

Release Notes

Polycom® RealPresence™ Mobile, Version 1.0.2, Motorola Xoom™, and Samsung® Galaxy Tab



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 Motorola Xoom and Samsung Galaxy Tab.

Software Version History

Version	Release Date	Features
1.0.2	October, 2011	Feature enhancement.
1.0	October, 2011	Initial release.

Hardware and Software Requirements

Motorola	XOOM
Samsung	Galaxy 10.1" Tab
Operating System	Android 3.1 (recommended) Android 3.2
Network Requirements	Wireless Local Area Network (WLAN, 802.11 a/b/g/n)
Peripheral Devices (optional)	3.5 mm 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	7.2.2.20 or later, with MPMX media card
	Polycom RMX 2000	7.2.2.20 or later, with MPMX media card
	Polycom RMX 1000	2.4 with video accelerator card
	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


Setting Up the RealPresence Mobile application

You need to configure network and server settings before you can use the RealPresence Mobile application.

To install the RealPresence Mobile application:

- 1 From **Android Market**, search for 'polycom' or 'video conferencing' to find the RealPresence Mobile application.
- 2 Touch **Free** and then touch **OK** to accept permission. The application will be downloaded and installed.



To uninstall the RealPresence Mobile application:

- 1 From the **Applications** list, touch **Settings > Applications > Manage applications** and then touch  **Video**.
- 2 Touch **Uninstall**.
- 3 When you are prompted to confirm, touch **OK**.



Your user data is deleted when you uninstall the application.

To configure the RealPresence Mobile application manually:

- 1 From the Application list, touch  **Video**.
- 2 Touch  and then touch **Settings**.
- 3 Enter the **User Display Name**. This is the name to be displayed to your far end during calls.
- 4 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.

- 5 Configure these H.323 settings:


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

6 Configure these SIP settings:


Setting	Description
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.
Authentication Name	Specifies the name to use for authentication when registering with a SIP Registrar Server. If you leave this field blank, the SIP User Name is used for authentication.
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.

Checking Your Mobile or WLAN Link

To check your current connection status:

>> Touch  on the bottom of your screen.



In case of a network connection problem during a call,  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

The version 1.0 provides the following features:

- Dual stack operation that allows the Polycom RealPresence Mobile to connect to SIP or H.323 systems.
- H.264 encode and decode at up to 720p, 30fps.
- 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.
- Configurable network and bandwidth settings that make the RealPresence Mobile operate well in virtually any network.
- Support for automatic gain control and echo cancellation.
- Ability to view network quality during a call.

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. 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 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 **Recent Calls**.
- 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 **Answer**.




Controlling Video

You can use the in-call toolbar to customize the way the RealPresence Mobile screen looks, switch cameras in the call.

- Touch  to turn the Picture-in-Picture (PIP) on and off.
- Touch  to switch between your front and back cameras.

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  on the in-call toolbar and then touch the slider on the upper part of the screen to adjust the volume. You can also use 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 use with RealPresence Mobile.</p> <ol style="list-style-type: none"> 1 From the Applications list, touch Settings > Wireless & Networks > WiFi Settings. 2 Touch WiFi Networks. 3 Choose your private wireless network. 4 Enter the private key and touch Connect.
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


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 the time displayed in the lower right corner.
- 2 In the window that opens, touch the time again.
- 3 Touch **Settings**.
- 4 Touch **Applications > Manage Applications**.
- 5 Touch  **Video**.

- 6 Touch **Force Stop**, and touch **OK** to confirm.
- 7 Touch  **Home**.
- 8 Touch  **Video**.
- 9 Touch **Settings** and disable **Gatekeeper Registration**. Touch **Gatekeeper Registration** again to register with the gatekeeper.

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-4438	When you call a contact who is already in a call, you get the message 'Unreachable', instead of 'Busy'.	None.
Calling	CMAD-4346	When you are not registered to a SIP server, you cannot place SIP calls to join a conference call.	Register to a SIP server.
Calling	CMAD-4232	Cannot establish SIP calls between two Xoom users using different WLAN AP (Access Point).	Place H.323 calls instead.
Calling	CMAD-4224	When two RealPresence Mobile users registered to different SIP servers end a SIP call, the call cannot be re-established by dialing from the Recent Calls list.	None.
Calling	CMAD-2381	You cannot call a system listed in your Recent Calls if it is registered to a different gatekeeper.	Enter the calling information manually.
Calling	CMAD-2602	When you dial the BroadWorks auto attendant, black video is displayed in the local video preview window.	This is a limitation of the BroadWorks system.
Calling	CMAD-2996	When the far end calls and then hangs up before you answer the call, you still see the incoming call.	Hang up the call.
Calling	CMAD-3736	When you are disconnected from a conference call, you see a message that the system cannot access the camera.	Force close the RealPresence Mobile application and call again.
Call Control	CMAD-3846	H.323 registration fails after you choose a different Access Point.	Force close the RealPresence Mobile application and call again.

Category	Issue ID	Description	Workaround
Call Control	CMAD-4020	Once RealPresence Mobile is disconnected from calls in places without WLAN coverage, you cannot place calls again even in places with WLAN coverage.	Force close the RealPresence Mobile application and call again.
General	CMAD-4640	If the RealPresence Mobile application is leave idle for a while, it freezes. You have to restart the tablet.	This is a defect caused by the tablet camera. Our workaround is to let the application running in the background if the user leaves it idle for over 30 minutes.
Interoperability: Polycom HDX systems	CMAD-2676	When you place calls to a Polycom HDX system, the screen is black with only the audio available.	None.
Interoperability: Polycom RMX 1500	CMAD-3456	When calls are hosted by RMX 1500, you see no people video when the call rate is set as 256 or 384 kbps.	None.
Interoperability	CMAD-4417	When you try to leave a video voice message to a contact who also supports this service, the recorded message contains only audio, no video.	None.
Interoperability: Polycom HDX systems	CMAD-4361	When you place SIP calls to a Polycom HDX system, local video is unavailable.	Place H.323 calls instead.
Interoperability: Polycom m100	CMAD-4519	When you and a Polycom m100 application join a multipoint call hosted by a Polycom HDX9006 system, local video freezes after you are in the call for around 10 minutes.	Use HDX9006 version 3.03 or later.
Interoperability: Polycom RMX1000 and RMX1500	CMAD-4462	When you place a SIP call hosted by HDX8000, the RealPresence Mobile application crashes. When you restart it, it shows black screen.	None.
Interoperability: Polycom HDX 8000	CMAD-4336	When calls are hosted by HDX 8000, sometimes the local video is only partially displayed.	None.
User Interface	CMAD-4276	When you end a 64 kbps call, the call rate shown in the Recent Calls list is not correct.	None.
User Interface	CMAD-4370	When you dial an invalid number, you get an incorrect message 'No connection'.	Call the correct number.

Category	Issue ID	Description	Workaround
Video	CMAD-3837	When you place SIP calls to RMX4000, no people video can be shown.	None.
Video	CMAD-2979	Using a Bluetooth wireless headphone during calls causes packet loss.	Disable the Bluetooth headphone for calls.
Video	CMAD-3516	You may experience video delay when you use the rear camera for calls at 1920 kbps.	Switch to the front camera.
Video	CMAD-3571	In SIP calls hosted by RMX1500, people video is not displayed. In H.323 calls, people video can be displayed after a three minute delay.	None.

Supported Capabilities, Protocols, Algorithms, and Ports

Capabilities

Call Rate	Video Capability
1920 kbps	720p
1024 kbps 768 kbps	VGA
512 kbps 384 kbps 256 kbps	QVGA
64 kbps	Audio only

Protocols

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

Protocol	Description
H.323, V6	Signaling
SIP (Session Initiation Protocol)	Signaling

Resolutions

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

Resolution and Frame Rate	Source
1280x720, 15 fps	People video sent from front camera
1280x720, 30 fps	People video sent from rear camera
1280x720, 30 fps	People video 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.

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	H.264

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

Port	Function
1719 (UDP)	Registration, Admission, and Status (RAS)
5230 - 5237 (UDP)	Media (RTP/RTCP)
5060	SIP

Outbound Ports

Port	Function
5060	SIP
1720 (TCP)	H.323 Signaling
1719 (UDP)	Registration, Admission, and Status (RAS)
5230 - 5237 (UDP)	Media (RTP/RTCP) - depends on receive ports negotiated by far end video endpoint

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