

Polycom® RealPresence® Resource Manager

Polycom announces the release of version 10.5 software for the Polycom® RealPresence® Resource Manager system. This document provides the latest information about the RealPresence Resource Manager.

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What's New in Release 10.5

RealPresence Resource Manager includes the features and functionality of previous releases and includes the following new features:

- Support Polycom® RealPresence® DMA® Edge Configuration
- Support for Resetting Phones via REST API
- Support for Getting or Setting Phone Parameters via REST API
- Simple Certificate Enrollment Protocol (SCEP) Provisioning Support
- Support for Sending Pooled Conference Name to RealPresence DMA via REST API
- Support LDAP Channel Binding Token
- Support for More Phone Configuration Profiles

Other Changes in this Release

Support Polycom® RealPresence® DMA® Edge Configuration

RealPresence DMA with edge configuration provides similar functionality to the Polycom[®] RealPresence Access Director[™] system. It is scheduled to replace RealPresence Access Director.

With RealPresence DMA edge configuration, RealPresence Resource Manager offers a software-based edge server to securely route communication, management, and content through firewalls without requiring special dialing methods or additional client hardware or software.

RealPresence Resource Manager also supports a combination of RealPresence DMA core configuration and edge configuration.

Support for Resetting Phones via REST API

You can reset specific phones or reset the phones belonging to a endpoint group from RealPresence Resource Manager. RealPresence Resource Manager supports the following reset options:

- **Web Configuration**: RealPresence Resource Manager removes web files and resets the phone web configuration.
- Local Configuration: RealPresence Resource Manager removes phone files and resets the phone local configuration.
- Device Settings: RealPresence Resource Manager resets the phone device settings.
- **Web, Local, and Device Settings**: RealPresence Resource Manager removes web and phone files and resets web, local, and device settings.
- **Reset to Factory Settings**: RealPresence Resource Manager removes all the phone-related files and resets the phone to factory settings.

Support for Getting or Setting Phone Parameters via REST API

You can select a specific phone to get specific parameters, and RealPresence Resource Manager gets phone parameters by sending corresponding REST API commands to the selected phone.

After viewing the parameters you selected, you can set new values to the parameters from RealPresence Resource Manager. You also can set parameters to the same values for multiple phones or phones belonging to an endpoint group.

The phones save all updates that you set to phones as the phone local configuration.

Simple Certificate Enrollment Protocol (SCEP) Provisioning Support

RealPresence Resource Manager adds SCEP provisioning support for Polycom RealPresence® Group Series. To enable SCEP, in a dynamic network provisioning profile, select the **Security Settings 2 > Enable SCEP** check box.

Refer to the *Polycom RealPresence Group Series Release Notes* for the RealPresence Group Series versions that support SCEP.

Support for Sending Pooled Conference Name to RealPresence DMA via REST API

RealPresence Resource Manager supports sending pooled conference name to RealPresence DMA via REST API. You can view the scheduled pooled conference name on the RealPresence Collaboration Server web UI.

Support LDAP Channel Binding Token

When integrating Enterprise Directory, you can enable support for LDAP Channel Binding Token in NTLM Message.

Support for More Phone Configuration Profiles

This release supports new Polycom standard phone configuration profiles. After you upgrade your system to 10.5, you see the new configuration profiles on the **Endpoint > Phone Management > Configuration Profiles** page.

Other Changes in this Release

This release includes the following feature updates:

- Expanded the number of allowed entries in the Global Address Book from 2000 to 4000.
- Support Windows proxy as SBC service.
- Removed the Revert to Legacy VVX Certificate feature
 - With this change, you must install or provision the Trusted Root CA on the phones managed by RealPresence Resource Manager via HTTPs or HTTP. RealPresence Resource Manager needs signed certificates to manage phones.
- Removed OpenDS from RealPresence Resource Manager (no customer impact).
 This release removes the OpenDS usage for setting network topology data from RealPresence Resource Manager.
- Polycom Rack Server 640 (R640) support



To view the latest Polycom product documentation, visit Polycom Support.

Release History

This following table lists the release history of RealPresence Resource Manager from 10.0.0.

Release History

Release	API Release	System	Release Date	Features
10.5.0	3.2.5	CentOS 6.10 Postgres 9.5.14 OpenJDK 1.8.0_181	December 2018	 Support Polycom® RealPresence® DMA® Edge Configuration Support for Resetting Phones via REST API Support for Getting or Setting Phone Parameters via REST API Simple Certificate Enrollment Protocol (SCEP) Provisioning Support Support for Sending Pooled Conference Name to RealPresence DMA via REST API Support LDAP Channel Binding Token Support for More Phone Configuration Profiles Other Changes in this Release
10.4.0	3.2.4	CentOS 6.9 Postgres 9.5.9 OpenJDK 1.8.0.151	July 2018	 Support for Provisioning Polycom RealPresence Group Series Via Polycom Trio New Dynamic Provisioning Parameters Support for Polycom Pano and RealPresence Group Series Enhancements to Phone Configuration Files Enhancements to Ciphers Support Support for More Phone Configuration Profiles Support for New Devices RealPresence Platform API Version Updates to 3.2.4 without API Changes
10.3.0	3.2.3	CentOS 6.9 Postgres 9.5.9 OpenJDK 1.8.0.151	December 2017	 Support for Polycom Pano Support for Selecting SMB Versions Support for Two New Log Streams Support for More Phone Configuration Profiles Dashboard Enhancements Sites Enhancements Adding Polycom VBP Automatically No Longer Supported

Release History

Release	API Release	System	Release Date	Features
10.2.0	3.2.3	CentOS 6.9 Postgres 9.5.6 OpenJDK 1.8.0.121	October 2017	 Video Endpoint and Audio Phones License Enhancement (Non-Polycom® RealPresence Clariti™) Filter Enhancements Support for User Defined Attributes in CSV File Assign Auto-Added Phones to Default Endpoint Groups Support for More Phone Configuration Profiles Phone Software Updates Enhancements Support for Uploading Phone Configuration Files Support for Updating Endpoint Model Definition Disk Space Usage Notice for Phone Software Updates and Resource Files Support for New Devices Polycom® Concierge No Longer Supported
10.1.0	3.2.3	CentOS 6.9 Postgres 9.5.6 OpenJDK 1.8.0.121	April 2017	 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
10.0.1	3.2.2	CentOS 6.6 Postgres 9.3 OpenJDK 1.8.0.45	October 2016	 Resolved some known issues. Support for Polycom Rack Server 230.
10.0.0	3.2.2	CentOS 6.6 Postgres 9.3 OpenJDK 1.8.0.45	August 2016	 Unified Management of RealPresence Clariti Video Infrastructure New HTML5 Look and Feel Support for Selectable Provisioning for RealPresence Group Series Improved Conference Scheduling and Monitoring Interface Support for Security Baselines Support for USB Deployment (Appliance Only) API Change: the changed API is *plcm_user_role*. The length of the *description* parameter has been increased from 120 characters to 240 characters.

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 is tested with other 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.



Polycom recommends that you upgrade your Polycom devices with the latest software versions, as compatibility issues may already have been addressed by software updates. See the Current Polycom Interoperability Matrix to match product and software versions.

Products Tested with this Release

Product	Tested Versions
Hypervisor Environments for Virtual Editions	
VMware® vSphere® Platform	5.5, 6.0, 6.5
Microsoft® Hyper-V®	2012, 2016
Polycom Video Endpoints	
Polycom® HDX®	3.1.11, 3.1.12
Polycom [®] RealPresence Debut™	1.3.1, 1.3.2
Polycom [®] RealPresence Centro™	6.1.6.1, 6.1.8
Polycom® RealPresence® Group Series (300, 310, 500, 550, and 700)	6.1.6.1, 6.1.8
Polycom® CMA® Desktop (Windows and Mac)	5.2.5
Polycom® RealPresence® Mobile	3.8.1, 3.9
Polycom® RealPresence® Desktop	3.8.1, 3.9
Polycom [®] RealPresence Immersive Studio™	6.1.5, 6.1.6.1
Polycom® RealPresence® OTX® Studio	6.1.5, 6.1.6.1
Polycom® VVX® 1500	5.6.0, 5.7.1
Polycom® CX5100	1.3.3, 1.3.4
Polycom® CX5500	1.3.3, 1.3.4

Endpoint Peripherals

Products Tested with this Release

Product	Tested Versions
Polycom [®] RealPresence Touch™	2.1.3, 2.1.5
Polycom® Touch Control	6.1.3, 6.1.5
Polycom [®] EagleEye™ Producer	1.1.1, 1.2.1.5
Polycom [®] EagleEye™ Director	2.2
Polycom [®] EagleEye™ Director II	1.1.0.23, 2.0
Polycom Audio Phones	
Polycom Trio™ 8800	5.5.3, 5.7.1
Polycom Trio™ 8500	5.5.3, 5.7.1
Polycom Trio™ Visual+	5.5.1, 5.5.3
Polycom® SoundPoint® IP 300/450/560/650/670	4.1.1
Polycom® SoundStation® IP 5000/6000/7000	4.1.1
Polycom® SoundStation® Duo	4.1.1
Polycom® SoundStructure® VoIP Interface (with VOIP card)	4.1.1
Polycom® VVX® 101/201 Polycom® VVX® 300/301/310/311 Polycom® VVX® 400/401/410/411 Polycom® VVX® 500/501 Polycom® VVX® 600/601 Polycom® VVX® 1500	5.7.3, 5.8.1
Polycom® VVX® 150/250/350/450	5.7.0, 5.8.1
Polycom Content Endpoints	
Polycom® Pano™	1.1.1, 1.2
Polycom Network Devices	
Polycom® RealPresence® Collaboration Server, Virtual Edition	8.7.4.4, 8.7.4.5
Polycom® RealPresence® Collaboration Server (RMX®) 1500/2000/4000 with MPMx	8.5
Polycom® RealPresence® Collaboration Server (RMX®) 1800/2000/4000 with MPMrx	8.7.4.4, 8.7.4.5
Polycom® RealPresence® DMA® 7000	10.0
Polycom® RealPresence® Access Director™	4.2.5, 4.2.5.1
Polycom® VBP® 7301	14.7.3

Products Tested with this Release

Product	Tested Versions
Polycom® RealPresence® Web Suite	2.1.0, 2.2.0
Polycom® RealPresence® Media Suite	2.8.2
Third Party Products	
Acme Packet Net-Net Enterprise Session Director	SCX6.3.0 MR-5 Patch 2 (Build 591)
Cisco Unified Communications Manager	10.5.2, 11.x
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
Cisco 150 MXP	L6.1
Cisco TelePresence System EX90	7.3.7
Cisco TelePresence System SX20	7.3.7
Cisco TelePresence MX200/MX300	7.3.7

System Constraints 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

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, verify that the system has enough RAM. You must 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 can use an R230 or R640 server. These servers come with 16 GB RAM. The R220 server can support a maximum of 400 endpoints. See the 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 640 (R640)
- 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.

Capability	Maximum for Polycom Rack Server 640, 630, and 620	Maximum for Polycom Rack Server 230 and 220
Users	250,000	2000
User Groups	1000	10
Areas	No maximum	No maximum
Video and Audio Endpoints	Maximum number of licensed video endpoints (50,000). Maximum number of managed audio phones is 20000. Recommended audio devices and video endpoints (mixed deployment) is 10000 audio/10000 video.	Maximum number of licensed video endpoints (400). Maximum number of managed audio phones is 400. Recommended number of mix of audio devices and video endpoints mixed deployment) is 200 audio/ 200 video.
Room entries	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.
Site entries	500	500
Number of supported instances/servers	50	20
Maximum number of images	5 The total size is under 8 GB. If the image number is more than 5 or the total size is larger than 8 GB, you need to delete unused images.	5 The total size is under 8 GB. If the image number is more than 5 or the total size is larger than 8 GB, you need to delete unused images.
Number of integrated RealPresence DMA systems (or RealPresence DMA superclusters)	1	1
Room entries	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.
Site entries	500	500
Number of supported instances/servers	50	20

Capability	Maximum for Polycom Rack Server 640, 630, and 620	Maximum for Polycom Rack Server 230 and 220
Maximum number of images	5 The total size is under 8 GB. If the image number is more than 5 or the total size is larger than 8 GB, you need to delete unused images.	The total size is under 8 GB. If the image number is more than 5 or the total size is larger than 8 GB, you need to delete unused images.
Number of integrated RealPresence DMA systems (or RealPresence DMA superclusters)	1	1
Number of integrated MCUs	No maximum	No maximum
Maximum text message length that can be sent to a hard endpoint	100 characters	100 characters
Number of provisioning profiles	2000	20
Number of provisioning rules	1200	20
Number of displayed users in the Users page	500	500
Number of tiers in Address book	5	5
Number of Guest book entries	500	500
Number of User GUI login sessions per system and sessions per user	50 with 10 sessions per user	10 with 10 sessions per user
Calendar Connector proxy connections	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

	Polycom Rack Server 620 (R620)	Polycom Rack Server 630 (R630)	Polycom Rack Server 640 (R640)	Polycom Rack Server 220 (R220)	Polycom Rack Server 230 (R230)
Polycom Rack Server 620 (R620)	Supported	Not Supported	Not Supported	Not Supported	Not Supported
Polycom Rack Server 630 (R630)	Not Supported	Supported	Not Supported	Not Supported	Not Supported

Supported Two-Server Local Cluster Combinations

	Polycom Rack Server 620 (R620)	Polycom Rack Server 630 (R630)	Polycom Rack Server 640 (R640)	Polycom Rack Server 220 (R220)	Polycom Rack Server 230 (R230)
Polycom Rack Server 640 (R640)	Not Supported	Not Supported	Supported	Not Supported	Not Supported
Polycom Rack Server 220 (R220)	Not Supported	Not Supported	Not Supported	Supported	Supported
Polycom Rack Server 230 (R230)	Not Supported	Not Supported	Not Supported	Supported	Supported

Virtual Edition

The RealPresence Resource Manager system is also available in an edition packaged for VM-based deployment.

You can install RealPresence Resource Manager, Virtual Edition on the following VM-based environments:

• VMware: 5.5, 6.0, 6.5

Microsoft Hyper-V: 2012 R2, 2016

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

RealPresence Resource Manager Recommended Deployment Settings in a Virtual Environment

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



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

Browser	Supported Versions	
Microsoft Internet Explorer®	11.0	
Google Chrome™	45.0 or later	

Supported Microsoft Exchange

The RealPresence Resource Manager Calendar Connector supports Microsoft Exchange Server 2013 15.0.516.032.

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, 10.0), minor releases (for example, 10.x) and updates with maintenance releases (for example, 10.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 later 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 and later.



You must upgrade RealPresence DMA to 10.0 before upgrading RealPresence Resource Manager to 10.5. If you don't upgrade RealPresence DMA first, it causes the RealPresence DMA integration to fail.

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

Current Version	Intermediate Upgrade	Intermediate Upgrade	Intermediate Upgrade	Intermediate Upgrade	Intermediate Upgrade	Final Upgrade
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
10.1						10.2
10.2						10.3
10.3						10.4
10.4						10.5

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.



If your local DNS server doesn't resolve ${\tt customerusagedatacollection.polycom.com}$, the analytics service in the RealPresence Resource Manager system will query the Google DNS server.

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 Manage system sends to Polycom:

- 1 Go to Admin > Maintenance > System Log Files.
- 2 Click it to roll the logs.
- 3 Save the log archive to your local machine.
- 4 Unpack the log archive.
- **5** 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 resolved issues in RealPresence Resource Manager 10.4.

Resolved Issues

Category	Issue Number	Description
Active Directory	EN-104367	Active Directory user names used to log in to the RealPresence Resource Manager GUI are case sensitive.
Alert	EN-104368	The RealPresence Resource Manager dashboard shows memory usage correctly. The MemoryUsageThresholdExceeded alert reports a higher memory usage, which is wrong.
Backup and Restore	EN-93157	After you back up your RealPresence Resource Manager system, if you change the system password and then restore the system from the backup archive, you can restore the system successfully, but your endpoint license may not be available.
HA	EN-91836	Changing the network MTU default value may cause HA disconnection.
Interop	EN-107881	After changing the RealPresence DMA admin user password, RealPresence Resource Manager and RealPresence DMA lost all their territories.
Interop	EN-84476	VVX 601 can't sign into RealPresence Resource Manager via WAN.
Interop	EN-95093	If you enable the Account Inactivity option and the specified account hits the inactivity threshold (days), the user account is disabled. This may cause RealPresence DMA integration and license allocation failure.
Security	EN-92624	After enabling SSLv3 on the Admin > Management and Security > TLS Settings page, the RealPresence Resource Manager GUI is not accessible.

Known Limitations

The following table lists known limitations that may be experienced when the RealPresence Resource Manager system interoperates with other Polycom products.

Known Limitations

Issue ID	Description	Workaround
EN-89957	The RealPresence Resource Manager system may fail to add the following instances by creating a new image with static IP: RealPresence Access Director instance RealPresence DMA instance Sometimes, you can add the instance, but the IP address of the instance in the RealPresence Resource Manager system is not same as the specified static IP.	Deploy the RealPresence Access Director OVA on a virtual machine, and then add the existing instance to RealPresence Resource Manager.
EN-88183	The RealPresence Resource Manager system fails to add a RealPresence Web Suite Experience Portal instance by creating a new image.	Deploy the RealPresence Web Suite Experience Portal OVA on a virtual machine, and then add the existing instance to RealPresence Resource Manager.
EN-85432	After disabling the CBC Ciphers on the RealPresence Resource Manager system, RealPresence Resource Manager fails to communicate with RealPresence Access Director.	None.
EN-59844	The RealPresence Resource Manager system fails to provision VVX 1500 after integrating with Enterprise Directory by SMB version 2.0.	VVX 1500 does not support SMB version 2.0. Use SMB version 1.0.
EN-59501	Sometimes the software update status on RealPresence Resource Manager indicates an update of a Pano system is in progress when it is not. This occurs when manually checking for updates from RealPresence Resource Manager in the Pano system web interface.	None.

Get Help

For more information about installing, configuring, and administering Polycom products, refer to Polycom Support.

To find all Polycom partner solutions, see Polycom Global Strategic Partner Solutions.

The Polycom Community

The Polycom Community gives you access to the latest developer and support information. Participate in discussion forums to share ideas and solve problems with your colleagues. To register with the Polycom Community, create a Polycom online account. When logged in, you can access Polycom support personnel and participate in developer and support forums to find the latest information on hardware, software, and partner solutions topics.

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