

# Polycom® RealPresence® Web Suite

Polycom announces the release of 2.2.0 for Polycom® RealPresence® Web Suite. This document provides the latest information about Polycom RealPresence Web Suite 2.2.0.

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# What's New in Release 2.2.0

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## Topics:

- [Launching RealPresence Desktop as the RealPresence Web Suite Soft Client](#)
- [Forwarding Logs to Syslog Server](#)
- [Dropped Support for Polycom Concierge](#)

Polycom® RealPresence® Web Suite 2.2.0 enables RealPresence Web Suite users using the Polycom® RealPresence® Desktop video collaboration software to control non-WebRTC conferences. As the RealPresence Web Suite soft client, the RealPresence Desktop software replaces RealPresence Web Suite plug-in web client in non-WebRTC conferences.

Polycom RealPresence Web Suite 2.2.0 also supports forwarding RealPresence Web Suite logs to a Syslog server.

## Launching RealPresence Desktop as the RealPresence Web Suite Soft Client

When RealPresence Web Suite attendees join non-WebRTC meetings in the RealPresence Web Suite Experience Portal, the system automatically downloads the `Launcher.exe` to attendees' computers.

RealPresence Web Suite attendees can do as follows:

- If attendees don't have the RealPresence Desktop software installed on their computers, the attendees can run the launcher. RealPresence Desktop software version 3.9.0 installs and launches to connect the attendees to the meeting.
- If attendees have the RealPresence Desktop software version 3.9.0 installed on the computer, the attendees can run the launcher. RealPresence Desktop software launches to connect the attendees to the meeting.
- If attendees have a previous version (3.8.x and below) of RealPresence Desktop software installed on their computers, the attendees must uninstall the previous version of RealPresence Desktop software, then join the meeting again from the web portal.

After the meeting connects, attendees can control meetings in the RealPresence Desktop software as the RealPresence Web Suite soft client.

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**Note:** If your launcher does not run properly, perform following steps:

1. Uninstall your launcher.
2. Clear up browser cache and cookies.
3. Join the meeting again from the web browser.

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## Related Concepts

[User Account Limitations on Mac and Windows](#) on page 13

You should use Administrator or Standard User (non-admin) accounts on Mac and Windows operating systems to access RealPresence Web Suite.

## Feature Differences between Soft Client and Plug-In Web Client

Compared with plug-in web client, RealPresence Desktop working as the RealPresence Web Suite soft client supports different features.

The following table shows the feature differences between the RealPresence Web Suite soft client and the plug-in web client.

Features	Soft Client in 2.2.0	Plug-In Web Client in 2.1.5
Plug-In for AVC Call	Use RealPresence Desktop	Use plug-in
Group Chat	Not supported	Supported
Add People	Not supported	Supported
Recording	Record using DTMF codes	Record from UI
Enhanced Content	Not supported	Supported
Polycom Concierge	Not supported	Supported
Roster Control <ul style="list-style-type: none"> <li>▪ Mute attendees (all or specific attendees)</li> <li>▪ Change attendees' roles</li> </ul>	Supported	Supported
Screen and Application Share (UI and BFCP)	Supported	Supported
Audio and Video Control <ul style="list-style-type: none"> <li>▪ Mute and unmute speaker</li> <li>▪ Start and pause video</li> <li>▪ Adjust speaker volume</li> <li>▪ Show and hide self-view</li> </ul>	Supported. Mute on Entry is supported additionally.	Supported
End the meeting for all attendees and drop attendees	Supported	Supported

Participants can join with a secondary device and select **Join without Audio and Video** in the meeting joining page to access Group Chat, Add People, and Enhanced Content functions from the RealPresence Web Suite web client.

## Comparison with RealPresence Desktop Standalone Mode

Compared with RealPresence Desktop standalone mode, RealPresence Desktop working as the RealPresence Web Suite soft client supports different features.

RealPresence Desktop does not support following functions when used as the RealPresence Web Suite soft client:

- Far end camera control
- Recording icons (System only plays interactive voice response for recording operations.)

## Enabling Mute on Entry

When the administrator enables the Mute on Entry function, all attendees (except Chairperson) when joining meetings from RealPresence Desktop will be muted by default.

## Soft Client License

When you use RealPresence Desktop as the RealPresence Web Suite soft client, you don't need a RealPresence Desktop license. Instead, the soft client uses a concurrent license within the RealPresence Web Suite deployment.

## Forwarding Logs to Syslog Server

Administrators can enable forwarding logs to a Syslog Server on RealPresence Web Suite portals if the Syslog Server is available.

## Dropped Support for Polycom<sup>®</sup> Concierge

Starting with version 2.2.0, RealPresence Web Suite no longer supports Polycom<sup>®</sup> Concierge. If you need Polycom Concierge support, you must use version 2.1.0 to version 2.1.5.

# Release History

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Release history table lists all release information since RealPresence Web Suite 2.0.0.

## Release History

Release	Release Date	Features
2.2.0	January 2018	<ul style="list-style-type: none"><li>▪ Introducing RealPresence Desktop as the RealPresence Web Suite soft client.</li><li>▪ Meeting controls using RealPresence Desktop software.</li><li>▪ Administrator can mute all RealPresence Desktop attendees (except the Chairperson) when they join a meeting.</li><li>▪ Administrator can enable TLS 1.0, TLS 1.1, TLS 1.2 from Web UI.</li><li>▪ Administrator can enable forwarding logs to Syslog Server.</li><li>▪ Dropped support for Polycom® Concierge.</li><li>▪ Defect fixes.</li></ul>
2.1.5	September 2017	<ul style="list-style-type: none"><li>▪ Collaboration with the Polycom RealPresence DMA system 9.0.</li><li>▪ Defect fixes.</li></ul>
2.1.4	May 2017	Defect fixes.
2.1.3	March 2017	<ul style="list-style-type: none"><li>▪ Defect fixes.</li><li>▪ Support upgrade from version 2.1.2 to version 2.1.3.</li></ul>
2.1.2	October 2016	<ul style="list-style-type: none"><li>▪ Infrastructure setup for in-place upgrade for future RealPresence Web Suite releases.</li><li>▪ Improved serviceability of Standards Connector.</li><li>▪ User experience enhancement in <b>Join Meeting</b> and <b>End Meeting</b>.</li><li>▪ Admin option that requires guests to join in Audio-Video mode</li><li>▪ Defect fixes.</li></ul>
2.1.0	May 2016	<ul style="list-style-type: none"><li>▪ Support for Polycom Concierge.</li><li>▪ Security enhancements.</li><li>▪ Customer defect fixes.</li></ul>
2.0.2	February 2016	<ul style="list-style-type: none"><li>▪ Maintenance release that fixes customer escalation issues.</li><li>▪ Support for Polycom RealPresence Clariti.</li></ul>
2.0.1	September 2015	Maintenance release that enables SVC meetings with Google Chrome.

<b>Release</b>	<b>Release Date</b>	<b>Features</b>
2.0.0	August 2015	First release of software to support Enhanced Content Sharing and WebRTC implementation.

# Security Updates

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The RealPresence Web Suite supports TLS 1.0, 1.1 and 1.2.

After logging into the RealPresence Web Suite Services Portal and RealPresence Web Suite Experience Portal administration interface, the administrator can configure the TLS settings in **Platform Settings > Security**. TLS 1.2 is enabled by default.

The administrator needs to ensure that the TLS settings of both portals are the same. Incompatible TLS settings may cause a software upgrade issue (see CAXIS-13907 ).

RealPresence Web Suite 2.2.0 provides the ability for the administrator to edit the IP address and DNS name fields in Certificate Signing Requests (CSRs) to facilitate compliance with recommendations from the Certificate Authority/Browser Forum. See <https://cabforum.org/wp-content/uploads/Guidance-Deprecated-Internal-Names.pdf> for more information. Refer to the [Polycom Security Center](#) for information about known and resolved security vulnerabilities.



# Hardware Requirements

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## Topics:

- [End-User System Requirements](#)
- [Server Requirements](#)

Polycom determined hardware requirements based on test scenarios.

## End-User System Requirements

The end-user computer system used must meet minimum requirements.

### End-User System Requirements for RealPresence Web Suite

Component	Description
Processor	Intel Core i5, 2.5 GHz or AMD equivalent
RAM	4 GB
Video memory	256 MB
Hard drive space	200 MB
Camera	Integrated or external
Audio devices	Standard PC97 audio devices
Monitor	Recommended: 16:9 aspect ratio, 1920 x 1080 resolution Minimum: 1024 x 768 resolution

For information on supported tablet and smartphone devices when using RealPresence Web Suite with RealPresence Mobile, see the RealPresence Mobile support page on [Polycom Support](#).

## Server Requirements

The recommended server requirements for RealPresence Web Suite are based on the type of licensing you have deployed in your system.

### RealPresence Web Suite Pro

When Enhanced Content is in use, RealPresence Web Suite Pro requires three or more VM instances, one for the RealPresence Web Suite Experience Portal, one for the RealPresence Web Suite Services Portal, and one or more for the Standards Connector servers. Each instance must meet the requirements in the following tables.

### Server Components per VM Instance for RealPresence Web Suite Pro Experience Portal with Enhanced Content Enabled

Component	Deployment Settings
CPU	20,000 MHz allocation
Cores	8 virtual cores
Memory	16 GB
Storage	100 GB
Performance	1200 concurrent sessions

### Server Components per VM Instance for RealPresence Web Suite Pro Services Portal

Component	Deployment Settings
CPU	20,000 MHz allocation
Cores	8 virtual cores
Memory	8 GB
Storage	100 GB
Performance	1000 concurrent host logins

### Server Components per VM Instance for RealPresence Web Suite Pro Standards Connector

Component	Deployment Settings
CPU	10,000 MHz allocation
Cores	4 virtual cores
Memory	8 GB
Storage	100 GB
Performance	10 connector sessions

## RealPresence Web Suite

RealPresence Web Suite requires two virtual machine (VM) instances, one for the RealPresence Web Suite Experience Portal and one for the RealPresence Web Suite Services Portal.

Each instance must meet the requirements in the following tables.

**Server Components per VM Instance for RealPresence Web Suite Experience Portal**

Component	Deployment Settings
CPU	5000 MHz allocation
Cores	2 virtual cores
Memory	8 GB
Storage	100 GB
Performance	1200 concurrent sessions

**Server Components per VM Instance for RealPresence Web Suite Services Portal**

Component	Deployment Settings
CPU	20,000 MHz allocation
Cores	8 virtual cores
Memory	8 GB
Storage	100 GB

**RealPresence Web Suite Pro**

When Enhanced Content is in use, RealPresence Web Suite Pro requires three or more VM instances, one for the RealPresence Web Suite Experience Portal, one for the RealPresence Web Suite Services Portal, and one or more for the Standards Connector servers.

Each instance must meet the requirements in the following tables.

Server Components per VM Instance for RealPresence Web Suite Pro Experience Portal with Enhanced Content Enabled

Component	Deployment Settings
CPU	20,000 MHz allocation
Cores	8 virtual cores
Memory	16 GB
Storage	100 GB
Performance	1200 concurrent sessions

**Server Components per VM Instance for RealPresence Web Suite Pro Services Portal**

<b>Component</b>	<b>Deployment Settings</b>
CPU	20,000 MHz allocation
Cores	8 virtual cores
Memory	8 GB
Storage	100 GB
Performance	1000 concurrent host logins

**Server Components per VM Instance for RealPresence Web Suite Pro Standards Connector**

<b>Component</b>	<b>Deployment Settings</b>
CPU	10,000 MHz allocation
Cores	4 virtual cores
Memory	8 GB
Storage	100 GB
Performance	10 connector sessions

# Software Requirements

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## Topics:

- [Operating System Requirements](#)
- [Soft Client Requirements](#)
- [Web Browser Requirements](#)

Polycom determined software requirements based on test scenarios.

## Operating System Requirements

Your deployment must meet RealPresence Web Suite software requirements.

### Operating System Requirements

System Type	Requirements
Microsoft® Windows® 32-bit and 64-bit systems	Windows 10 Windows 8.1 Windows 8 Windows 7
Mac®	Mac OS X® 10.11, 10.12, 10.13 or higher
iOS	iOS for use with iPad and iPhone. (iOS is a trademark or registered trademark of Apple Inc. in the U.S. and other countries and is used under license.)  See the RealPresence Mobile documentation at <a href="#">Polycom Support</a> for information on compatibility with version 3.9 or later.
Other	Android™  Check RealPresence Mobile on <a href="#">Polycom Support</a> documentation for information on compatibility with version 3.9 or later.

## User Account Limitations on Mac and Windows

You should use Administrator or Standard User (non-admin) accounts on Mac and Windows operating systems to access RealPresence Web Suite.

Guest users with limited permissions can't access RealPresence Web Suite.

### Related Concepts

[Launching RealPresence Desktop as the RealPresence Web Suite Soft Client](#) on page 3

When RealPresence Web Suite attendees join non-WebRTC meetings in the RealPresence Web Suite Experience Portal, the system automatically downloads the `Launcher.exe` to attendees' computers.

## Soft Client Requirements

You should review RealPresence Web Suite prerequisites before using RealPresence Desktop video collaboration software and the RealPresence Mobile app to join non-WebRTC meetings with RealPresence Web Suite.

RealPresence Web Suite prerequisites are listed as follows:

- Your company IT must install the root certificate and intermediate certificate (if applicable) from your CA on your computer or mobile device before you use the soft client.
- If you access RealPresence Web Suite Experience Portal or RealPresence Web Suite Services Portal from the external network, your company IT must enter the FQDN of the specific portal in the **Subject Alternative Name** field in the RealPresence Access Director certificate, otherwise, you will fail to launch the soft client.
- If you use Chrome or Firefox to join a meeting and launch the RealPresence Desktop in Windows OS, you need to simultaneously install Internet Explorer 11 (or higher version). This is because RealPresence Desktop Roster functions use the core of the Internet Explorer to work.

RealPresence Desktop working as RealPresence Web Suite soft client or working in standalone mode has same system requirements, for more information refer to [RealPresence Desktop Release Notes](#) of a specific platform.

RealPresence Mobile working as RealPresence Web Suite soft client or working in standalone mode has same system requirements, for more information refer to [RealPresence Mobile Release Notes](#) of a specific platform.

## Web Browser Requirements

Polycom supports only production versions of web browsers on your computers; Polycom doesn't support beta or development versions for use with RealPresence Web Suite products.

### Web Browser Requirements

Web Browser	Version
Microsoft Internet Explorer®	Version 11 for Windows
Microsoft Edge	For Windows 10
Mozilla Firefox®	For Windows and Macintosh
Google Chrome™	For Windows and Macintosh
Apple® Safari®	For Macintosh

## Mozilla Firefox Web Browser Limitations

Due to issues with Firefox support for WebRTC and lack of feature parity, Polycom recommends selecting the **Enable the WebRTC support in Firefox** option only for testing or evaluation purposes.

For more information, see the *Polycom RealPresence Web Suite Administrator Guide* on [Polycom Support](#).

Some security protection software such as Symantec Endpoint Protection permits Read-Only access to the Mozilla Firefox default download folder. If you failed to download `Launcher.exe` using Mozilla Firefox for Windows, you can use one of the following workarounds:

- Use other supported web browsers.
- Set the value of two system and user environment variables `TEMP` and `TMP` to `%USERPROFILE%\AppData\Local\Microsoft\Windows\Temporary Internet Files\`, then restart Firefox.

## Web Browser Extension

You must install web browser extension on your computer to fully enable RealPresence Web Suite web client.

### Required Web Client Software Components

Component	Description
RealPresence Extension	Required to enable audio, video, and content sharing in Google Chrome.

# Other System Requirements

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This section lists other system requirements needed to enable the RealPresence Web Suite Services and Experience Portals in Polycom RealPresence Web Suite.

## Other System Requirements

Requirement	Description
Polycom® RealPresence® Platform	Polycom RealPresence Web Suite requires RealPresence Platform components such as Polycom® RealPresence® Collaboration Server (RMX or Virtual Edition), Polycom® RealPresence® DMA® 7000, and Polycom® RealPresence® Access Director™ to function. RealPresence Collaboration Server, Virtual Edition is required for RealPresence Web Suite Pro deployments for WebRTC mesh-to-bridge call escalations.
VMware Deployments	
.OVA Files	Latest RealPresence Web Suite Experience Portal .OVA file downloaded to your local machine from <a href="#">Polycom Support</a> . Latest RealPresence Web Suite Services Portal .OVA file downloaded to your local machine from <a href="#">Polycom Support</a> .
VMware	Version 6.0 and 6.5
One or more ESXi hosts	Required for VMware deployment. Version 5.5 or higher, supporting 64-bit installations. Using a vSphere client, you must be able to access and administer your VMware ESXi hosts either directly or from a vCenter controlling the hosts.
VMware vSphere vCenter controller	Optional. Version 5.5 or higher.
Hyper-V Deployments	
.VHD Files	Latest RealPresence Web Suite Experience Portal .VHD file downloaded to your local machine from <a href="#">Polycom Support</a> . Latest RealPresence Web Suite Services Portal .VHD file downloaded to your local machine from <a href="#">Polycom Support</a> .
Microsoft Hyper-Visor Server	Required for Hyper-V deployment. Microsoft 2012 R2 Standard Edition with Hyper-V Role enabled.
Dynamic Host Configuration Protocol (DHCP)	Allows the portals to obtain their IP addresses.



Requirement	Description
LDAP Server	<p>Optional. Enables authentication for enterprise users with their network credentials. The RealPresence Web Suite Services Portal currently supports integration with only Microsoft Active Directory.</p> <p>This feature also enables administrators to import users from an enterprise LDAP server. The administrator can edit user roles or set user status as inactive for imported users.</p> <p>For information on user roles and on changing imported user accounts, see the <i>Polycom RealPresence Web Suite Administrator Guide</i>.</p>
SMTP Server	<p>Enables the RealPresence Web Suite Services Portal to deliver email meeting invites and other notifications such as user onboarding.</p>
Edge Proxy	<p>If providing access to external guests through a firewall, a functioning firewall/NAT traversal element such as RealPresence Access Director, Virtual Edition or Acme Packet SBC is required, as outlined in the <i>Polycom RealPresence Web Suite Administrator Guide</i>. This element requires provisioning to allow SIP guest access and optional H.323 access to your RealPresence DMA and MCUs.</p> <p>RealPresence Access Director 3.1 or higher is required to enable HTTPS tunneling functionality.</p>
HTTP Reverse Proxy	<p>If providing access to external guests through a firewall, an HTTP reverse proxy or a NAT server is required. This element must be provisioned to allow HTTPS and optional web socket access to the RealPresence Web Suite Experience Portal and HTTPS access to the RealPresence Web Suite Services Portal.</p> <p>RealPresence Access Director 3.0 or later can also be used as an HTTP Reverse Proxy for the RealPresence Web Suite Experience Portal.</p>
End User License Agreement (EULA)	<p>Access the Polycom® Software End User License Agreement on <a href="#">Polycom Support</a>.</p>

# Installation and Upgrade Notes

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## Topics:

- [Upgrade and Migration Paths](#)
- [Upgrade from Version 2.1.5 to Version 2.2.0](#)
- [Accepting RealPresence Desktop Upgrade](#)
- [RealPresence Clariti Support](#)

This section provides information on RealPresence Web Suite installation and upgrading operations.

## Upgrade and Migration Paths

This section lists tested upgrade and migration paths.

### RealPresence Web Suite Upgrade and Migration Paths

From Release	To Release
Tested Upgrade Paths	
RealPresence Web Suite 2.1.5	RealPresence Web Suite 2.2.0
RealPresence Web Suite 2.1.4	RealPresence Web Suite 2.2.0
RealPresence Web Suite 2.1.3	RealPresence Web Suite 2.2.0
RealPresence Web Suite 2.1.2	RealPresence Web Suite 2.2.0
Tested Migration Paths	
RealPresence Web Suite 2.1.5	RealPresence Web Suite 2.2.0
RealPresence Web Suite 2.1.4	RealPresence Web Suite 2.2.0
RealPresence Web Suite 2.1.3	RealPresence Web Suite 2.2.0
RealPresence Web Suite 2.1.2	RealPresence Web Suite 2.2.0
RealPresence Web Suite 2.1.0	RealPresence Web Suite 2.2.0

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**Note:** After you migrate RealPresence Web Suite server from version 2.1.0 to version 2.1.x and then upgrade the server to version 2.2.0, your RealPresence Web Suite users may be directed to version 2.1.0 online help when they click on the Help button. You need to customize the URLs linked to the Help buttons to make sure your users use correct online help version.

Customize the URLs as follows:

- URL for RealPresence Web Suite Experience Portal and Services Portal user interfaces: <http://documents.polycom.com/sites/default/files/static/websuite/2.2.0/ug/WebHelp/index.htm>.
  - URL for RealPresence Web Suite Experience Portal and Services Portal administration interfaces: <http://documents.polycom.com/sites/default/files/static/websuite/2.2.0/ag/WebHelp/index.htm>
- 

## Upgrade from Version 2.1.5 to Version 2.2.0

You need to upgrade Web Suite Services Portal first, then upgrade RealPresence Web Suite Experience Portal.

1. Download the upgrade package (.upg) from [Polycom Support](#)
2. Validate the upgrade package (for example using MD5 checksum).
3. Login Web Suite Services Portal as Super Admin or RealPresence Web Suite Experience Portal as Admin.
4. Click **Platform Settings > Upgrade**
5. Click **Choose File**, and select the upgrade package.
6. Validate the product version:
  - If you uploaded the wrong version or file, click **Choose File** to overwrite the previously uploaded upgrade package.
  - If you uploaded the correct version, click **Continue to Upgrade**.
7. Click **Upgrade** to initiate the upgrade process.  
The system reboots automatically once the upgrade is completed.
8. Login again as the same role.
9. Click **Platform Settings > Upgrade History** to view the upgrade history, and **Download** the upgrade logs for troubleshooting.
10. Go to **Product Info** to validate the product version.

## Accepting RealPresence Desktop Upgrade

Since version 2.2.0, when you join a non-WebRTC meeting, you can accept RealPresence Web Suite to upgrade your RealPresence Desktop to a higher version.

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**Note:** You still need to buy the RealPresence Desktop license, if you want to use RealPresence Desktop as a standalone meeting software (not the soft client of RealPresence Web Suite).

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After the upgrade completes, you need to restart the RealPresence Desktop, then join the meeting again from the web portal.

## **RealPresence Clariti Support**

RealPresence Web Suite is available as part of RealPresence Clariti, a Polycom collaboration infrastructure offer that features simplified concurrent user licensing and add-on options. RealPresence Clariti customers must consult with their Polycom representative to ensure they have the correct licensing information before upgrading.

If you are a RealPresence Clariti customer, you must use the RealPresence Resource Manager 10.0 or a higher version to license your product. If the RealPresence Resource Manager is not available, you can use RealPresence Platform Director 3.0 system alternatively to license your product.

# Products Tested with this Release

RealPresence Web Suite systems are tested extensively with a wide range of products. While the following list is not a complete inventory of compatible equipment, it lists the products that have been specifically tested for compatibility with this release.

**Note:** Polycom recommends that you upgrade all of your Polycom systems with the latest software versions before contacting Polycom support, as compatibility issues may have been addressed by software updates. Refer to the Current Polycom Interoperability Matrix on the [Polycom Service Policies](#) site for more information.

## Browsers Versions Tested

Browser	Description
Microsoft Internet Explorer®	Version 11.0 for Windows
Microsoft Edge	Version 41.16299.15.0 for Windows 10
Google Chrome™	Up to version 62 for Windows and Macintosh <sup>1</sup>
Apple® Safari®	Version 11.0.1 for Macintosh
Mozilla Firefox®	Version 56

<sup>1</sup> Collaboration Server version 8.6.4.97 or higher is required to support Chrome version 52 and higher as a WebRTC client.

## RealPresence Platform Product Versions Tested

Product	RealPresence Web Suite	RealPresence Web Suite Pro with Enhanced Content	RealPresence Web Suite Pro with WebRTC
Polycom® RealPresence® Collaboration Server (RMX®) 1800/2000/4000	8.7.4	8.7.4	N/A
	8.7.3	8.7.3	
Polycom® RealPresence® Collaboration Server, Virtual Edition	8.7.4	8.7.4	8.7.4
	8.7.3	8.7.3	8.7.3
Polycom® RealPresence® Media Suite	2.8.2	2.8.2	2.8.2
Polycom® RealPresence® DMA®	9.0.1	9.0.1	9.0.1
	9.0.0	9.0.0	9.0.0
Polycom® RealPresence® Access Director™	4.2.5.1	4.2.5.1	4.2.5.1

**Other Product Versions Tested**

<b>Product</b>	<b>Tested Versions</b>
Polycom® RealPresence® Group Series systems	6.2.0
Polycom® RealPresence® Desktop	3.9.0
Polycom® RealPresence® Mobile	3.9.0
Skype for Business Server 2015 (volume license key installed)	6.0.9319.281

# System Constraints and Limitations

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## Topics:

- [Supported Bandwidths and Video Formats](#)
- [Firewall Restrictions](#)
- [System Constraints](#)

This section provides information on capabilities supported for RealPresence Web Suite in this release and any restrictions and constraints.

## Supported Bandwidths and Video Formats

The RealPresence Web Suite soft client supports the bandwidth, video format, and resolution as outlined in the following tables. Individual system performance and camera capabilities may limit available video formats and resolutions.

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**Note:** The RealPresence DMA in your Polycom environment sets and regulates bandwidth available for meeting attendees using the RealPresence Web Suite Services and Experience Portals.

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### Receive Capabilities

The following tables outline the formats supported for received video at different call rates.

#### H.264 High-Profile Receive Capability

Resolution	Required Call Rate (kbps)	Resolution	Required Call Rate (kbps)
1280x720	512	640x360	384
1024x768 XGA	512	432x240	192
1024x576	512	424x240	96
960x720	512	352x288 CIF	96
800x600 SVGA	448	352x240 SIF	96
864x480	256	320x240 QVGA	96
640x480 VGA	192	320x180	96
704x576 CIF4	192	176x144 QCIF	96
704x480 SIF4	192	128x96 SQCIF	96

**H.264 Receive Capability**

Resolution	Required Call Rate (kbps)	Resolution	Required Call Rate (kbps)
1280x720	832	704x480 SIF4	256
1024x768	832	432x240	256
1024x576	832	352x288 CIF	96
960x720	832	352x240 SIF	96
800x600	768	320x240 QVGA	96
864x480	384	176x144 QCIF	96
640x480 VGA	256	128x96 SQCIF	96
704x576 CIF4	256		

**H.263 Receive Capability**

Resolution	Required Call Rate (kbps)	Resolution	Required Call Rate (kbps)
1024x768	1024	352x288 CIF	96
800x600	1024	352x240 SIF	96
640x480 VGA	512	176x144 QCIF	96
704x576 CIF4	1024	128x96 SQCIF	96
704x480 SIF4	1024		

**SVC Multipoint Receive Capability**

Bit Rate (kbps)	Downlink	Bit Rate (kbps)	Downlink
Number of Remote Participants: Up to 9			
1920	360p30 x 1 + 180P30 x 6 + 180P15 x 2	512	360P7.5 x 1 + 180P7.5 x 3
1024	360P15 x 1 + 180P7.5 x 8	384	360P7.5 x 1 + 180P7.5 x 1
768	360P15 x 1 + 180P7.5 x 5	256	360P7.5 x 1
Number of Remote Participants: Up to 8			
1920	360p30 x 1 + 180p30 x 7	512	360P7.5 x 1 + 180P7.5 x 3



Bit Rate (kbps)	Downlink	Bit Rate (kbps)	Downlink
1024	360P15 x 1 + 180P15 x 2 + 180P7.5 x 5	384	360P7.5 x 1 + 180P7.5 x 1
768	360P15 x 1 + 180P7.5 x 5	256	360P7.5 x 1
Number of Remote Participants: Up to 7			
1920	360p30 x 1 + 180P30 x 6	512	360P7.5 x 1 + 180P7.5 x 3
1024	360P15 x 1 + 180P15 x 4 + 180P7.5 x 2	384	360P7.5 x 1 + 180P7.5 x 2
768	360P15 x 1 + 180P7.5 x 5	256	360P7.5 x 1
Number of Remote Participants: Up to 6			
1920	360P30 x 1 + 180P30 x 5	512	360P7.5 x 1 + 180P7.5 x 3
1024	360P15 x 1 + 180P15 x 5	384	360P7.5 x 1 + 180P7.5 x 1
768	360P15 x 1 + 180P7.5 x 5	256	360P7.5 x 1
Number of Remote Participants: Up to 5			
1920	360P30 x 1 + 180p30 x 4	512	360P7.5 x 1 + 180P7.5 x 3
1024	360P30 x 1 + 180P15 x 4	384	360P7.5 x 1 + 180P7.5 x 1
768	360P15 x 1 + 180P15 x 2 + 180P7.5 x 2	256	360P7.5 x 1
Number of Remote Participants: Up to 4			
1920	360P30 x 1 + 180p30 x 3	512	360P7.5 x 1 + 180P7.5 x 3
1024	360P30 x 1 + 180P30 x 2 + 180P15 x 1	384	360P7.5 x 1 + 180P7.5 x 1
768	360P15 x 1 + 180P15 x 3	256	360P7.5 x 1
Number of Remote Participants: Up to 3			
1920	360p30 x 1 + 180P30 x 2	512	360P15 x 1 + 180P7.5 x 2
1024	360P30 x 1 + 180P30 x 2	384	360P7.5 x 1 + 180P7.5 x 1
768	360P15 x 1 + 180P15 x 2	256	360P7.5 x 1
Number of Remote Participants: Up to 2			
1920	360p30 x 1 + 180P30 x 1	512	360P15 x 1 + 180P15 x 1
1024	360P30 x 1 + 180P30 x 1	384	360P7.5 x 1 + 180P7.5 x 1
768	360P30 x 1 + 180P30 x 1	256	360P7.5 x 1

Bit Rate (kbps)	Downlink	Bit Rate (kbps)	Downlink
Number of Remote Participants: Up to 1			
1920	720p30 x 1	512	360P30 x 1
1024	720P30 x 1	384	360P15 x 1
768	360P30 x 1	256	360P7.5 x 1

### Transmit Capabilities

The following tables outline the formats supported for transmitted video at different call rates.

#### H.264 High-Profile Transmit Capability

Resolution	Required Call Rate (kbps)	Resolution	Required Call Rate (kbps)
1280x720	832	320x240 QVGA	96
640x480 VGA	384	176x144 QCIF	96
352x288 CIF	96	128x96 SQCIF	96

#### H.264 Transmit Capability

Resolution	Required Call Rate (kbps)	Resolution	Required Call Rate (kbps)
1280x720	960	320x240 QVGA	96
640x480 VGA	384	176x144 QCIF	96
352x288 CIF	96	128x96 SQCIF	96
352X240 SIF	96		

#### H.263 Transmit Capability

Resolution	Required Call Rate (kbps)	Resolution	Required Call Rate (kbps)
704X576 CIF4	960	352X240 SIF	128
704X480 SIF4	960	176x144 QCIF	96
640x480 VGA	448	128x96 SQCIF	96
352x288 CIF	128		

**SVC Multipoint Transmit Capability<sup>1</sup>**

Call Rate (kbps)	Uplink	Call Rate (kbps)	Uplink
1920	180p30 + 360p30 + 720p30	384	180p15 + 270p15
1024	180p30 + 360p15 + 720p15	256	180p30
768	180p30 + 360p30	128	180p7.5
512	180p30 + 360p15		

<sup>1</sup> RealPresence Web Suite will not send 720p if the RealPresence DMA conference template is provisioned with a line rate of 2048 or greater.

## Firewall Restrictions

Polycom recommends system administrators configure RealPresence Web Suite to operate inside the enterprise firewall, protected by a web reverse proxy, such as the one included with RealPresence Access Director.

Implementing a Demilitarized Zone (DMZ) with the RealPresence Web Suite components between the inner and outer firewall requires additional rules to be added to the internal firewall of the DMZ to enable the RealPresence Web Suite components to communicate with enterprise services, including the RealPresence DMA system, Active Directory, and Exchange. This configuration is not tested as part of the standard solution deployment and therefore is not supported by Polycom.

## System Constraints

Start and restart RealPresence Web Suite must follow the restricted orders.

### Starting RealPresence Web Suite

When starting RealPresence Web Suite, make sure to start the RealPresence DMA system and RealPresence Web Suite Services Portal before starting the RealPresence Web Suite Experience Portal. If you do not start RealPresence Web Suite in this order, the API that handles feature functionality on the Experience Portal is impacted.

### Restarting RealPresence Web Suite

When restarting the RealPresence DMA system or RealPresence Web Suite Services Portal, make sure to also restart the RealPresence Web Suite Experience Portal afterwards. If you restart the RealPresence DMA system or Services Portal without restarting the Experience Portal afterwards, the API that handles feature functionality on the Portal is impacted.

# Resolved Issues

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Resolved issues table lists the resolved issues in RealPresence Web Suite 2.2.0.

## Resolved RealPresence Web Suite Services Portal and Experience Portal Issues

Category	Issue No.	Description
Functionality	CAXIS-14282	When multiple Access Points configured on the RealPresence Web Suite Services Portal, RealPresence Desktop launcher does not automatically run after a RealPresence Web Suite user starts a meeting by clicking <b>Meet Now</b> .
Functionality	CAXIS-13928	At times, when RealPresence Web Suite users join meetings using RealPresence Desktop or RealPresence Mobile, the <b>Share Content</b> and <b>Roster</b> buttons are not functioning.
Functionality	CAXIS-12837	When a Mac system is attached to multiple monitors configured for extended desktop and the user tries to share the PowerPoint application in slideshow presentation mode, the content is not visible on the far end.
User Interface	CAXIS-13352	When migrating from software version 2.0.0 to 2.1.0, the Help links on the RealPresence Web Suite Services Portal user UI also get migrated from the old machine to the new deployment. The Help link points to the 2.0.0 User Guide instead of the 2.1.0 version.
Software Update	CAXIS-13976	At times, after upgrading RealPresence Web Suite Experience Portal, users cannot use their previous root password to login the console.
Software Update	CAXIS-13850	At times, when a user reboots the virtual machine to finish upgrading the RealPresence Web Suite Services Portal or RealPresence Experience Portal, the RealPresence Web Suite service fails to restart and the system reports "Unable to collect IPv4 routing table".
Software Update	CAXIS-13847	When a user upgrades the RealPresence Web Services Portal using Firefox, the upgrade succeeds but the web page sticks in a backing up existing data state.

# Known Issues

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Known issues table lists known issues in all releases of RealPresence Web Suite.

## Known RealPresence Web Suite Services Portal and Experience Portal Issues

Category	Issue No.	Release	Description	Workaround
Audio	CAXIS-10670	2.0.0	Occasionally when users with multiple speaker options test the options before selecting a speaker, the test will not sound in the selected speaker.	No workaround in this release.
Browser	CAXIS-13773	2.1.2	For Chrome version 54 and higher, when the user stops screen share using the <b>Stop Sharing</b> Chrome button, the screen at the receiver side displays as black, while the sender side appears to be still sharing the screen.	Use the <b>Stop</b> button from RealPresence Web Suite client user interface or Content Queue panel to stop screen share instead of the <b>Stop Sharing</b> Chrome button
Certificates	CAXIS-9280	1.7.0	The SAN field cannot be entered as part of the certificate signing requests initiated from the RealPresence Web Suite Experience Portal.	No workaround in this release.
Content	CAXIS-11860	2.0.0	When a Chrome participant is sharing a PDF document, the Windows 7 Internet Explorer 11 participant observes the letters are shrunk.	No workaround in this release.
Deployment	CAXIS-13636	2.1.1	If the deployment has a self-signed certificate, the uploaded document might fail intermittently.	Open the content specific URL <code>&lt;MEA_URL&gt;/ecs</code> in a separate tab and accept the certificate.  Any document uploaded after accepting the certificate is uploaded.
First Time Setup	CAXIS-13394	2.1.2	EDU does not configure RealPresence Web Suite for secure LDAP.	Configure LDAP in RealPresence Web Suite manually post-deployment.

Category	Issue No.	Release	Description	Workaround
First Time Setup	CAXIS-13554	2.1.1	RealPresence Web Suite Experience Portal is assigned a dynamic IP address even through a static IP address has been configured for it during the deployment through EDU.	
First Time Setup	CAXIS-13605	2.1.1	If the FQDN was not mapped to the IP address before RealPresence Web Suite is deployed on the Hyper-V through EDU, the RealPresence Web Suite is not accessible.	Make sure 'A' records are created for Static IP address of the RealPresence Web Suite Services Portal and RealPresence Web Suite Experience Portal and they are solvable, then implement the deployment.
Functionality	CAXIS-11537	2.0.1	At times, although the network indicator bars are fully lit, only some of the video participants can be connected to the SVC conference. At times, although the network indicator bars are fully gray, all the video participants can be connected to the SVC conference.	No workaround in this release.
Functionality	CAXIS-14323	2.2.0	On MacBook, participants fail to join a RealPresence Web Suite conference if they didn't hang up the call in RealPresence Desktop and quit the application.	Perform following steps: <ol style="list-style-type: none"> <li>1. Manually hang up the call in RealPresence Desktop and quit the application.</li> <li>2. Join RealPresence Web Suite conference again from a web browser.</li> </ol>
Functionality	CAXIS-10046	2.0.0	For meetings that require a chairperson (the RealPresence DMA setting "Conference requires Chairperson" is enabled), attendees can still participate in the roster, chat, and enhanced content sharing even before a chairperson has joined the call.	No workaround in this release.

Category	Issue No.	Release	Description	Workaround
Functionality	CAXIS-10287	2.0.0	Participants with the Promote option selected can only exercise promote/demote functions on the roster only if full roster control is enabled for participants in the RealPresence Web Suite admin console.	No workaround in this release.
Functionality	CAXIS-13756	2.1.0	Each RealPresence Web Suite Services Portal deployed on Hyper-V has the same GUID and therefore the WSP deployed on Hyper-V after the first one cannot be licensed with the direct licensing model.	No workaround in this release.
Interoperability	CAXIS-12116	2.0.1	RealPresence Resource Manager is not able to block the video of the RealPresence Web Suite participant nor change the layout in the pure-mesh Web RTC and adhoc RealPresence DMA conference.	No workaround in this release.
Interoperability	CAXIS-11077	2.0.0	When a user connects to a meeting using RealPresence Web Suite and another Polycom standard endpoint (RealPresence Mobile, RealPresence Desktop, RealPresence Group Series or Polycom HDX) using the same AD credentials, the RealPresence Web Suite Experience Portal disconnects when the user hangs up the other endpoint.	All Endpoints to have different dial strings.
Interoperability	CAXIS-13659	2.1.2	Unable to receive licenseServer, dmaConnects, meaConnection, and ldapConnection SNMP trap from RealPresence Web Suite	No workaround in this release.
Interoperability	CAXIS-13753	2.1.2	RealPresence Web Suite participants on iPad and Android tablet endpoints are not connected to a CP and SVC mixed conference on RealPresence Collaboration Server, Virtual Edition. The conference is set to Encrypt All and 1920 Kbps.	No workaround in this release.

Category	Issue No.	Release	Description	Workaround
User Experience	CAXIS-8858	2.0.0	When drawing a large shape on the whiteboard that overlaps or encloses a number of other small shapes, if the larger shape is selected and it appears that the smaller shapes are also selected when they are not.	No workaround in this release.
User Experience	CAXIS-8997	2.0.0	Application sharing does not list Windows 8 default applications to preview PDF and PowerPoint files.	Use the screen sharing feature to bring the needed application to the foreground.
User Experience	CAXIS-9292	2.0.0	If sharing multiple documents in a meeting and the first document is larger in size than the stage area due to monitor resolution, the document will not display on the stage.	Increase your monitor resolution or delete the document and put it further in the document queue.
User Experience	CAXIS-10746	2.0.0	When operating as an AVC video client, a RealPresence Web Suite user may receive far-end content both as enhanced content (displayed separately from people video, with additional controls) and as legacy content (displayed as people video along with other people video, potentially at a reduced resolution).	<p>Do one of the following:</p> <ul style="list-style-type: none"> <li>▪ Enable SVC in the applicable conference template settings to allow RealPresence Web Suite clients to use SVC video rather than AVC.</li> <li>▪ Disable <b>Send content to legacy endpoints</b> under <b>Content Video Settings</b> in the RealPresence DMA conference template. This workaround may impact the ability of legitimate legacy endpoints from being able to view content.</li> </ul> <p>Limitation: If <b>Multiple Content Resolutions</b> is also enabled, this workaround has no effect and will not eliminate the redundant content.</p>
User Experience	CAXIS-10770	2.0.0	When a user connects a USB headset while in a meeting, the user must refresh the page or refresh the browser to use it in the meeting.	No workaround in this release.



Category	Issue No.	Release	Description	Workaround
User Interface	CAXIS-9787	2.0.0	It is possible in the RealPresence Web Suite Experience Portal admin console to enable enhanced content even if the required RealPresence Web Suite Pro license has not been implemented.	No workaround in this release.
Video	CAXIS-13321	2.1.0	In certain cases during an SVC call, the video may look elongated or stretched.  This can happen due to the changes in network dynamics which cause the video resolution and the aspect ratio to change.	No workaround in this release.

# Limitations

Limitations table lists limitations in all releases of RealPresence Web Suite and other software.

## RealPresence Web Suite Services Portal and Experience Portal Limitations

Category	Issue No.	Release	Description	Workaround
Browser	CAXIS-9755	2.0.0	The specific browser instance that is running RealPresence Web Suite cannot be shared as an app during screen share on Chrome.	Share the complete screen instead of the application.
Browser	CAXIS-10418	2.0.0	If hardware acceleration is not enabled in Chrome, you may not receive the main video in a meeting and your self-view will not display.	Configure Chrome to "Use H/W Acceleration when available" within the Chrome browser settings and restart the browser.
Browser	CAXIS-10503	2.0.0	If a user starts or joins a call in Chrome incognito mode, the Polycom Chrome extension cannot be added from the Chrome web store.	Relaunch your meeting in a window that does not have incognito mode enabled.  You can also enable the app by using developer mode to work in incognito mode.
Browser	CAXIS-12838	2.0.0	When using Enhanced Content screen sharing in Chrome to display a presentation in PowerPoint Slide Show mode, far-end participants still see the PowerPoint application window with editing tools instead of the full-screen slide view, and the slides won't advance.	Do one of the following: <ul style="list-style-type: none"> <li>Enter Slide Show mode in PowerPoint first and then start sharing the PowerPoint application window in Chrome.</li> <li>Select the screen share option to share the entire screen rather than the PowerPoint application window.</li> <li>Use a browser other than Chrome.</li> </ul>
Certificates	CAXIS-9280	1.7.0 2.0.0	The SAN field cannot be entered as part of the certificate signing requests initiated from the RealPresence Web Suite Experience Portal.	No workaround in this release.

Category	Issue No.	Release	Description	Workaround
Connectivity	CAXIS-8348	1.7.0	If a conference is configured to require encryption and a participant can't establish encryption, the call disconnects without providing this information to the user.	No workaround in this release.
Functionality	CAXIS-14318	2.2.0	RealPresence Web Suite users cannot join meetings if Mozilla Firefox Proxy is in use.	Open Firefox and go to <b>Options &gt; Advanced &gt; Network &gt; Connection Settings</b> , and select <b>Use system proxy settings</b> to use the proxy settings in the Internet Explorer.
Functionality	CAXIS-7885	1.6.1	The direct access probe feature is not available when running the RealPresence Web Suite client on Mac systems. On a Mac system, the RealPresence Web Suite client always attempts to use a forwarding web proxy, if one is configured on the local system and/or browser.	No workaround in this release.
Functionality	CAXIS-13228	2.1.0	In deployments where users upload PowerPoint and Word document files, the RealPresence Web Suite Experience Portal instance may reach a state where the memory utilized by the conversion library exceeds the specified limits. If this occurs, file uploads might fail intermittently.	Polycom recommends restarting the MEA services once every two weeks for these types of deployments.
Interoperability	CAXIS-8815	1.7.0	If you create a Continuous Presence-only conference call on Polycom RealPresence Collaboration Server (RMX) 4000, 2000, and 800s, version 8.1, with default content settings ( <b>Content Settings: HiResGraphics and Content Protocol: H.264 HD</b> ), RealPresence Web Suite cannot send or receive content if the call rate is set to 384 kbps or below.	Set the call rate on RealPresence Web Suite to above 384 kbps.  Or, change the RealPresence Collaboration Server (RMX) <b>Content Settings</b> to <b>Graphics</b> and the <b>Content Protocol</b> to <b>H.263 and H.264 Auto Selection</b> .

Category	Issue No.	Release	Description	Workaround
Software Update	CAXIS-13907	2.2.0	During the RealPresence Web Suite Experience portal upgrade process, the Authentication Required window repeatedly pops up and the upgrade cannot continue.	Ensure you use the same TLS settings between the RealPresence Web Suite Experience Portal and the RealPresence Web Suite Services Portal.
Software Update	CAXIS-13149	2.1.0	At times, the default NTP server address provisioned in the RealPresence Web Suite Services and Experience Portals does not reach the actual NTP server and causes the time sync between the MEA/WSP portals and RealPresence DMA to fail. As a result, the call attempt from the RealPresence Web Suite client fails, and the user sees a "The conference does not exist" error.	Verify that you can reach the NTP server from the RealPresence Web Suite Services and Experience Portals and RealPresence DMA. Once the reachability to the NTP server is established, update the MEA/WSP portals and RealPresence DMA with the NTP details.
User Experience	CAXIS-1529	1.3.2	The Host, the initiator of the meeting, can be dropped by a Presenter.	If a presenter switches his or her role to a participant, another presenter must switch the role back to presenter before the user can rejoin the meeting.
User Experience	CAXIS-6802	1.5.0	Quality of RealPresence Web Suite Experience Portal meeting session is degraded when performing network-intensive tasks (for example, large file downloads) during a meeting.	While participating in RealPresence Web Suite Experience Portal meetings, avoid performing tasks that require a lot of network bandwidth.

#### Other Limitations

Category	Description	Workaround
Functionality	Application share has been disabled in Google Chrome due to problems with sharing open applications.	Use another browser to share enhanced content.

Category	Description	Workaround
Video	Under some circumstances, the video bridge may truncate the top and bottom rows of windows in a displayed multipoint video conference. This can occur when the video bridge is required to send a 4:3 conference mix in a 16:9 video stream.	For more information on the behavior and configuration of the video bridge, go to the <a href="#">Collaboration and Conferencing Platforms Support</a> page on <a href="#">Polycom Support</a> .
Video	In Google Chrome for Windows, if WebGL is supported but the canvas value in chrome://gpu is <b>software only</b> , then the user will not see the video.	No workaround in this release. Restarting your browser may resolve this issue.
Video	In some environments, video may be delayed or frozen on calls made from outside the enterprise network through an HTTPS tunnel. In some cases, video calls may be de-escalated to audio calls.	Try the call again with a higher bandwidth connection.
Video Resolution	RealPresence Web Suite does not support the Motion setting (60fps) on RealPresence Collaboration Server (RMX). Users will see video delays if this setting is enabled.	Do not enable the Motion setting (60fps) on RealPresence Collaboration Server (RMX).
User Experience	If language setting of the operating system is different from the setting of the web browser, RealPresence Desktop will display the operating system language while RealPresence Web Suite portals will display the web browser language.	No workaround in this release.
User Experience	During WebRTC conferences connecting with Chrome, some first-time participants see a blank screen instead of their video feed after clicking "Allow" to access the camera and mic.  This is a known issue with the Chrome browser.	Do one of the following: <ol style="list-style-type: none"> <li>1. Choose another camera from the drop down menu if one is available.</li> <li>2. Restart the Chrome browser.</li> </ol>

# Getting Help

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

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