

# Polycom<sup>®</sup> RealPresence<sup>®</sup> Resource Manager

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## What's New in Release 10.1.0

Polycom<sup>®</sup> RealPresence<sup>®</sup> Resource Manager 10.1.0 includes the features and functionality of previous releases and includes the following new features:

- [Enhanced Audio Phone Management](#)
- [Pre-defined Domain and Password for Software Endpoints Control](#)
- [Support for Guest Book Filter](#)
- [Support for Manually Updating Endpoint Name](#)
- [Support for Standalone RealPresence Platform Director Migration](#)
- [Support for New Network Devices for Remote Alert Profile](#)
- [Support for New Devices](#)

## Enhanced Audio Phone Management

This release enhances the audio phone management, which includes the following features:

### • Audio Phone Management in Open SIP Environments

This release supports audio phone provisioning in open SIP environments. The following servers have been tested by Polycom:

- Skype for Business
- Avaya
- Genband
- Integrated Cisco Unified Communications Manager
- Polycom RealPresence DMA

### • Support for HTTP/HTTPS Provisioning

The RealPresence Resource Manager system now supports HTTP or HTTPS for audio phones provisioning, software update, and uploading phones management files.

FTP and FTPS is not supported from this release.



Polycom recommends you to use the HTTPS protocol, especially when managing over 400 phones to enhance the performance.

### • Mass Import and Export Tool

This release adds support for importing and exporting phones via CSV (comma separated values) file. You need to create a CSV file containing the audio information and then import the CSV file into the RealPresence Resource Manager system.

If you want to edit audio phones, you can export these phones in a CSV file, edit the phones' information, and then import the updated CSV file to the system again.

### • Support for Configuration Profiles

The RealPresence Resource Manager system comes with 300+ pre-defined configuration profiles which covers a huge number of parameters that you can use for provisioning audio phones. The pre-defined files are read-only. You can create new configuration profile to customize endpoint settings in your environment based on pre-defined or user-defined profiles.

The following list is ordered by priority of the conditions from the lowest to the highest.

- **Global:** All audio phones are part of Global regardless of model, site or endpoint group. Configuration profiles association in this container apply to all endpoints.
- **Endpoint Groups:** Configuration profiles association in this container apply to the audio phones belonging to this Endpoint Group.
- **Device Models:** Configuration profiles association in this container apply to the audio phones in a specific device model. For example, apply a customized configuration profile to all Polycom VVX 500 phones.

- **Sites:** Configuration profiles association in this container apply to the audio phones in a specific site. Geographical locations are the typical use case for site.
- **Endpoints:** Configuration profiles association in this container apply to the audio phones that you specified. For example, you know specific phones need a specific configuration or call server. You can select these phones to receive the required configuration profiles.

## ● **Reset Phone's Password**

After a RealPresence Trio or Polycom VVX phone is provisioned, the RealPresence Resource Manager system will enable the REST API and change the phone's Admin password to "789".

You can change the default password by applying your own configuration profile.

## ● **Support for Endpoint Group Management**

Endpoint groups are logical collections of endpoints and are mainly used for audio phones' provisioning. Users with the Endpoint Admin or System Setup permission can manage endpoint groups.

You can set a selected endpoint group to the highest priority group in its all associated phones. For each associated phone, the configuration profiles belonging to the selected endpoint group will have the highest priority comparing to other endpoint group associated configuration profiles for this phone.

You can use the endpoint group to identify which category of devices and device alerts should be sent as part of a remote alert profile.

## ● **Endpoint Monitor View for Polycom Audio and Video Phones**

You can manage all the provisioned Polycom audio phones and video endpoints from the **Endpoint > Monitor View** page. You can add, edit, delete, view, reboot, and manage (login to phone's web GUI) the added phones from this page.

## ● **Support for Resource Files Used by Audio Phones**

Resource files can be any types of files used for configuring phones. For example, you can upload JPG files and configure to use the files such as phone icons in your configuration profile.

## ● **Audio Phone Software Updates**

After uploading software updates, you can apply the software updates via deploying configuration profiles. You can set different default update versions for different phone models under certain conditions.

## ● **Support for more Phone Management Settings**

You can configure the following new phone settings from the **Endpoint > Phone Management > Phone Management Settings** page:

- **Provisioning Account Configuration:** The HTTP or HTTPS service is used for provisioning connection between the RealPresence Resource Manager system and the phones. By default, system-generated user name and password are used by the phones during the process to get provisioning profiles and software updates from the RealPresence Resource Manager. Each phone uses the same HTTP or HTTPS service password. The default user name and password are both PlcmSplp.

You can change this password at any time. After you change the password, you need to configure the phones to use the same HTTP or HTTPS password. Otherwise, the phones will not be able to connect to the RealPresence Resource Manager system to receive provisioning profiles and software updates.

- **Phone Files Rotation Settings:** You can control the disk space that the uploaded configuration and log files occupy in the RealPresence Resource Manager system. The default values rotate the log files every 1024 KB and keep up to 5 files for 15 days.
- **Upload Default XSD:** The RealPresence Resource Manager system comes with a default XSD (Polycom RealPresence Trio 5.4.4.7609) file that contains phone configuration elements that you can use. You also can make your own XSD file to include more customized phone settings and upload the XSD file to the system to overwrite the default file.

## ● **Support for Viewing Phone Management Log**

Use this option to troubleshoot phone management issues by checking the phone management real-time log:

- File requests and responses to phones: phone's MAC address, file name, success or fail response in info level.
- Phone sync information between the RealPresence Resource Manager system and CUCM, such as the MAC address read from CUCM API and the failure reason when phones fail to be added in info level.

## ● **Alert for Phone's Status Change**

When phone's status is changed from online to offline or the status changed from registered to unregistered to an SIP server, the RealPresence Resource Manager system will notify users via SNMP trap or e-mail.

## ***Pre-defined Domain and Password for Software Endpoints Control***

If you use only one domain, you can set the domain name in the RealPresence Resource Manager system, which will automatically populate the domain name for your software endpoints. Currently only RealPresence Mobile endpoints are supported.

You can make the RealPresence Resource Manager save the passwords of your software endpoints. Both RealPresence Mobile endpoints and RealPresence Desktop endpoints support the setting. By default, the setting is disabled.

This feature is only supported on the latest RealPresence Mobile and RealPresence Desktop versions. See the RealPresence Mobile and RealPresence Mobile Release Notes for details on the supported versions.

## ***Support for Guest Book Filter***

A new guest book filter is supported to search specific guests using guest's name in the system. This filter is available on the following UI pages:

- **User > Guest Book**
- **Conference > Monitor View:** Click **Participant** when adding a new conference.

## ***Support for Manually Updating Endpoint Name***

This release supports for manually updating the names for dynamic managed endpoints on the RealPresence Resource Manager GUI.

## ***Support for Standalone RealPresence Platform Director Migration***

This feature only impacts the RealPresence Platform Director users without a RealPresence Resource Manager license.

From this release, the RealPresence Resource Manager system opens the license control functions for users only with the RealPresence Platform Director license. These users can migrate the RealPresence Platform Director instances to the RealPresence Resource Manager system for license management.

## ***Support for New Network Devices for Remote Alert Profile***

RealPresence Resource Manager 10.1.0 supports the following network devices for remote alert profile configurations:

- RealPresence DMA
- RealPresence Collaboration Server
- RealPresence Access Director
- Web Suite Services Portal
- Web Suite Experience Portal
- RealPresence Media Suite



### **Note: Upgrading Remote Alert Profile**

After upgrading remote alert profiles containing Polycom MGC and RMX, MGC and RMX will disappear from the profiles. You need to add RealPresence Collaboration Servers back to the alert profiles.

10.1 has dropped the support for MGC in Remote Alert Profile.

## ***Support for New Devices***

The system now supports the following new devices:

- Polycom endpoints and peripherals:
  - Managing Polycom® CX5100 in dynamic management

CX5100 is dynamically managed in the RealPresence Resource Manager system. The way to provision and upgrade CX5100 is same as other dynamically managed endpoints.

See the **Dynamic Management** section in the *RealPresence Resource Manager Operations Guide* for details.

- Polycom® VBP® 7301
- Managing Polycom® EagleEye™ Director II as peripheral
- Polycom® RealPresence Trio™ Visual+ in audio phone management
- Support for the following Polycom® VVX® models in audio phone management:
  - ◆ Polycom VVX 101
  - ◆ Polycom VVX 201
  - ◆ Polycom VVX 301/311
  - ◆ Polycom VVX 401/411
  - ◆ Polycom VVX 501
  - ◆ Polycom VVX 601
- Cisco devices: Cisco TelePresence MX series

## Release History

This following table lists the release history of RealPresence Resource Manager.

### Release History

<i>Release</i>	<i>API Release</i>	<i>System</i>	<i>Release Date</i>	<i>Features</i>
10.1.0	3.2.2	CentOS 6.9 Postgres 9.5.6 OpenJDK 1.8.0.121	April 2017	<ul style="list-style-type: none"> <li>• Enhanced Audio Phone Management</li> <li>• Pre-defined Domain and Password for Software Endpoints Control</li> <li>• Support for Guest Book Filter</li> <li>• Support for Manually Updating Endpoint Name</li> <li>• Support for Standalone RealPresence Platform Director Migration</li> <li>• Support for New Network Devices for Remote Alert Profile</li> <li>• Support for New Devices</li> </ul>
10.0.1	3.2.2	CentOS 6.6 Postgres 9.3 OpenJDK 1.8.0.45	October 2016	<ul style="list-style-type: none"> <li>• Resolved some known issues.</li> <li>• Support for Polycom Rack Server 230.</li> </ul>

<i>Release</i>	<i>API Release</i>	<i>System</i>	<i>Release Date</i>	<i>Features</i>
10.0.0	3.2.2	CentOS 6.6 Postgres 9.3 OpenJDK 1.8.0.45	August 2016	<ul style="list-style-type: none"> <li>Unified Management of RealPresence Clariti Video Infrastructure</li> <li>New HTML5 Look and Feel</li> <li>Support for Selectable Provisioning for RealPresence Group Series</li> <li>Improved Conference Scheduling and Monitoring Interface</li> <li>Support for Security Baselines</li> <li>Support for USB Deployment (Appliance Only)</li> <li>API Change: the changed API is <b>*plcm_user_role*</b>. The length of the <b>*description*</b> parameter has been increased from 120 characters to 240 characters.</li> </ul>
9.0.1	3.2.1	CentOS 6.6 Postgres 9.3 OpenJDK 1.8.0.45	March 2016	<ul style="list-style-type: none"> <li>Support for the RealPresence Clariti solution.</li> <li>Enhancements for pooled conferences.</li> </ul>
9.0.0	3.2.0	CentOS 6.6 Postgres 9.3 OpenJDK 1.8.0.45	December 2015	<ul style="list-style-type: none"> <li>Support for new Polycom endpoints and peripherals. <ul style="list-style-type: none"> <li>➤ RealPresence Centro system</li> <li>➤ RealPresence Touch Control</li> <li>➤ RealPresence Debut</li> <li>➤ Polycom OTX Studio</li> <li>➤ Polycom RealPresence Trio</li> </ul> </li> <li>Support for Polycom Concierge features.</li> <li>Support for monitoring WebRTC conference participants.</li> <li>Support for zero-touch provisioning of RealPresence Debut.</li> <li>Support for easier upgrade of redundant systems.</li> </ul>
8.4.1	2.7.1	CentOS 6.6 Postgres 9.3 OpenJDK 1.8.0.45	September 2015	<ul style="list-style-type: none"> <li>Resolved some known issues.</li> </ul>

<i>Release</i>	<i>API Release</i>	<i>System</i>	<i>Release Date</i>	<i>Features</i>
8.4.0	2.7.1	CentOS 6.6 Postgres 9.3 OpenJDK 1.8.0.45	June 2015	<ul style="list-style-type: none"> <li>• Support for the RealPresence Group Series 310</li> <li>• Subnet overlapping is allowed when creating site topology.</li> <li>• Support for Additional Direct Conference Template Parameters</li> <li>• Calendar Proxy support for RealPresence Group Series and Polycom HDX systems.</li> <li>• Configurable passcode for Anytime conferences.</li> <li>• Limitations in license reclamation for RealPresence Desktop, RealPresence Mobile and CMA Desktop.</li> <li>• Virtual edition now supports geographic redundancy.</li> <li>• Allow mid-string searches for non-LDAP users.</li> <li>• Add encryption license for Presence and Chat (XMPP).</li> <li>• Virtual edition now supports Microsoft Hyper-V.</li> <li>• Enhanced phone management. More Polycom phones and support for Cisco Unified Communications Manager 10.x.</li> <li>• Ability to enable sending usage data reports to Polycom.</li> </ul>
8.3.2	2.6.1	CentOS 6.5 Postgres 9.3 OpenJDK 1.8.0.25	March 2015	<ul style="list-style-type: none"> <li>• Resolves issues related to Active Directory integrations.</li> </ul>
8.3.1	2.6.1	CentOS 6.5 Postgres 9.3 OpenJDK 1.8.0.25	March 2015	<ul style="list-style-type: none"> <li>• Improved Pooled Conferences</li> <li>• Ability to Sort the Conference Template List</li> <li>• Flexible Provisioning of IDs and Passwords</li> <li>• Support for the Polycom Rack Server 220 (R220)</li> <li>• Default System Password Changed</li> <li>• TLSv1.2 Support for Active Directory Connections</li> <li>• Java Version Changed to OpenJDK</li> <li>• API Changes</li> <li>• Resolved some known issues.</li> </ul>



<i>Release</i>	<i>API Release</i>	<i>System</i>	<i>Release Date</i>	<i>Features</i>
8.3	2.4.3	CentOS 6.5 Postgres 9.3 Java 7u51	December 2014	<ul style="list-style-type: none"> <li>• Improved certificate settings</li> <li>• Audio phone provisioning with Cisco Unified Communications Manager</li> <li>• Upgrade CentOS operating system</li> <li>• Improved Active Directory Integration</li> <li>• Guest Book improvements</li> <li>• Improved synchronization with endpoints registered with the RealPresence DMA system</li> <li>• Default password changed.</li> </ul>
8.2.1	2.4.2	CentOS 6.3 Postgres 9.2 Java 7u51	November 2014	<ul style="list-style-type: none"> <li>• Bug fixes and performance enhancements.</li> </ul>
8.2.0	2.4.1	CentOS 6.3 Postgres 9.2 Java 7u51	July 2014	<ul style="list-style-type: none"> <li>• Deploying RealPresence Resource Manager, Virtual Edition with RealPresence Platform Director</li> <li>• Geographic Redundancy and Other Redundancy Enhancements</li> <li>• Endpoint Management Enhancements</li> <li>• Simplified Integration with the Polycom RealPresence DMA System</li> <li>• User Management Enhancements</li> <li>• Usability changes.</li> <li>• API documentation available on the RealPresence Resource Manager system server.</li> <li>• Resolved some known issues.</li> </ul>
8.1.1	2.2.0	CentOS 6.3 Postgres 9.2 Java 7u21	April 2014	<ul style="list-style-type: none"> <li>• Resolved some known issues.</li> </ul>

<i>Release</i>	<i>API Release</i>	<i>System</i>	<i>Release Date</i>	<i>Features</i>
8.1.0	2.2.0		December 2013	<ul style="list-style-type: none"> <li>• Support for system log management with an external syslog server.</li> <li>• Ability to configure automatic system backups.</li> <li>• Improved SNMP.</li> <li>• More detailed status messages for redundancy failover.</li> <li>• Support for presence for RealPresence Desktop endpoints.</li> <li>• Support for the RealPresence Immersive Studio systems.</li> <li>• Increased flexibility to use Active Directory fields when you auto-generate dial strings.</li> <li>• Increased support for scheduled provisioning of Cisco endpoints.</li> <li>• Shorter conference passcodes are allowed.</li> </ul>
8.0.1	2.0.1		October 2013	<ul style="list-style-type: none"> <li>• Resolved some known issues.</li> </ul>
8.0	2.0.1		August 2013	<ul style="list-style-type: none"> <li>• Rule-based dynamic provisioning.</li> <li>• Re-organization of menu system.</li> <li>• Direct import and linking to MCU conference profiles.</li> <li>• Support for SVC conferences.</li> <li>• Integration with a Polycom RealPresence DMA supercluster.</li> <li>• Ability to auto-generate SIP URIs for dynamically-managed endpoints.</li> <li>• Increased security options.</li> <li>• Support for IPv6 networks.</li> <li>• Support for Polycom MGC systems.</li> <li>• Performance enhancements.</li> <li>• Better license reclamation for Polycom soft endpoints.</li> </ul>
7.1.1			April 2013	<ul style="list-style-type: none"> <li>• Associate billing codes with conferences.</li> <li>• Support for RealPresence Collaboration Server 800s.</li> </ul>
7.1			December 2012	<ul style="list-style-type: none"> <li>• Support for RealPresence Group Series endpoints.</li> <li>• Dynamically-provisioned system and E.164 naming schemes for endpoints.</li> <li>• Access Control Lists for tighter dynamic-management.</li> <li>• Support for RealPresence Access Director systems.</li> </ul>

<i>Release</i>	<i>API Release</i>	<i>System</i>	<i>Release Date</i>	<i>Features</i>
7.0			August 2012	<ul style="list-style-type: none"> <li>• Initial Release.</li> <li>• Runs on Linux-based operating system.</li> <li>• Integration with Polycom RealPresence DMA system.</li> <li>• Full multi-tenancy support.</li> </ul>

## Security Updates

Please refer to the [Polycom Security Center](#) for information about known and resolved security vulnerabilities.

## Products Tested with this Release

The RealPresence Resource Manager systems are tested extensively with a wide range of products. The following list is not a complete inventory of compatible equipment. It indicates the products that have been tested for compatibility with this release.



### Note: Update your Polycom devices

Polycom recommends that you upgrade your Polycom devices with the latest software versions, as compatibility issues may already have been addressed by software updates. Refer to the [Current Polycom Interoperability Matrix](#) to match Polycom devices with the latest software release.

### Products Tested with this Release

<i>Product</i>	<i>Tested Versions</i>
<b>Polycom RealPresence Platform Infrastructure</b>	
Polycom® RealPresence® Platform Director™	3.0
<b>Hypervisor Environments for Virtual Editions</b>	
VMware® vSphere® Platform	5.1, 5.5, 6.0
Microsoft® Hyper-V®	2012 R2

<i>Product</i>	<i>Tested Versions</i>
<b>Polycom Video Endpoints</b>	
Polycom® HDX®	3.1.11
Polycom® RealPresence Debut™	1.0, 1.2.x
Polycom® RealPresence Centro™	6.1.x
Polycom® RealPresence® Group Series (300, 310, 500, 550, and 700)	6.0.x, 6.1.x
Polycom® CMA® Desktop (Windows and Mac)	5.2.5
Polycom® RealPresence® Mobile	3.6, 3.7
Polycom® RealPresence® Desktop	3.6, 3.7
Polycom® RealPresence Immersive Studio™	5.0.x, 5.1.x
Polycom® RealPresence® OTX® Studio	5.0.x, 5.1.x
Polycom® VVX® 1500	5.5.0, 5.5.1
<b>Endpoint Peripherals</b>	
Polycom® RealPresence Touch™	1.0.1
Polycom® Touch Control	5.0.x, 5.1.x
Polycom® EagleEye™ Producer	1.1.0, 1.1.1
Polycom® EagleEye™ Director	2.2
Polycom® EagleEye™ Director II	1.0.0
<b>Polycom Audio Phones</b>	
Polycom® RealPresence Trio™ Polycom® RealPresence Trio™ Visual+	5.5.0, 5.5.1
Polycom® SoundPoint® IP 300/450/560/650/670	4.0.11
Polycom® SoundStation® IP 5000/6000/7000	4.0.11
Polycom® SoundStation® Duo	4.0.11
Polycom® SoundStructure® VoIP Interface (with VOIP card)	4.0.11

<i>Product</i>	<i>Tested Versions</i>
Polycom® VVX® 101/201	4.0.11
Polycom® VVX® 300/301/310/311	
Polycom® VVX® 400/401/410/411	
Polycom® VVX® 500/501	
Polycom® VVX® 600/601	
Polycom® VVX® 1500	
<b><i>Polycom Unified Conference Station</i></b>	
Polycom® CX5100	1.3
<b><i>Polycom Network Devices</i></b>	
Polycom® RealPresence® Collaboration Server, Virtual Edition	8.6.4, 8.7.3
Polycom® RealPresence® Collaboration Server (RMX®) 1500/2000/4000 with MPMx	8.5.x
Polycom® RealPresence® Collaboration Server (RMX®) 1800/2000/4000 with MPMrx	8.6.4, 8.7.3
Polycom® MGC system	9.0.4
Polycom® RealPresence® DMA® 7000	6.4.1
Polycom® RealPresence® Access Director™	4.2.4.1
Polycom® VBP® 7301	14.7.3
Polycom® RealPresence® Web Suite	2.1.2
<b><i>Third Party Products</i></b>	
Acme Packet Net-Net Enterprise Session Director	SCX6.3.0 MR-5 Patch 2 (Build 591)
Cisco Unified Communications Manager	9.0, 10.5.2
Lifesize® Express 200™ Lifesize® Team 200™	4.7.22 (3)
Lifesize® Express 220™ Lifesize® Team 220™	5.0.9 (2)
Cisco TelePresence System 1700 MXP	F9.3.4 PAL
Cisco TelePresence System Quick Set C20	7.3.7
Tandberg 150 MXP	L6.1
Cisco TelePresence System EX90	7.3.7

**Polycom Network Devices**

Cisco TelePresence System SX20	7.3.7
Cisco TelePresence MX200/MX300	7.3.7

## System Capabilities and Limitations

The RealPresence Resource Manager system is available in either an Appliance Edition or a Virtual Edition.

If your RealPresence Resource Manager system is licensed for more than 400 endpoints or over 20 network devices, the server you use must have 16 GB of RAM.

- If you are using a virtual edition, you will need to ensure that the system has enough RAM. You will need to create a new virtual machine with the required 16 GB of RAM and at least 160 GB of hard disk space.
- If you are using an Appliance Edition, you must use an R230 or R630 server. These servers come with 16 GB RAM. The R220 and R610 servers can support a maximum of 400 endpoints. See [Polycom Server Replacement Migration Guide](#) on how to change servers.

### Appliance Edition

This version of RealPresence Resource Manager, Appliance Edition can be installed on the following Polycom servers:

- Polycom Rack Server 630 (R630)
- Polycom Rack Server 620 (R620)
- Polycom Rack Server 230 (R230) — deployments with 400 endpoints or less
- Polycom Rack Server 220 (R220) — deployments with 400 endpoints or less

The maximum capabilities of the system differ according to which server you are using.

#### Maximum Capabilities for Polycom Rack Server

Capability	Maximum for Polycom Rack Server 630 and 620	Maximum for Polycom Rack Server 230 and 220
<b>Users</b>	250,000	2000
<b>User Groups</b>	1000	10
<b>Areas</b>	No maximum	No maximum

<b>Capability</b>	<b>Maximum for Polycom Rack Server 630 and 620</b>	<b>Maximum for Polycom Rack Server 230 and 220</b>
<b>Video and Audio Endpoints</b>	<p>Maximum number of licensed video endpoints (50,000).</p> <p>Maximum number of managed audio phones is 20000.</p> <p>Recommended audio devices and video endpoints(mixed deployment) is 10000 audio/10000 video.</p>	<p>Maximum number of licensed video endpoints (400).</p> <p>Maximum number of managed audio phones is 400.</p> <p>Recommended number of mix of audio devices and video endpoints mixed deployment) is 200 audio/ 200 video.</p>
<b>Room entries</b>	No limit, but if the system has more than 1000 room entries, it could experience user interface performance issues.	No limit, but if the system has more than 400 room entries, it could experience user interface performance issues.
<b>Site entries</b>	500	500
<b>Number of supported instances/servers</b>	50	20
<b>Maximum number of images</b>	<p>5</p> <p>The total size is under 8 GB.</p> <p>If the image number is more than 5 or the total size is larger than 8 GB, you need to delete unused images.</p>	<p>5</p> <p>The total size is under 8 GB.</p> <p>If the image number is more than 5 or the total size is larger than 8 GB, you need to delete unused images.</p>
<b>Number of integrated RealPresence DMA systems (or RealPresence DMA superclusters)</b>	1	1
<b>Number of integrated MCUs</b>	No maximum	No maximum
<b>Maximum text message length that can be sent to a hard endpoint</b>	100 characters	100 characters
<b>Number of provisioning profiles</b>	2000	20
<b>Number of provisioning rules</b>	1200	20
<b>Number of displayed users in the Users page</b>	500	500
<b>Number of tiers in Address book</b>	5	5
<b>Number of Guest book entries</b>	500	500

Capability	Maximum for Polycom Rack Server 630 and 620	Maximum for Polycom Rack Server 230 and 220
<b>Number of User GUI login sessions per system and sessions per user</b>	50 with 10 sessions per user	10 with 10 sessions per user
<b>Calendar Connector proxy connections</b>	200 RealPresence Group Series systems and 1000 RealPresence Mobile and/or RealPresence Desktop applications.	10 RealPresence Group Series systems and 100 RealPresence Mobile and/or RealPresence Desktop applications.

## Supported Cluster Configurations

The Appliance Edition supports a two-server redundant configuration only with certain server combinations. The following table details which two-server local cluster configurations are supported:

### Supported Two-Server Local Cluster Combinations

	<i>Polycom Rack Server 620 (R620)</i>	<i>Polycom Rack Server 630 (R630)</i>	<i>Polycom Rack Server 220 (R220)</i>	<i>Polycom Rack Server 230 (R230)</i>
<i>Polycom Rack Server 620 (R620)</i>	Supported	Not Supported	Not Supported	Not Supported
<i>Polycom Rack Server 630 (R630)</i>	Not Supported	Supported	Not Supported	Not Supported
<i>Polycom Rack Server 220 (R220)</i>	Not Supported	Not Supported	Supported	Supported
<i>Polycom Rack Server 230 (R230)</i>	Not Supported	Not Supported	Supported	Supported

## Virtual Edition

This version of the RealPresence Resource Manager system is also available in an edition packaged for VM-based deployment. RealPresence Resource Manager, Virtual Edition, is supported in VMware environments and Microsoft Hyper-V environments.

Polycom supports mixed Hyper-V/VMware environments, but Polycom has not tested all configurations/combinations.

## Host Installation Guidelines

The following table describes the VM host recommended deployment settings for an instance of the RealPresence Resource Manager, Virtual Edition system. It also shows the typical performance capacities of that deployment.

If you upgrade your system from 9.0 to 10.0 and your server only has 8 GB of RAM, only 400 devices are supported.



### RealPresence Resource Manager Recommended Deployment Settings in a Virtual Environment

<i>Component</i>	<i>Deployment Settings</i>
Virtual Cores	8
CPU	16000 MHz
Memory	16 GB
Storage	160GB
Performance	<p>Maximum number of licensed video endpoints 10000.</p> <p>Maximum number of managed audio phones is 10000.</p> <p>Recommended number of audio devices and video endpoints(mixed deployment) is 5000 audio/5000 video.</p>



Because of differences in hardware and VM environments, the performance information is provided for guidance purposes and does not represent a guarantee of any kind by Polycom.

## Browser Requirements

Using one of the web browsers in the following table to administer a RealPresence Resource Manager system on Windows PC is officially supported. Polycom recommends you to use Google Chrome™ for better user experience.

### Browser Requirement

<i>Browser</i>	<i>Description</i>
Microsoft Internet Explorer®	Version 11.0
Google Chrome™	Version 45.0 or later

## Installation and Upgrade Notes

See the *Polycom RealPresence Resource Manager Getting Started Guide* for instructions on how to install and license your product.

See the *Polycom RealPresence Resource Manager Upgrade Guide* for instructions on how to upgrade your product.

Polycom delivers RealPresence Resource Manager system upgrades within major (for example, 8.0), minor releases (for example, 8.x) and updates with maintenance releases (for example, 8.x.x).

If you are running a version prior to 8.0, you must sequentially apply every minor upgrade version until you get to 8.0.

Customers running 8.0 and above can directly upgrade to the next minor version without worrying about the maintenance updates in between. For example, you can upgrade directly from 8.2 > 8.3 or from 8.3 > 8.4.

If you want to update to a maintenance release of the next minor release, you must first upgrade to the next minor release and then update to the maintenance release. For example, if you want to upgrade 8.1.x to 8.2.1, you must upgrade to 8.2 first, then update to 8.2.1.

You must be running on either version 10.0.0 or 10.0.1 to upgrade to 10.1.

Polycom supports the following upgrade and migration paths for RealPresence Resource Manager system.

#### Upgrade and Migration Paths for Existing RealPresence Resource Manager installations

<i>Current Version</i>	<i>Intermediate Upgrade</i>	<i>Intermediate Upgrade</i>	<i>Intermediate Upgrade</i>	<i>Intermediate Upgrade</i>	<i>Intermediate Upgrade</i>	<i>Final Upgrade</i>
8.0.x	8.1	8.2	8.3	8.4	9.0	9.0.1
8.2.x	8.3	8.4			9.0	9.0.1
8.3.x	8.4				9.0	9.0.1
8.4.x					9.0	9.0.1
9.0.x					10.0.0	10.0.1
10.0.0						10.0.1
10.0.x						10.1

## System Licenses

Licenses for the RealPresence Resource Manager system must be activated and validated before you can use RealPresence Resource Manager to manage your RealPresence products.

When products are connected to the RealPresence Resource Manager system, licensing remains active. If the RealPresence Resource Manager system goes offline for any reason, licensing remains active for up to 14 days.


## General Note on Analytics:

When you accept the End User License Agreement (EULA) for the RealPresence Resource Manager system, you can select the **Automatically send usage data** check box. This option enables your system to send various types of usage data to a Polycom collection point (customerusagedatacollection.polycom.com). As this data is used to continually improve the product, Polycom recommends that you keep the setting enabled. See the **Send Usage Data** section in the *RealPresence Resource Manager Operations Guide* for a description of the type of data your system sends.

To view or change your selection for the Automatically send usage data option:

- 1 Go to **Admin > Server Settings > Licenses** in the web user interface.
- 2 Select or clear the **Automatically send usage data** check box.
- 3 Click **Update**.

To see the data your RealPresence Resource Manager system sends to Polycom:

- 1 Go to **Admin > Maintenance > System Log Files**.
- 2 Click  to roll the logs.
- 3 Save the log archive to your local machine.
- 4 Unpack the log archive.

The `analytics.json` file in the `/var/log/polycom/cma` directory contains the data that your system sends to Polycom.

## Resolved Issues

The following table lists the resolved issues in RealPresence Resource Manager.

### Resolved Issues

<i>Category</i>	<i>Issue Number</i>	<i>Found in Version</i>	<i>Description</i>
Area	EN-8103	10.0.1	Fail to assign an area to an imported enterprise group.
Certificate	EN-16907	10.0.1	When using SHA1 to generate Certificate Signing Request (CSR), the generated CSR is always signed with SHA256 instead of SHA1.
Conference	XMA-10475/ EN-8111	10.0.0	After removing a guest from an ongoing conference, you cannot add this guest with the same name and email back in to the conference.

<i>Category</i>	<i>Issue Number</i>	<i>Found in Version</i>	<i>Description</i>
Conference	XMA-8831 / EN-8165	9.0.1	If an ITP system is an audio-only participant in a pooled conference, its encryption status incorrectly displays as unencrypted even when it is encrypted.
Conference	EN-8768	10.0.0	When editing an existing scheduled conference, and add a new room participant to the conference, the line rate of the participant is set to 384K regardless of how it is configured.
Conference	EN-8782	10.0.0	ISDN dial out fails while adding ISDN audio guest users to an ongoing RealPresence Resource Manager pooled conference.
Conference	EN-9055	10.0.0	Sometimes scheduled conferences with the same start time cannot be launched.
Conference	EN-9868	10.0.1	Users with only the advance scheduler role are unable to add participants to a scheduled conference.
Conference	EN-10362	10.0.1	When editing the start time or end time of a scheduled conference, the calendar of all participants in this conference is incorrectly displayed.
Conference	EN-10392	10.0.1	A conference owner is incorrectly changed to a user who is editing this conference even the owner is not the user.
Conference	EN-11514	10.0.1	The conference duration is incorrectly displayed as 0:00 hours in the RealPresence Resource Manager pre-conference check e-mail notification.
Conference	EN-12697	9.0.1	When failing to edit a conference due to the <b>Insufficient Network Bandwidth</b> error, the conference is incorrectly deleted.
Conference	EN-14189	9.0.1	One participant can be booked in two conferences in the same timeslot after this participant was added in an ongoing conference.
Conference	EN-15734	10.0.1	The <b>Conference Passcode</b> is always included in the conference e-mail invitation even <b>Conference Passcode</b> is removed from the conference.
Conference	EN-16040	10.0.1	(Spanish Only) Fail to schedule a recurrent conference.
Conference	EN-17557	10.0.1	Querying recurring conferences takes too long via REST API when the number of future conferences is large.
Conference	EN-18030	10.0.1	(IE Only) The default bridge selection is incorrectly displayed when scheduling a new conference.
Conference	EN-18096	10.0.1	On <b>Conference &gt; Monitor View</b> , the filter does not work when using <b>Owner</b> to do the search.
Conference	EN-18180	10.0.0	When doing consecutive conference, searches using conference filter, the returned result is not correct.

<i>Category</i>	<i>Issue Number</i>	<i>Found in Version</i>	<i>Description</i>
Conference	EN-18174	10.0.1	On <b>Conference &gt; Monitor View</b> , the <b>Bridge</b> column is blank for recurrent direct conferences scheduled on <b>Auto Bridge</b> .
Conference	EN-19108	10.0.1	When scheduling a conference, and click the <b>Add Guest</b> button to add an ISDN guest participant, if the <b>Use Modified Dial Number</b> and <b>Save to Guest Book</b> options are enabled for this guest user, the information of this guest cannot be completely saved to the guest book, and the conference <b>Add Guest</b> page cannot display this guest user.
Endpoint	EN-13821	10.0.1	After editing a room, the endpoint associated with this room disappears.
Endpoint	EN-17243	10.0.1	When enabling <b>Firewall Settings</b> in a scheduled provisioning profile, the setting cannot be saved.
Endpoint	EN-18414	10.0.1	Occasionally, the endpoint number on the <b>Dashboard</b> is not consistent with the number on the <b>Monitor View</b> page.
Endpoint	EN-18740	10.1.0	No 3072 for preferred and maximum call speed in the <b>Default Admin Config Provisioning Profile</b> .
HA	EN-8203	10.0.0	The calendar connector service restarts regularly in a RealPresence Resource Manage HA system.
HA	XMA-10768/ EN-7996	10.0.1	After installing RealPresence Resource Manager servers through USB utility and setting up HA, the HA servers status is Inactive, which is incorrect.
Interop	EN-8071	10.0.0	When logging in to the RealPresence Collaboration Sever GUI from the RealPresence Resource Manage system, the HTTPs protocol is used even the HTTP is configured to manage the RealPresence Collaboration Sever.
Interop	EN-12349	10.0.0	(Lifesize Endpoint Only) The <b>Video Feed</b> option is not available on the RealPresence Resource Manage GUI.
Interop	EN-14296	10.0.1	Occasionally, the login information window is blank for AD users.
Interop	EN-15681	10.0.1	Fail to do service integration when adding RealPresence Collaboration Sever using FQDN on the RealPresence Resource Manage system with <b>Conference Controlled by Resource Manager</b> enabled.
Interop	EN-16394	10.0.1	The RealPresence Resource Manager system fails to manage PTC using HTTP link.
Interop	EN-16395	10.0.1	If the RealPresence Resource Manager system is integrated with an AD server, when the AD server is not reachable, local users cannot login the RealPresence Resource Manager GUI.

<i>Category</i>	<i>Issue Number</i>	<i>Found in Version</i>	<i>Description</i>
License	EN-12702	10.0.1	When multiple versions of "DMA_MAX_VMR_CALLS" features are used on the Polycom License Server, the DMA allocated license number on the RealPresence Resource Manager system <b>License Allocation</b> page is not consistent with the license number that DMA actually gets.
Network Topology	EN-9044	10.0.0	Unable to input decimal points in the <b>Site-Link Max Bandwidth</b> field.
	EN-8097	10.0.0	The RealPresence Collaboration Server alert email incorrectly shows the source type as <b>ENDPOINT</b> .
Report	EN-8101	10.0.0	The Y axis of endpoint usage report shows as 12h format rather than 24h format.
Report	EN-8788	10.0.0	If ICMP is not allowed by the firewall policy, the RealPresence Resource Manager system cannot send logs to a Syslog server outside of the firewall.
Report	EN-8836	10.0.0	The <b>License Expired Warning</b> alert level setting cannot be saved.
Report	EN-9053	10.0.0	Fail to sort the <b>Endpoint Usage Reports</b> list by areas.
Report	EN-10115	10.0.1	(Chrome Only) Fail to generate endpoint usage report for large items.
Server Setting	EN-18186	10.0.1	Fail to save the e-mail address whose user name contains more than one dash.

## Known Issues

The following table lists known issues in this release.

### Known Issues

<i>Category</i>	<i>Issue Number</i>	<i>Found in Version</i>	<i>Description</i>	<i>Workaround</i>
Audio Phone	EN-12410	10.1.0	When syncing with CUCM, an auto-added phone's IP, model, version, type, and online information will be cleared if this phone is also added to CUCM.	The RealPresence Resource Manager system will get the phone's information after next polling interval.

<i>Category</i>	<i>Issue Number</i>	<i>Found in Version</i>	<i>Description</i>	<i>Workaround</i>
Conference	XMA-6988	8.3.0	Conferences scheduled on a Cisco C system with an embedded MCU will not work.	It is not a Polycom bug.
Conference	XMA-7281	8.3.0	In a conference with more than 20 participants that all use a dial-in password to join, the RealPresence Resource Manager will briefly display internal multipoint conferences incorrectly on the monitoring screen.	None.
Conference	EN-19486	10.1.0	A user with the scheduler role with default permissions fails to save conference note for an ongoing conference.	Add the Conference Operator (Restricted) permission to the scheduler role.
Conference	EN-20148	10.1.0	Point to Point conferences and embedded MCU conferences should not have conference IDs.	None. This issue does not impact any feature.
Conference	EN-20151	10.1.0	The sort function does not work when scheduling or editing an Anytime meeting.	None.
Conference	EN-20241	10.1.0	After you open and edit a conference with the <b>Chairperson Passcode</b> checked, the other conference, which you open later, will all have the <b>Chairperson Passcode</b> checked.	Uncheck the <b>Chairperson Passcode</b> manually for the conferences that you do not want this option.
Conference	EN-20280	10.1.0	(DMA Pool Conference Only) <b>Chairperson Passcode</b> cannot be modified for existing conferences.	If you enable the chairperson option in the DMA template, delete and reschedule the conference to change the passcode.  If you do not enable the chairperson option in the DMA template, uncheck <b>Chairperson Passcode</b> , save the meeting, and re-edit the passcode.
Interop	XMA-10237/ EN-8015	10.0.0	RealPresence Resource Manager does not support scheduling embedded MCU conferences with third-party endpoints.	None.
Interop	EN-20195	10.1.0	Lifesize® Express 220™ or Lifesize® Team 220™ 5.0.9 fails with LDAP searching.	None.

<i>Category</i>	<i>Issue Number</i>	<i>Found in Version</i>	<i>Description</i>	<i>Workaround</i>
Interop	GS-28519	10.0.0	After enabling the <b>Selectable Provisioning for Group Series</b> option on RealPresence Resource Manager, you still cannot edit the settings on the RealPresence Group Series GUI that are not provisioned by RealPresence Resource Manager.  This issue happens on RealPresence Group Series version 5.1.2 and earlier.	Re-provision RealPresence Group Series, then the settings will be editable.
License	EN-20087	10.1.0	The <b>License &gt; Allocation</b> page on the RealPresence Resource Manager GUI cannot immediately reflect the license allocation changes on Polycom License Center.	After clicking <b>Update</b> on the <b>License &gt; Setup</b> page, wait for 30 seconds to see the license allocation changes.
Phone Management	VOIP-124750	10.1.0	The Change Phone AD Password and Remote Call Control features are not supported on audio phones that do not support REST API, such as VVX 101 and VVX 201.	None.
Report	EN-18741	10.1.0	The Today's Conference Statistics and Today's Adhoc Conferences on the dashboard do not show the anytime conference number changes.	None.
Report	EN-19805	10.1.0	(Operator Role Only) The network device information is missing in the <b>Network Usage Report</b> .	Add the <b>System Maintenance/Troubleshooting</b> permission to the operator role.
Scheduling	XMA-8358/ EN-8130	9.0.0	H.323 conferences scheduled with the API display the connection type as H323_E164 instead of H323.	None.
Scheduling	XMA-7416/ EN-8081	8.3.1	You cannot schedule an ISDN participant using a multi-string dial string.	None.
UI	XMA-8462/ EN-8090	9.0.0	If you use the RealPresence Resource Manager to reboot an H.323 endpoint that has been synchronized from a RealPresence DMA, RealPresence Resource Manager incorrectly displays that the endpoint is still online.	None.



<i>Category</i>	<i>Issue Number</i>	<i>Found in Version</i>	<i>Description</i>	<i>Workaround</i>
UI	XMA-10202	10.0.0	When you select a field on the GUI using Internet Explorer, <b>X</b> is displayed instead of some functional icons, such as <b>◆</b> . This is a browser limitation with Internet Explorer.	Use Google Chrome. It is not a Polycom bug.
Report	EN-18986	10.0.1	(IE Only) When the <b>Conference &gt; Monitor View, Reports &gt; Endpoint Usage Report, or Reports &gt; Conference Usage Report</b> contains large items, the pages may response slowly or freeze.	Use Google Chrome.
UI	EN-19303	10.1.0	(IE Only) Some floating tool tips cannot show on the RealPresence Resource Manager GUI.	Use Google Chrome.
UI	EN-19995	10.1.0	(IE only) When hundreds of sites are configured, the response on the Site Topology and Dashboard pages is slow.	User Google Chrome.
UI	EN-19912	10.1.0	(Spanish Only) The <b>Dashboard</b> cannot display the full <b>Hardware Usage</b> pane.	Use the English version to check hardware usage.
UI	EN-20244	10.1.0	On <b>Dashboard</b> , after adding an <b>Endpoint Type</b> pane by selecting <b>By Type</b> , you cannot edit this Endpoint Type pane.	Remove this pane and add a new <b>Endpoint Type</b> pane by selecting <b>By Site or By Endpoint Group</b> .
			On <b>Dashboard</b> , the pie chart tooltip on the <b>Endpoint Type</b> pane cannot be updated immediately when changing from one type to another type.	Reload the <b>Dashboard</b> .

## Get Help

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

For information about Polycom partner solutions, see [Polycom Global Strategic Partner Solutions](#).

## The Polycom Community

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