language versions of the operating system.</p> <p>The system can register to the gatekeeper and SIP server only with an English alias and user name.</p> <p>User names or aliases for incoming calls from systems registered with other languages display correctly.</p>	None.

Category	Issue ID	Description	Workaround
Network	CMAD-4552	RealPresence Mobile may sometimes be unable to register after changing networks.	<ol style="list-style-type: none"> 1 Disable and enable Registration again. 2 If the registration continues to fail, change the H.323 Name and H.323 Extension and try again.
Provisioning	CMAD-4660	When you register to a CMA server, only the gatekeeper, LDAP, SIP, and AES settings can be configured by the CMA server.	None.
Registration	CMAD-4647	You can use one CMA account to log in to the RealPresence Mobile application on more than one tablets at the same time. However, only one tablet can register to the gatekeeper successfully. The rest cannot log in because of duplicate alias.	Sign in with different CMA accounts on different tablets.
Registration	CMAD-4658	After you are registered to a CMA server and the network becomes unavailable, the RealPresence Mobile application doesn't sign out automatically, unless you change the sign in password.	Sign out and sign in manually.
User Interface	CMAD-4648	When all licenses configured in a CMA server are used, and you try to log in the CMA server, the message "Login data corrupted" appears, instead of prompts such as "No available licenses".	Configure more end point licenses in the CMA server.
User Interface	CMAD-4343	RealPresence Mobile doesn't support vertical screen orientation.	None. This is the designed behavior.
User Interface	CMAD-4653	For iOS 5.0, when you start the RealPresence Mobile application for the first time and try to change settings, you cannot click a setting to change it.	Click on the left side of the Settings window, then you can click a setting to change it.
User Interface	CMAD-4556	When a call ends with RealPresence Mobile system running in the background, the next call may start with the last frame of the previous call.	None.
User Interface	CMAD-3397	When you place calls, the system uses the device name as your RealPresence Mobile display name.	To change the display name, change the device name.
Video	CMAD-4554	Far-end video and audio are not synchronized.	Place the call again when network conditions are better.

Category	Issue ID	Description	Workaround
Video	CMAD-4557	The local preview might sometimes show black video when you start the RealPresence Mobile application.	Restart RealPresence Mobile and try again.

Supported Capabilities, Protocols, Algorithms, and Ports

Capabilities

Call Rate	Video Capability
512 kbps 384 kbps 256 kbps	480x352
128 kbps	192x144
64 kbps	Audio only

Protocols

This version of the Polycom® RealPresence™ Mobile supports the following protocols:

Protocol	Description
H.239	People and Content
H.323, V6	Signaling
H.460	Firewall traversal
SIP (Session Initiation Protocol)	Signaling
BFCP (Binary Floor Control Protocol)	Content



H.460 is supported only when you are registered to a CMA server.

Resolutions

This version of the RealPresence Mobile application supports following the resolutions:

Resolution and Frame Rate	Source
Up to 480x352, 15 fps	People video sent from camera
Up to 480x352, 30 fps	People video received from far end
Up to 720p, 7.5 fps	Content received from far end



Actual transmitted video resolution is determined by several factors, such as camera capability, computer performance, network conditions, the far-end system's capabilities, and whether content is being received.

Algorithms

This version of the RealPresence Mobile application supports the following algorithms:

Algorithm Type	Description
Audio	G.722.1 Annex C G.711u G.711a Siren LPR Acoustic Echo Cancellation (AEC) Automatic Gain Control (AGC)
Video	Polycom® Lost Packet Recovery™ (LPR™) H.264
Encryption	AES for H.323 calls



AES encryption is available only when you are registered to a CMA server.

Inbound and Outbound Ports

This version of RealPresence Mobile uses the following inbound and outbound ports.

Inbound Ports

Port	Function
80 (TCP)	HTTP
1720 (TCP)	H.323 Signaling
1719 (UDP)	Registration, Admission, and Status (RAS)
3230 - 3237 (UDP)	Media (RTP/RTCP)
5060	SIP

Outbound Ports

Port	Function
443(TCP)	Provisioning, Monitoring, Help files, HTTPS
389 (TCP)	LDAP
5060	SIP
1720 (TCP)	H.323 Signaling
1719 (UDP)	Registration, Admission, and Status (RAS)
3230 - 3237 (UDP)	Media (RTP/RTCP) - depends on receive ports negotiated by far end video endpoint

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