Polycom® Pano™

Polycom® announces the release of the Polycom® Pano™ device software version 1.2.1. This document includes the latest information about new and updated features available on the Pano device and Polycom® Pano™ App, including relevant features on the Polycom® Cloud Service.

Contents

Related Documentation................................................. 3

What's New................................................................. 4
  Guest Network Support ........................................ 4
  Disabling Content Saving.................................... 4
  Customizing Your Home Screen............................ 4
  Dropped Support for Cloud Content Sharing.......... 4
  Other Changes in This Release.............................. 5
  What's New for Pano App Version 1.2...................... 5
    Using Polycom Touch Devices to Start Content Sharing on Pano App........ 5
    New OS Support for Pano App............................... 5
    Pano App Content Layout Controls Available as a Normal Feature........... 5

Security Updates..................................................... 6

Install and Upgrade.................................................. 7
  Installing Pano App from the Command Line............. 7
  Install Pano App on Windows from the Command Line... 7
  Uninstall Pano App on Windows from the Command Line.. 7
  Install Pano App on Mac from the Command Line........ 7
  Uninstall Pano App on Mac from the Command Line..... 8
Related Documentation

Refer to the following documents located at Polycom Support for more information on the new features described in these release notes.

- Polycom Deployment Guide
- Polycom Pano Administrator Guide
- Polycom Pano User Guide
What's New

Topics:

- Guest Network Support
- Disabling Content Saving
- Customizing Your Home Screen
- Dropped Support for Cloud Content Sharing
- Other Changes in This Release
- What's New for Pano App Version 1.2

The Pano device software version 1.2.1 delivers the following features.

Guest Network Support
You can set up a secondary (Wi-Fi) network to allow guests to access the Pano system.
You can configure the Wi-Fi network settings in the Pano system web interface.

Disabling Content Saving
You can disable the Pano App content snapshots saving feature.
Disabling content saving helps prevent information leaking from meetings.

Customizing Your Home Screen
System administrators can customize the Pano device home screen.
Customizable items include:

- Background image
- Showing or hiding primary and secondary network IP addresses
- Primary and secondary network names

Dropped Support for Cloud Content Sharing
Starting in version 1.2.1, you can no longer share files in the Pano App from your Microsoft OneDrive for Business folders. However, you can still sign in to the Polycom Cloud Service to provision your Pano device. Pano App users can get automatic software updates after the sign-in.
Other Changes in This Release

Minor changes in this release include the following:

▪ Pano device user interface is now available in Arabic also.

What's New for Pano App Version 1.2

The Pano App software version 1.2 delivers the following features.

Using Polycom Touch Devices to Start Content Sharing on Pano App

You can now use a Polycom® RealPresence® Touch with a RealPresence Group Series system to start content sharing on Pano App.

Previously, you could only stop content sharing using these touch devices.

New OS Support for Pano App

Pano App is now supported on 64-bit Mac OS.

Pano App Content Layout Controls Available as a Normal Feature

When sharing local content with the Pano App, you can maximize or restore the content window on the Pano system. This works only when:

▪ The Pano system and the device using the Pano App are on the same network.
▪ There is more than one content source on the Pano device.

Now this feature is available as a normal feature. Previously, you need to enable it from Settings > Lab Features.
Security Updates

In this release, the device factory partition is updated to Factory Image 1.2.1, which provides higher security as against Spectre and meltdown issues.
Install and Upgrade

Topics:

- Installing Pano App from the Command Line
- Upgrade Notes

Unlike in previous releases of the Pano App, you can upgrade without having to first uninstall the app (unless you are using version 1.1 Alpha or Beta).

Installing or uninstalling the Pano App requires administrative rights on the device.

Installing Pano App from the Command Line

If you are a system administrator, you can install the Pano App using the command line.

The installation file with an .msi extension supports silent Windows installations.

The installation file with a .dmg extension supports silent Mac installations.

Remember the following when installing the Pano App from the command line:

- The .msi and .dmg files are intended for centralized distribution by system administrators.
- When you save one of these installation files to your local disk, do not rename it (the filename should be consistent with the installation package).

Install Pano App on Windows from the Command Line

You can install the Pano App on Windows using the command line.

1. Save the Polycom Pano App.msi installation file to a directory on your local disk (e.g., C:\Downloads).

2. Do one of the following:
   - Run the command to install version 1.2 of the app. For example: msiexec /qn /l* log.txt /i "C:\Downloads\Polycom Pano App.msi"
   - Run the command to upgrade from an earlier version. For example: msiexec /passive /i "C:\Downloads\Polycom Pano App.msi" REINSTALLMODE=vomus REINSTALL=ALL /l*v logfile

Uninstall Pano App on Windows from the Command Line

You can uninstall the Pano App on Windows using the command line.

1. Run the command to uninstall the app using the .msi file.
   Example: msiexec /qn /x "C:\Downloads\Polycom Pano App.msi"

Install Pano App on Mac from the Command Line

You can install the Pano App on Mac using the command line.
1. Mount the .dmg file to get the .pkg file.
   Example: hdiutil attach /filepath/PolycomPanoApp.dmg

2. Run the command to install the .pkg file.

   Note: This command only works for installing version 1.1 or later.

Uninstall Pano App on Mac from the Command Line

You can uninstall the Pano App on Mac using the command line.

1. Enter cd /Applications.
2. Enter sudo rm -r -f Polycom\ Pano\ App.app.
3. Enter your Mac administrator password to proceed.

Upgrade Notes

If you enabled 802.1x in Polycom Pano version 1.1, you need to follow the steps below to have Wi-Fi and Miracast capabilities in version 1.2.1.

1. Perform a factory restore on the Polycom Pano.
2. Connect the Polycom Pano to network with 802.1x disabled and complete the Out of Box process.
3. Check the software version. If it doesn’t show Polycom Pano version 1.2.1, please update the software to version 1.2.1.
4. Configure the Polycom Pano for your network (enabling 802.1x if required).

Miracast and Wi-Fi work as expected.
# Version History

## Pano System Software Version History

<table>
<thead>
<tr>
<th>Software Version</th>
<th>Release Date</th>
<th>Description</th>
</tr>
</thead>
</table>
| 1.2.1            | July 2018    | Includes the following new features:  
▪ Guest network support  
▪ Able to disable content saving  
▪ Customize your Pano home page  
▪ Dropped support for cloud content sharing |
| 1.1.1            | March 2018   | (Pano only) Bug fixes, security updates, and wireless support in additional countries. |
| 1.1              | December 2017| Release includes the following new features: 802.1X authentication and PKI certificate support; TLS 1.0 disabled; provisioning service support; new option for integrating with Polycom video systems; LLDP support for PoE+; new administrative user roles for the Polycom Cloud Service; and a built-in Office 365 authentication provider for accessing the Polycom Cloud Service Administration portal. |
| 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, which is a Polycom Labs feature. |

## Pano App Software Version History

<table>
<thead>
<tr>
<th>Software Version</th>
<th>Release Date</th>
<th>Description</th>
</tr>
</thead>
</table>
| 1.2              | July 2018    | Includes the following new features:  
▪ Using Polycom Touch Devices to start content sharing on Pano App  
▪ New OS support for Pano App  
▪ Pano App content layout controls available as a normal feature |
<table>
<thead>
<tr>
<th>Software Version</th>
<th>Release Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>December 2017</td>
<td>Includes the following new features: the ability to end sessions and disconnect from the Pano system; audio support with Pano App for Windows; sharing video at up to 1080p and 30fps. This release also includes Pano App content layout control, which is a Polycom Labs feature.</td>
</tr>
<tr>
<td>1.0.1</td>
<td>June 2017</td>
<td>Includes user interface updates.</td>
</tr>
<tr>
<td>1.0</td>
<td>June 2017</td>
<td>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.</td>
</tr>
</tbody>
</table>
## Resolved Issues

The following table lists resolved issues for the Pano system and Pano App 1.2.

### Resolved Issues

<table>
<thead>
<tr>
<th>Category</th>
<th>Issue ID</th>
<th>Found in Release</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application</td>
<td>EN-35843</td>
<td>1.1</td>
<td>(Windows 10 users only) When you share the &quot;Movies &amp; TV&quot; or &quot;Chrome&quot; applications, if another window (such as a notification window or other application) is open, the content goes black.</td>
</tr>
<tr>
<td>Application</td>
<td>EN-52383</td>
<td>1.1.1</td>
<td>The Pano system status bar (showing the device IP address, Security Code and Data/Time) may get lost after you plug in and remove the USB flash drive that includes the Pano upgrade package.</td>
</tr>
<tr>
<td>Application</td>
<td>EN-55047</td>
<td>1.1</td>
<td>If you share a Microsoft Word file with the Pano App when connected to a Pano device, the content sometimes doesn’t display correctly while scrolling through the document.</td>
</tr>
<tr>
<td>Application</td>
<td>EN-60567</td>
<td>1.1</td>
<td>When the Pano App connects to a Pano device that is registered to the Polycom Cloud Service, sometimes the wrong device name displays in the Pano App.</td>
</tr>
<tr>
<td>Application</td>
<td>EN-61241</td>
<td>1.1</td>
<td>Content shared using the Pano App may take up to a minute to display with some devices.</td>
</tr>
<tr>
<td>Application</td>
<td>EN-79861</td>
<td>1.1.1</td>
<td>Sometimes, the Pano Miracast discovery service is unreachable and you need to reset the Pano device to factory settings to fix this problem.</td>
</tr>
<tr>
<td>Application</td>
<td>EN-82278</td>
<td>1.1.1</td>
<td>If you cast multiple live video streams from a Microsoft Surface device using Miracast, this sometimes causes Pano to freeze.</td>
</tr>
<tr>
<td>Content</td>
<td>EN-61318</td>
<td>1.1</td>
<td>Content shared from an AirPlay-certified device may not display on the Pano system.</td>
</tr>
<tr>
<td>Category</td>
<td>Issue ID</td>
<td>Found in Release</td>
<td>Description</td>
</tr>
<tr>
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<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Content</td>
<td>EN-66236</td>
<td>1.1.1</td>
<td>If your device OS is Mac OS X 10.13, when you share PowerPoint slides on a Polycom Pano device using AirPlay, the content leaves a residual image on the Pano monitor.</td>
</tr>
<tr>
<td>Content</td>
<td>EN-77206</td>
<td>1.1.1</td>
<td>If your content contains dark text with a dark background, the content is blurry.</td>
</tr>
<tr>
<td>Content</td>
<td>EN-77683</td>
<td>1.1.1</td>
<td>If you cast video clips from an AirPlay-certified device to the Pano device, the audio included in the video clips isn’t available on the monitor connected to the Pano device.</td>
</tr>
<tr>
<td>Security</td>
<td>EN-63607</td>
<td>1.1</td>
<td>Installing valid .pem certificates that do not end with a new line may fail silently or return a “The upload failed” error.</td>
</tr>
</tbody>
</table>
Known Issues

The following table lists known issues and suggested workarounds for the Pano system 1.2.1 and previous versions.

**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.

### Known Issues

<table>
<thead>
<tr>
<th>Category</th>
<th>Issue ID</th>
<th>Release</th>
<th>Description</th>
<th>Workaround</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application</td>
<td>EN-35220</td>
<td>1.1</td>
<td>(Windows 10 users only) When you share the Windows Media Player application, if another window (such as a notification window or other application) covers the shared application, the content sharing hangs.</td>
<td>Make sure the shared application is always on top, or share your desktop instead.</td>
</tr>
</tbody>
</table>
| Application | EN-53049 | 1.1 | (Windows users only) When your device has two displays in duplicate mode and you are sharing a PowerPoint deck, starting Slide Show may cause truncated content. | Do one of the following:  
  - Change the display setting to Extend these displays.  
  - Remove or disable the second monitor. |
<p>| Application | EN-57340 | 1.1 | If your laptop runs on battery only and you share 1080p content for over an hour, your laptop may power off automatically because of power exhaust. | Plug in the power supply during prolonged sharing. |
| Application | EN-58795 | 1.1 | (Windows users only) Audio shared with the Pano App from a Lenovo™ T420 system may have poor quality. | Stop the content and share it again. |</p>
<table>
<thead>
<tr>
<th>Category</th>
<th>Issue ID</th>
<th>Release</th>
<th>Description</th>
<th>Workaround</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application</td>
<td>EN-85138</td>
<td>1.2.1</td>
<td>You can’t register to Polycom Cloud Service if you are connected to only the secondary network (Wi-Fi).</td>
<td>Connect also to the primary network.</td>
</tr>
<tr>
<td>Application</td>
<td>EN-87106</td>
<td>1.2.1</td>
<td>To use the Pano App to cast content on the Pano device over the Secondary network (Wi-Fi), you must enable the Administrator Access for the Secondary network.</td>
<td>Use AirPlay or Miracast to cast content instead.</td>
</tr>
<tr>
<td>Application</td>
<td>EN-92241</td>
<td>1.2.1</td>
<td>In the Pano web interface, if you enable the Secondary network (Wi-Fi) but uncheck the Enable Administrator Access to This Network option, Pano App users can’t connect to the Pano device and cast content on it.</td>
<td>None.</td>
</tr>
<tr>
<td>Application</td>
<td>EN-96203</td>
<td>1.2.1</td>
<td>While using a RealPresence Resource Manager for provisioning, if the provisioning fails, the provisioning status icon shown in the Pano web interface Diagnostics &gt; System Status isn’t grayed out as expected.</td>
<td>Refresh the web page.</td>
</tr>
<tr>
<td>Category</td>
<td>Issue ID</td>
<td>Release</td>
<td>Description</td>
<td>Workaround</td>
</tr>
<tr>
<td>--------------</td>
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<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Content</td>
<td>EN-35262</td>
<td>1.1</td>
<td>Content on the Pano system sometimes does not display in a call when other content is already shared to a paired RealPresence Group Series system using Polycom People +Content. This occurs when the systems are connected with an HDMI splitter or HDMI USB adapter.</td>
<td>Share content to the paired Pano system using the Pano App.</td>
</tr>
<tr>
<td>Content</td>
<td>EN-93212</td>
<td>1.2.1</td>
<td>If you stream content from multiple Miracast devices to the same Pano device, you may observe video delay.</td>
<td>None. Miracast is a best-effort protocol that uses UDP over Radio Frequency signal and packet loss is subject to the device and operating system that is sending the traffic.</td>
</tr>
<tr>
<td>Content</td>
<td>EN-93543</td>
<td>1.2.1</td>
<td>If you are mirroring content using Miracast from a Microsoft Surface Pro 5 with other miracast-certified devices, you may see frozen content.</td>
<td>Don’t mirror content using Miracast from Microsoft Surface Pro 5 devices.</td>
</tr>
<tr>
<td>Configuration</td>
<td>EN-17320</td>
<td>1.0</td>
<td>Changing the Room Name for a Pano system that is paired with a Polycom video system fails when the value provided exceeds 40 characters.</td>
<td>Use 40 or fewer characters when entering a value for the Room Name.</td>
</tr>
<tr>
<td>Integration</td>
<td>EN-35762</td>
<td>1.1</td>
<td>When a RealPresence Group Series system is unpaired from a Pano system, its monitor profile does not revert to Content, then Far, then Near as expected.</td>
<td>In the RealPresence Group Series system interface, reconfigure the monitor profile settings after unpairing.</td>
</tr>
<tr>
<td>Category</td>
<td>Issue ID</td>
<td>Release</td>
<td>Description</td>
<td>Workaround</td>
</tr>
<tr>
<td>--------------</td>
<td>----------</td>
<td>---------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Integration</td>
<td>EN-49285</td>
<td>1.1</td>
<td>If a Pano system is paired to a new RealPresence Group Series system, the name of the one it was previously paired to still displays in the Connected to field on the General Settings &gt; Pairing page of the Pano system web interface.</td>
<td>Disconnect then reconnect the Pano system to the newly paired RealPresence Group Series system. The correct name should display.</td>
</tr>
<tr>
<td>Integration</td>
<td>EN-60925</td>
<td>1.1</td>
<td>When connecting the Pano system to a RealPresence Group Series system using an HDMI USB adapter, pairing fails if the RealPresence Group Series system is in sleep mode.</td>
<td>Wake the RealPresence Group Series system, reconnect it to the Pano system, and complete the pairing process again.</td>
</tr>
<tr>
<td>Integration</td>
<td>EN-90388</td>
<td>1.2.1</td>
<td>After you pair with a Polycom Group Series server using its IP address (from the Pano web interface General Settings &gt; Pairing), if the Polycom Group Series changes its IP address, or is powered off, you may have problem unpairing from it.</td>
<td>Use DHCP reservation or a static IP to configure your Polycom Group Series IP.</td>
</tr>
<tr>
<td>Maintenance</td>
<td>EN-59501</td>
<td>1.1</td>
<td>Sometimes the software update status on RealPresence Resource Manager indicates a Pano system update is in progress when it's not. This occurs when manually checking for available updates from RealPresence Resource Manager in the Pano system web interface.</td>
<td>No workaround currently available.</td>
</tr>
<tr>
<td>Category</td>
<td>Issue ID</td>
<td>Release</td>
<td>Description</td>
<td>Workaround</td>
</tr>
<tr>
<td>----------</td>
<td>----------</td>
<td>---------</td>
<td>-------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>Security</td>
<td>EN-60037</td>
<td>1.1</td>
<td>Updating the Pano system software with RealPresence Resource Manager fails when TLS is enabled.</td>
<td>No workaround currently available.</td>
</tr>
</tbody>
</table>
Limitations

Topics:
- Polycom Cloud Service
- Miracast-Certified Devices
- AirPlay-Certified Devices
- Pano App
- Polycom RealPresence Resource Manager
- Capacity
- HDCP Not Supported
- Downloading Certificate Signing Requests
- Downloading System Logs
- Integrating with Polycom Video Systems

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

Polycom Cloud Service

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

Miracast-Certified Devices

For some Miracast-certified devices, the behavior of the security code differs from what is expected when connecting to the Pano device.

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 the Pano device since its security code contains only four digits.
- Some Android devices or operating systems may only require a security code during the first attempt to connect. To force their personal device to prompt for a security code after the initial attempt, a user can remove the Pano device from the list of connected devices (also referred to as “forget” a device).
- Systems running the Windows operating system only require a security code during the first attempt to connect. To force personal device to prompt for a security code after the initial attempt, a user can remove the Pano device from the list of connected devices (also referred to as “forgetting” a device).
- Huawei® devices may only require a security code during the first attempt to connect.
- 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.

**AirPlay-Certified Devices**

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

The Pano device 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 device, the content is not shown.

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

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

**Pano App**

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

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.

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

When Bluetooth® is enabled, the Pano App can search for nearby Pano systems that are in same network segment and have enabled Bluetooth broadcasting. This feature is available to devices supporting Bluetooth version 4.0 or later, with OS as Windows version 8.1 or macOS 10.8, or later.

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**Note:** (Mac users only) When your device resumes from sleep or screen lock status, the Mac OS may occasionally fail to start the Bluetooth low-level function. This may cause the Pano App failing to detect nearby Pano systems. You can restart the Bluetooth manually from your system **Settings** to fix this problem.

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**Polycom® RealPresence® Resource Manager**

If you’re using a Polycom RealPresence Resource Manager for your device management, before you can receive automatic software updates, you must enable **Network Provisioning Profiles > Enable Pano Updates via HTTP** on your Polycom Resource Manager.

This enables HTTP transfer for Pano software updates. If you disable this option, HTTPS transfer is used for Pano updates. In this case, you need to install an official certificate to allow HTTPS connection for Pano updates.
Capacity

The following table helps answer questions about the Pano system’s capacity (e.g., content sharing activity and number of connected devices).

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many blackboards and whiteboards can be open at the same time (including in the content tray) during a session?</td>
<td>The maximum is 70.</td>
</tr>
<tr>
<td>How many content snapshots can be open at the same time (including in the content tray) during a session?</td>
<td>Average 100. This depends on the pixel complexity and resolution of the content background.</td>
</tr>
<tr>
<td>How many Pano App users can connect (but not share content) at the same time?</td>
<td>If the devices are on the same network, up to four can connect directly.</td>
</tr>
<tr>
<td>Is there a limit to how many content saves can occur simultaneously with the Pano App?</td>
<td>Up to four (the same number of devices that can directly connect to a Pano system at the same time).</td>
</tr>
<tr>
<td>How many AirPlay-certified devices can share content at the same time?</td>
<td>Four (only three if HDMI is also used to share).</td>
</tr>
<tr>
<td>How many Miracast-certified devices can share content at the same time?</td>
<td>Four (only three if HDMI is also used to share).</td>
</tr>
<tr>
<td>Is capacity affected by the quality (e.g., resolution) or type of content shared?</td>
<td>No.</td>
</tr>
<tr>
<td>How long can a session last?</td>
<td>Sessions do not end if there is active content.</td>
</tr>
<tr>
<td></td>
<td>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.</td>
</tr>
</tbody>
</table>

HDCP Not Supported

The High-bandwidth Digital Content Protection (HDCP) standard does not support the use of HDCP by a Pano system. If you connect a content source that sends HDCP-encrypted content, the Pano device displays a blank screen or default non-HDCP screen provided by the source. To ensure that content displays correctly, send content in a format other than HDCP.

Note: Due to a policy established by Apple Computer, Inc., you cannot disable the HDCP encryption service on the DVI or HDMI outputs of a computer that is manufactured by Apple Computer, Inc.
Downloading Certificate Signing Requests

Downloading a certificate signing request (CSR) from the Pano system web interface using the Safari browser may not save the file with the correct extension (.pem).

Polycom recommends updating to at least Safari version 10.1.1 and macOS version 10.12.5 or using another browser.

Downloading System Logs

On iOS devices, you can only download Pano system logs using the Safari browser. The log files are named unknown.dms, which you must rename with a .tgz extension to view.

Integrating with Polycom Video Systems

To integrate your Pano system with a Polycom video system, make sure that the systems are connected to networks that allow connectivity between them.

For example, if the Pano system is connected to the Internet, while 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.

For more information on how to integrate with a Polycom video system, refer to the Polycom Pano Deployment Guide available on Polycom Support.
Interoperability

Topics:

- Products Tested with Pano App
- Supported Displays
- Supported Browsers
- Supported Miracast-Certified Devices
- Supported Miracast Resolutions
- Supported AirPlay-Certified Devices
- Notes on Screen Mirroring Quality
- Supported Operating Systems for Pano App
- Language Support

Refer to the following for devices tested, or compatible with Polycom Pano or Pano App.

Products Tested with Pano App

Polycom products are tested extensively with a wide range of products. You can view a list of the products that have been tested for compatibility with this release.

Polycom strives to support any system that is standards-compliant and investigates reports of Polycom systems that are not interoperable with other vendor systems. Note that the following list is not a complete inventory of compatible equipment, but the products that have been tested with this release.

**Note:** Polycom recommends that you upgrade all of your Polycom systems with the latest software versions. Any compatibility issues may already have been addressed by software updates. Refer to Polycom Service Policies at [http://support.polycom.com/content/support/service-policies.html](http://support.polycom.com/content/support/service-policies.html) to see the Current Polycom Interoperability Matrix.

### Products Tested with this Release

<table>
<thead>
<tr>
<th>Product</th>
<th>Tested Versions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polycom® RealPresence® Group Series</td>
<td>6.1.7, 6.1.6.1</td>
</tr>
<tr>
<td>Polycom Pano</td>
<td>1.2.1, 1.1.1</td>
</tr>
<tr>
<td>Polycom® RealPresence® Debut™</td>
<td>1.3.2</td>
</tr>
<tr>
<td>Polycom® Centro™</td>
<td>6.1.6.1, 6.1.6</td>
</tr>
<tr>
<td>Polycom® RealPresence® Trio™</td>
<td>5.5.4</td>
</tr>
<tr>
<td>Polycom® RealPresence® Immersive Studio</td>
<td>6.1.6.1, 6.1.6</td>
</tr>
</tbody>
</table>
## Supported Displays

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

### Tested Touch-Capable Monitors

The Pano device supports single- and multi-touch input from a HID-compliant device.

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

<table>
<thead>
<tr>
<th>Size (inches)</th>
<th>Touch Technology</th>
<th>Brand</th>
<th>Model/Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>Capacitive</td>
<td>Acer</td>
<td>T232HL</td>
</tr>
<tr>
<td>22</td>
<td>Capacitive</td>
<td>Elo®</td>
<td>E497001</td>
</tr>
<tr>
<td>46</td>
<td>Capacitive</td>
<td>Elo®</td>
<td>ET4602L</td>
</tr>
<tr>
<td>86</td>
<td>InGlass™</td>
<td>Dell</td>
<td>C8618Q7</td>
</tr>
<tr>
<td>55</td>
<td>InGlass™</td>
<td>Dell</td>
<td>C5518QT (black)</td>
</tr>
<tr>
<td>65</td>
<td>InGlass</td>
<td>Volanti</td>
<td>VD-6500-OB0C-1100 (black)</td>
</tr>
<tr>
<td>65</td>
<td>InGlass</td>
<td>Volanti</td>
<td>VD-6500-OQ0C-16P3 (white)</td>
</tr>
<tr>
<td>70</td>
<td>IR</td>
<td>Sharp</td>
<td>PN-L703B (black)</td>
</tr>
</tbody>
</table>

### Supported Browsers

You can access the Pano system web interface using the following browsers:

- Apple® Safari® 9 and later
- Google Chrome™ 46.0.2490.86 and later
- Mozilla® Firefox® 42.0 and later
- Microsoft Edge™ (all versions)
Supported Miracast-Certified Devices

You can display content from your Miracast-certified Android or Windows device to the Polycom Pano system monitor.

Windows or Android devices can discover and connect directly with the Polycom Pano system and do not have to be on the same network.

The Polycom Pano system supports content sharing from the following Android and Windows devices:

- Miracast-certified devices running Windows 10
- Samsung Galaxy smartphones and tablets running Android version 4.4 or later

**Note:** Polycom cannot guarantee connectivity with all Miracast-certified devices, but connectivity has been validated to work well with Samsung smartphones and tablets using Android version 4.4 or later and the Microsoft Surface® 3 Pro and Surface® 4 Pro running Windows 10. Check your device documentation on how to enable and use its screen mirroring feature.

Supported Miracast Resolutions

Pano is only supporting the following 30fps resolutions:

- **CEA (TV Resolutions)**
  - 1080p
  - 720p
- **VESA (Monitor Resolutions)**
  - 1920x1200
  - 1680x1024
  - 1680x1050
  - 1600x1200
  - 1600x900
  - 1400x1050
  - 1400x900
  - 1360x768
  - 1280x1024
  - 1280x864
  - 1280x800
  - 1280x764
  - 1152x864
  - 1024x768
- **HH (Hand Held Resolutions)**
  - 960x540
  - 864x480
  - 854x480
It is possible, on Windows 10 clients, once you have a Miracast connection, to change the Miracast display resolution separately from the client's own display resolution. It may take a few seconds before the Display settings shows the newly casted display, but once it does, select it and change the resolution and see the change on the Pano.

**Supported AirPlay-Certified Devices**

You can share the screen and audio of an AirPlay-certified iPhone®, iPad®, or Mac® computer. Polycom cannot guarantee connectivity with all these devices but has validated the following:

- iPhone 6 and newer running at least iOS® version 10
- iPad Air and newer running at least iOS version 10
- Mac computers running at least macOS® version 10.12

**Notes on Screen Mirroring Quality**

In many poor video quality situations, a reboot of the Airplay or Miracast device resolves the issue. Too many open applications can negatively affect the performance of the client device and closing out applications can increase performance.

**Supported Operating Systems for Pano App**

The Pano App can run on the following operating systems:

- Windows 7, 8.1, and 10
- macOS 10.11 and later

**Language Support**

The Pano device user interface provides support for the following languages:

- Arabic
- Chinese (Simplified)
- Chinese (Traditional)
- British English
- American English
- French
- German
- Hungarian
- Italian
- Japanese
• Korean
• Norwegian
• Polish
• Portuguese (Brazilian)
• Russian
• Spanish

**Note:** Pano App supports all these languages except Arabic.