Polycom® Pano™

Contents

Introducing Polycom® Pano™

The Polycom® Pano™ system provides an easy way to connect and share content. From the moment users walk into the meeting room, the Pano system invites them to connect their personal device or system with a simple touch using native support for Miracast® or AirPlay® screen sharing, the Polycom Pano™ App, or an HDMI connection. Once connected, users can simultaneously share content and collaborate on their organization's high-fidelity content monitors.

Ease-of-use is not limited to the user. The Pano system also delivers high value to the business through easy installation with existing investments in display and video-conferencing technology. Manage the deployment from anywhere and turn a regular display into a collaborative solution in minutes.

The Pano system allows you to do the following:

- Quickly and easily connect using a personal device.
- Wirelessly share content and more to any size display and in 4K resolution.
- Access and share documents from a personal Microsoft® OneDrive® for Business account.
- Securely manage your organization's deployment from anywhere using a browser interface.
- Integrate with existing Polycom videoconferencing systems for sharing over distance.
- Experience automatic touch capability when you upgrade your deployment to use a touch display.
- Manipulate, annotate, create, and save important content details.
- Brainstorm on an integrated and infinite blackboard to express, and discuss ideas of just about any size.

Getting Started

An administrator should set up the Pano system for users to start collaborating.

 Note: The Pano system is designed to be always powered on, so it has no power button.

To get started with the Pano system:

1 Connect the Pano system cables and monitor using the instructions on the setup sheet.
2 Perform any additional setup or configuration that is required.

Once the system is up and running, users can start sharing content from AirPlay- and Miracast-certified devices, the Pano App, or an HDMI cable.

For details about setting up and configuring a Pano system, see the *Polycom Pano Administrator Guide*.

For information about how to use the Pano system, refer to the *Polycom Pano User Guide*.

Instructions for installing the Pano App are provided in the *Polycom Pano User Guide*.

What's New for Version 1.0.1

The Pano system version 1.0.1 delivers the following feature:

Increased International Support for Wireless Capability

Increased International Support for Wireless Capability

Some countries have unique regulatory requirements for wireless devices. In this release, Polycom upgraded the Pano system firmware to include wireless interface power tables that meet the following countries' requirements:

- China
- India
- Brazil

The upgrade also includes a generic power table that meets worldwide standards, which have a common set of parameters for operating in the 2.4 GHz band. To facilitate a quicker response to type approvals, the generic power table is shipped with Pano systems to countries in which Polycom obtains approval, allowing you to immediately order your Pano system and use its wireless capability. Power tables for approved countries are updated in the subsequent Pano system software release based on the details of the approval (including, in some instances, the ability to operate in the higher-capacity 5 GHz band).

Countries that do not require type approval, or the type approval is held by an entity other than Polycom, can use the generic power table.

This upgrade is reflected in the setup wizard when you choose the country where your Pano system is located.

Software Version History

Polycom Pano System Software Version History

Software Version	Release Date	Description
1.0.1	August 2017	Includes upgraded Pano system firmware that increases international support for wireless capability.
1.0	June 2017	Initial release that includes support for wired and wireless content display; non-touch and touch display capabilities; integrated blank canvas options for sharing and collaborating; infinite blackboard or whiteboard canvas size; an integrated toolbar for interacting with content (including real-time annotation tools); multi-finger gesture detection for content interaction (e.g., erase, zoom, pan, and move); an administrative web interface; integration with Polycom video systems; connectivity to the Polycom Cloud Service; and the ability to share content with the Pano App. This release also includes Polycom Cloud Service Content Sharing, a Polycom Labs feature.

Polycom Pano App Software Version History

Software Version	Release Date	Description
1.0.1	June 2017	Includes user interface updates.
1.0	June 2017	Initial release that includes local content sharing; automatic detection of nearby Pano systems; and the ability to save content displayed on a Pano system. This release also includes Polycom Cloud Service Content Sharing, a Polycom Labs feature.

Supported Displays

Pano systems can present content streams on user-supplied, non-touch or touch displays that support up to 4K (UHD) 60fps RGB444 output over HDMI 2.0.

Recommendations for Using an Optional Touch-Capable Monitor

The Pano system supports single and multi-touch input from the USB port of a HID-compliant device.

The following touch-capable monitors have been tested with the Pano system and provide an optimal touch experience.

Tested Touch-Capable Monitors

Size (inches)	Touch Technology	Brand	Model/Part Number
55	InGlass™	Dell	C5518QT (black)
65	InGlass	Volanti	VD-6500-0B0C-1100 (black)
65	InGlass	Volanti	VD-6500-0Q0C-16P3 (white)
70	IR	Sharp	PN-L703B (black)

Supported Browsers

The Pano web interface is supported in the following browsers:

- Apple® Safari® 9 and above
- Google Chrome™ 46.0.2490.86 and above
- Mozilla® Firefox® 42.0 and above
- Microsoft Edge™ (all versions)

Supported Miracast-Certified Devices

Polycom cannot guarantee connectivity with all Miracast-certified devices but has validated that there is connectivity with Samsung smartphones and tablets running Android 4.4+ and Microsoft Surface Pro 3 and Surface Pro 4 systems running Microsoft Windows 10. Depending on your device, additional software may be required.

Supported AirPlay-Certified Devices

You can share the screen and audio of an AirPlay-certified iPhone®, iPad®, or Mac® computer.

Products Tested with Pano App

The Pano App is tested extensively with a wide range of products. The following list indicates the products that have been tested for compatibility with this release but is not a complete inventory of compatible equipment.

Products Tested with Pano App

Type	Product	Version
Endpoint	Polycom® RealPresence® Group Series	6.1.1
	Polycom® Pano™	1.0.1
	Polycom® RealPresence Debut™	1.3
	Polycom® RealPresence Centro™	6.1.1
	Polycom® RealPresence Trio™	5.4.5
	Polycom® Open Telepresence Experience™ 300 (with ITP)	3.1.4

> **Note:** When the Pano App is connected to a Polycom RealPresence OTX 300 or RealPresence Group Series system, you can only use the App to start content sharing. You cannot do this using the Touch Pad of the OTX or RealPresence Group Series system. However, you can stop content sharing using the Touch Pad.

Language Support

The Pano system user interfaces provide support for the following languages:

- Chinese (Simplified)
- Chinese (Traditional)
- British English
- American English
- French

- German
- Hungarian
- Italian
- Japanese
- Korean
- Norwegian
- Polish
- Portuguese (Brazilian)
- Russian
- Spanish

System Constraints and Limitations

The following sections provide information on constraints and limitations when using the Pano system.

Polycom Cloud Service

If you did not provide an email address with your purchase, or your Pano system is shipped to China, Mexico, Brazil, or Argentina, you must activate your Pano system maintenance service on the Polycom Support Center and provide an email address before your Polycom Cloud Service account can be created.

AirPlay

Connecting to a Pano system from an AirPlay-certified device with iOS 9.x version installed is only supported when the two systems are on the same subnet.

The Pano system does not support casting from direct streaming sources such as web links, YouTube™, or Google Chromecast® when sharing content using an AirPlay-certified device. If you share content that streams by sending direct links to the Pano system, the content is not shown.

For some AirPlay-certified devices and systems, the behavior of the security code differs from what is expected when connecting to a Pano system. The following variances may be important to note, depending on your organization's security plan:

- The security code is not highlighted on the Pano system when the device or system that is attempting to connect is running iOS 9 and is in charging mode.
- If a user attempts to connect to a previously connected Pano system and the security code has not changed, the user is not prompted for a security code and the connection is not successful.

Miracast

For some Miracast-certified devices and systems, the behavior of the security code differs from what is expected when connecting to a Pano system. The following variances may be notable depending on your organization's security plan:

- Android devices that require an eight-digit security code are not able to connect to a Pano system since its security code contains only four digits.

- Some Android devices or operating systems may only prompt the user for a security code the first time the user attempts to connect to a Pano system. To force their personal device to prompt for a security code after the initial attempt, a user can remove the Pano system from the list of connected devices (also referred to as "forget" a device).

- Systems running the Windows operating system will only prompt the user for a security code during the first connection attempt. To force their personal device to prompt for a security code after the initial attempt, a user can remove the Pano system from the list of connected devices (also referred to as "forget" a device).

- As of the December 15, 2016, release of the Samsung software update, the method to send a security code from a Samsung device to a Pano system has changed. A user must press and hold the desired Pano system selection in the list of devices, then select the option to send the entered security code to that system.

Pano App

Internet Explorer version 11 or later must be installed on a system using the Windows version of the Pano App to access a shared component that does not exist in previous versions of Internet Explorer.

To prevent unexpected results when connecting to the Polycom Cloud Service, make sure the time clock of the system on which the Pano App is installed matches the current local time.

Users can share image files from their OneDrive for Business folders that are in .jpg, .jpeg, .png, .gif, or .webp file format. Polycom recommends that shared image files be less than 20 MB in size to ensure acceptable download and rendering time.

The Pano system displays a blank panel or screen when the last content source from the Pano App is disconnected.

When Bluetooth® detection is enabled, the Pano App can search for nearby Pano systems that have enabled Bluetooth broadcasting and that are registered to the same Polycom Cloud Service account (when you are signed in to the service). This feature is available to users of Microsoft Windows® 10 and Apple Mac® OS X® 10.8 (Mountain Lion) or later, with hardware supporting Bluetooth version 4.0 or higher.

> **Note:** If you prefer to limit the knowledge of room names, consider using a different naming convention for your Pano systems other than room name.

Related Links

Capacity

The following table helps answer questions about the Pano system's capacity.

Pano System Capacity Frequently Asked Questions

Question	Answer
How many blackboards and whiteboards can be open at the same time (including in the content tray) during a session?	The maximum is 70.
How many content snapshots can be open at the same time (including in the content tray) during a session?	Between 15–20.
How many Pano App users can connect (but not share content) at the same time?	There is no known limit for connections to a Pano system through the cloud. If the devices are on the same network, up to four can connect directly.
Is there a limit to how many content saves can occur simultaneously with the Pano App?	Up to four (the same number of devices that can directly connect to a Pano system at the same time).
How many AirPlay-certified devices can share content at the same time?	Four (only three if HDMI is also used to share).
How many Miracast-certified devices can share content at the same time?	Four (only three if HDMI is also used to share).
Is capacity affected by the quality (e.g., resolution) or type of content shared?	No.
How long can a session last?	Sessions do not end if there is active content. A session could end if the sharing device's connection through the Pano App times out due to inactivity (e.g., sleep mode) or network issues.

HDCP Support

High-bandwidth digital content protection (HDCP) is not supported. The Pano system displays a blank screen or default non-HDCP screen provided by the source.

Integration with Polycom Video Systems

In order to integrate a Pano system with a Polycom video system, be sure that both systems are connected to networks that allow connectivity between them. For example, if the Pano system is connected to the Internet and the Polycom video system is on a trusted network, the Pano system would not be able to detect and pair with the Polycom video system and functionality may be limited.

Pano systems do not support receiving content from a Polycom video system.

Security Updates

For information about known and resolved security vulnerabilities, refer to the Polycom Security Center.

Known Issues

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

Issue ID	Description	Workaround
EN-12087	When performing application or screen sharing using Pano App, power consumption is higher than typical applications and may consume battery capacity quickly on lower-end mobile devices.	For best results when used on a low performing laptop, always connect using your AC power source.
EN-14662	The frame rate is low for application or screen sharing from the Pano App on devices configured for 4K display resolution.	Lower the device's display resolution if a higher frame rate is required.
EN-17320	Changing the Room Name for a Pano system that is paired with a Polycom video system fails when the value provided exceeds 40 characters.	Use 40 characters or fewer when entering a value for Room Name.
EN-19020	Device Name or Room Name are not updated for a Pano system when the values are more than 40 characters. The provided name appears on the Device Management page in the Polycom Cloud Administration portal.	Use a device or room name that is fewer than 40 English characters and 13 Chinese/Japanese/Korean letters.
EN-19567	Occasionally, while the Pano App is sharing content with a Polycom RealPresence Group Series system, the content flashes and is partially scrambled.	Switch to a wired network or connect to a steady Wi-Fi network.
EN-20023	If there is modal window when you share a local application using the Pano App, the content is shown as a black screen to your far end. A modal window is a child window which requires the user to interact with it before they can return to operate the parent application.	Close the modal window before sharing content.
EN-20254	If your device has multiple monitors connected in **Duplicate** mode and you are sharing local content on a connected Polycom video system, starting **Slide Show** on a PowerPoint deck of Office 2013 or later stops the content sharing.	Do one of the following: • Set the display mode to **Extended** • Disable or disconnect the other monitors • From **PowerPoint**, select **Slide Show**. Make sure **Use Presenter View** is not selected.
EN-20587	Maximizing video content does not function properly when a user is connected to the Pano system using AirPlay and the video content is shared from Chrome version 58.	Either use a different version of Chrome, or use a different supported browser, such as Firefox.
EN-21006	If you share GIF files from OneDrive, the Pano App may hang or crash.	None.

Issue ID	Description	Workaround
EN-21583	Connections to the ADFS3OAuth2 authentication provider are sometimes unsuccessful.	Use the O365Oauth authentication provider.
EN-23435	(Mac users only) If you play files using the Apple Keynote application on the Pano system, content shows as a black screen to the far end. If the files are shared on another Polycom video system, the Pano App is disconnected from the video system.	Share your desktop instead of the Keynote application.

Note: These release notes do not provide a complete listing of all known issues that are included in the software. Issues not expected to significantly impact customers with standard voice or video conferencing environments may not be included. In addition, the information in these release notes is provided as-is at the time of release and is subject to change without notice.

Other Known Issues

Previous Pano App Installation

If you previously installed Pano App, you must uninstall it before you install a newer version.

Note: When using a system running Microsoft Windows with the Pano App, you must set the display color depth to 32-bit.

To uninstall the Pano App (Windows Users Only):

1   Select **Start**, then choose **Polycom > Polycom Pano App** from **All Programs**.

2   Select **Uninstall Polycom Pano App**; when asked to confirm the operation, select **Yes**.

3   Select **No** when asked "**Do you want to keep current configurations and logs?**".

To uninstall the Pano App (Mac Users Only):

1   Log in to your Mac with an administrator account.

2   Open your **Applications** folder and select **Polycom Pano App.**

3   Drag the program to the **Trash**.

4   Right-click on the **Trash** icon, select **Empty Trash**, and then click **Empty Trash** to confirm.

To install the Pano App:

»   Double-click the installation package and follow the on-screen instructions to install it.

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