



Polycom[®] RealPresence[®] Resource Manager System

Polycom is pleased to announce the release of the Polycom RealPresence Resource Manager system. These release notes describe this release.

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What's New in this Release

The RealPresence Resource Manager system v8.1.1 release is a maintenance release that fixes the issues identified in ["Resolved Issues"](#) on page 13.

The RealPresence Resource Manager system offers the following new features.

- [Management of Cisco Endpoints with HTTPs](#)

Management of Cisco Endpoints with HTTPs

RealPresence Resource Manager system v8.1.1 supports using HTTPs when managing a Cisco endpoint.

The following Cisco endpoints are supported with HTTPs (and HTTP): Cisco C series, Cisco SX series and EX series, as well as Cisco MXP series. The Cisco T-150 series is not supported with HTTPs.

By default, the RealPresence Resource Manager system will try both HTTP and HTTPs when accessing a Cisco endpoint. For better performance, you can enable the system to try your preferred protocol first.

To configure the system to use HTTPs when managing Cisco endpoints:

- 1 Navigate to **Endpoint > Scheduled Management > Endpoint Management** Settings.
- 2 Under **Cisco Endpoint Management**, select the **Use HTTPs** check box.

When this check box is selected, the RealPresence Resource Manager system will first use HTTPs when managing a Cisco endpoint.

If this check box is not selected, the RealPresence Resource Manager system will first use HTTP when managing a Cisco endpoint.

Software Version History

Table: Software Version History

Version	API Version	Release Date	Features
v8.1.1		April 2014	Resolved some known issues. Added support for managing Cisco endpoints via HTTPs.
v8.1.0	v2.2.0	December 2013	Support for system log management with an external syslog server. Ability to configure automatic system backups. Improved SNMP. More detailed status messages for redundancy failover. Support for presence for RealPresence Desktop endpoints. Support for the RealPresence Immersive Studio systems. Increased flexibility to use Active Directory fields when you auto-generate dial strings. Increased support for scheduled provisioning of Cisco endpoints. Shorter conference passcodes are allowed.
v8.0.1	v2.0.1	October 2013	Resolved some known issues. Support for virtual edition.
v8.0	v2.0.1	August 2013	Rule-based dynamic provisioning. Re-organization of menu system. Direct import and linking to MCU conference profiles. Support for SVC conferences. Integration with a Polycom DMA supercluster. Ability to auto-generate SIP URIs for dynamically-managed endpoints. Increased security options. Support for IPv6 networks. Support for Polycom MGC systems. Performance enhancements. Better license reclamation for Polycom soft endpoints.
v7.1.1		April 2013	Associate billing codes with conferences. Support for RealPresence Collaboration Server 800s.

Table: Software Version History

Version	API Version	Release Date	Features
v7.1		December 2012	Support for RealPresence Group Series endpoints. Dynamically-provisioned system and E.164 naming schemes for endpoints. Access Control Lists for tighter dynamic-management. Support for RealPresence Access Director systems.
v7.0		August 2012	Runs on Linux-based operating system. Integration with Polycom DMA system. Full multi-tenancy support.

About the RealPresence Resource Manager System

The RealPresence Resource Manager system is a key element of the Polycom RealPresence Platform. The RealPresence Resource Manager system takes on most of the functions previously handled by its predecessor the Polycom CMA system.

The RealPresence Resource Manager system offers the following new features. Each of these features is discussed in more detail in the following sections.

- [Integration with a Polycom DMA™ 7000 System](#)
- [Multi-tenancy and the Areas Functionality](#)
- [Scheduling Pooled or Anytime Conferences](#)
- [REST-based APIs](#)
- [Session Border Controller Support](#)
- [Billing Interface](#)
- [Unsupported Polycom CMA System Functions](#)
- [Additional System Information](#)
- [Legacy SNMP Trap Support](#)
- [Polycom RealPresence Mobile and RealPresence Desktop Support](#)

Integration with a Polycom DMA™ 7000 System

The RealPresence Resource Manager system does not include H.323 gatekeeper functionality. Instead, the RealPresence Resource Manager system is your centralized user, conference, room, and device manager, while an integrated Polycom Distributed Media Application™ (DMA 7000) system acts as the H.323 gatekeeper, SIP registrar, SIP proxy, and SIP to H.323 gateway for your network.

In this configuration, the DMA system is also the virtualized conference manager—managing call control, bandwidth, priority-based routing, and your pool of MCU resources. As such, the DMA system supports numerous dial options including flat dial plan, MCU prefix dialing, ISDN gateway dialing, prefix dialing and Polycom One Dial.

The RealPresence Resource Manager system can only integrate with one DMA 7000 system, be it in a cluster or supercluster system configuration.

MCU Systems Registered with the DMA System

With this release, you can schedule conferences on MCUs that are directly registered with the RealPresence Resource Manager system (direct conferences) as well as resources that are registered to the DMA system (pooled conferences).

You cannot have the same MCU managed by both systems. It must either be managed by the DMA system or managed by the RealPresence Resource Manager system. MCUS that are managed by the RealPresence Resource Manager system should not be added to the DMA system's conferencing resources.

Multi-tenancy and the Areas Functionality

The RealPresence Resource Manager system supports multi-tenancy with its Areas feature. Multi-tenancy allows you to use the RealPresence Resource Manager system to service multiple customers (tenants), internal or external. Each area serves a tenant by partitioning off a collection of resources including users, associated endpoints, MCU resources and other network devices.

As the RealPresence Resource Manager system administrator, you may delegate administration and conferencing duties for areas to users within each areas or to a set of super users who are allowed to view and manage all areas.

- You may choose to have an area scheduler or area operator for each respective tenant or area or
- You can limit area administration tasks to users specifically allowed to manage that area.

For example, in an enterprise deployment, you can divide up users and resources according to department and then delegate video conferencing duties to users within that area. This allows the system administration duties to remain with a specialized video IT department, while video conference scheduling can be delegated to users within specific areas.

Areas also allow you to run area-specific reports on how specific departments within the enterprise are utilizing video conferencing.

Scheduling Pooled or Anytime Conferences

The RealPresence Resource Manager system manages the following conference types:

- Pooled - Conferences hosted on MCUs that are managed by the DMA system as part of the system's MCU pools. These are ad hoc conferences that do not reserve MCU resources, but instead pull from the resource pool.
- Anytime conferences - Conferences are system-managed, ad hoc, dial out conferences. They do not have designated start and end times. Once an Anytime conference is configured by your administrator, conferences can be started at any time by authorized participants.

REST-based APIs

The RealPresence Resource Manager system provides a functional Application Programming Interface (API) for:

- Scheduling
- Directory support
- User management
- Conference control and management
- SNMP
- System logs

This API uses an XML encoding over HTTPS transport. The API adheres to a Representational State Transfer (REST) architecture. For more information, see the *Polycom RealPresence Platform Application Programming Interface (API) Developer Guide*.

The API is licensed separately.

Session Border Controller Support

The RealPresence Resource Manager system can dynamically manage (provision, upgrade, and manage) select remote endpoints through critical session border controller functions to enable high quality interactive communication — voice, video, and multimedia sessions — across IP network borders.

- The Polycom® RealPresence® Access Director™ enables users within and beyond the firewall to securely access video services – whether you are at home, in the office or on the go. A software based edge server – RealPresence Access Director – securely routes communications, management and content through firewalls without requiring additional client hardware or software.

For more information about this solution, see *Deploying Polycom® Unified Communications in an Polycom RealPresence® Access Director™ System Environment*.

- Acme Packet® Net-Net ESD secures the borders to the service provider IP network, the private VPN that connects major enterprise or contact center sites, and the Internet. This allows for secure communication between remote office and remote users, as well as users and organizations outside of the enterprise.

For more information about this solution, see *Deploying Polycom® Unified Communications in an Acme Packet® Net-Net Enterprise Session Director Environment*.

Billing Interface

The RealPresence Resource Manager system also provides a billing interface that will allow the enterprise or service provider to detail “per call” information downloadable from the system as a CDR Report.

Unsupported Polycom CMA System Functions

While the RealPresence Resource Manager system takes on most of the functions previously handled by its predecessor the CMA system, the following list describes the CMA system functions it does not support:

- Scheduling Plugin Support

RealPresence Resource Manager system does not support the Polycom® Scheduling Plugin for Microsoft® Outlook® or the Polycom® Scheduling Plugin for IBM® Lotus® Notes®. Instead, the system provides a scheduling API which will allow integrators to implement scheduling applications.

- Gatekeeper functionality

The system does not include H.323 gatekeeper functionality. Instead, the system will integrate with other standard H.323 gatekeepers like the Polycom DMA 7000 system for gatekeeper, registration and call control.

- External Database

The system does not use or support an external database. The RealPresence Resource Manager system incorporates an internal database that does not need to be managed. System backups now automatically include all database data.

- Legacy Device Support

This system release does not include support for the following “end-of-life” Polycom endpoints:

- Polycom PVX systems
- Polycom iPower systems

Polycom VSX endpoint systems are supported, but the RealPresence Resource Manager system does not manage scheduled software updates for them.

- Cascaded conferencing support

The RealPresence Resource Manager system supports cascading conferences only on the Polycom MGC system. If the RealPresence Resource Manager system is a migrated CMA system, cascading conferences scheduled on the CMA system for an RMX system are deleted from the system. Cascading conferences scheduled for Polycom MGC system remain on the system.

- Lifesize 220 Express and Team

This Lifesize Express and Lifesize 220 Team endpoints have not been tested with this release. The RealPresence Resource Manager system does not support Lifesize 220 Express and Lifesize 220 Team endpoints.

Additional System Information

The following sections describe additional information about this RealPresence Resource Manager system release.

Support of Multiple Provisioning Servers

Create an SRV record to point to the RealPresence Resource Manager system provisioning service that endpoints can use to auto discover the system for dynamic provisioning.

Two or more provisioning servers may co-reside on a network; however only one may be used for DNS-based discovery of provisioning services.

If more than one provisioning server is used within an environment, there is no knowledge or coordination between the provisioning servers. This includes, but is not limited to:

- No shared directory services
- No shared management or provisioning services
- No shared scheduling
- No shared licenses

Legacy SNMP Trap Support

In this release, the POLYCOM-CMA-MIB is a legacy MIB that includes some unsupported event traps. However, it does support the following SNMP event traps.

- mcuDownAlert
- dbConnectionDownAlert
- ldapConnectionDownAlert,
- cmaFailoverAlert,
- licenseCapacityAlert,
- licenseExpirationAlert
- redundantServerDownAlert
- ldapSystemAccountPasswordFailed
- bandwidthUsedSiteAlert
- bandwidthUsedSubnetAlert
- bandwidthUsedSiteLinkAlert
- auditUsageThresholdExceeded
- alertDiskSpaceUsageExceeded
- certificateExpirationWarning
- certificateExpiredWarning
- cpuUsageExceededAlert
- memoryUsageExceededAlert
- idsFloodDetected
- dmaDownAlert

SNMP traps not listed here may be included in the POLYCOM-CMA-MIB but are not supported and have no information.

See the *RealPresence Resource Manager System Operations Guide* for more details about SNMP monitoring.

System Parameters

The RealPresence Resource Manager system operates within the following system parameters:

- Users—250000
- Groups—1000
- Areas—no limit
- Devices—limited to maximum number of device licenses (50000)
- Global Address Book entries—limited to maximum number of device licenses
- Room entries—no limit, but if the system has more than 500 room entries, it could experience user interface performance issues.
- Site entries—supports up to 500 total sites
- Subnets—supports up to 5000 total subnets
- Site links—no limit
- Maximum number of concurrent endpoint software upgrade: 80
- Maximum number of licensed endpoints: 50000.
- Max number concurrent calls that can be monitored—no limit
- Max number directory entries—no limit
- Max number of registered DMA systems (or DMA superclusters)—1
- Maximum number of registered MCUs—no limit
- Maximum text message length that can be sent to a hard endpoint is 100 characters.
- Maximum number of provisioning profiles is 2000.
- Maximum number of provisioning rules is 2000.
- Maximum password age for local user is 180 days when this feature is enabled.
- Maximum displayed users in the Users page is 500.
- Maximum number of tiers in Address book: 5
- Maximum Guest book entry: 500
- Maximum 50 user GUI login sessions per system and 10 sessions per user.

Localization Information

This version of the RealPresence Resource Manager system user interface (UI) is only available in the following languages: English, French, German, International Spanish, Japanese, Korean, Simplified Chinese, Traditional Chinese, Portuguese, and Russian.

Localization of the UI is not complete for all the system. Some messages display in English.

Installation and Upgrade Information

Your RealPresence Resource Manager system must be running v8.0.x in order to apply the upgrade software for v8.1.1.

Only RealPresence Resource Manager systems running version 7.1.x AND that have applied the pre-upgrade patch can be migrated to version 8.0. You must apply a pre-upgrade patch before you can migrate.

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

Version Number	Upgrade/Migration Steps	Use the Following Documentation
RealPresence Resource Manager system v8.0.x	<ol style="list-style-type: none"> 1 Upgrade system to v8.1.1 	RealPresence Resource Manager System Upgrade Guide v8.1
RealPresence Resource Manager system v7.1.x	<ol style="list-style-type: none"> 1 Apply v7.1.x pre-upgrade patch 2 Migrate system to v8.0 3 Upgrade system to v8.1.0 	RealPresence Resource Manager System Upgrade Guide v8.1.0 and v8.0
RealPresence Resource Manager system v7.x	<ol style="list-style-type: none"> 1 Upgrade to v7.1.x 2 Apply v7.1.x pre-upgrade patch 3 Migrate system to v8.0 4 Upgrade system to v8.1.0 	RealPresence Resource Manager System Upgrade Guide v8.0.1 and v8.0

Migrating to RealPresence Resource Manager systems from v7.1.x to v8.0

You can download the RealPresence Resource Manager v7.1.x Pre-Upgrade patch from the RealPresence Resource Manager system support site:

http://support.polycom.com/PolycomService/support/us/support/network/management_scheduling/realpresence_resource_manager.html

After applying the RealPresence Resource Manager system 7.1.x Pre-Upgrade patch, please request the RealPresence Resource Manager system v8.0 DVD by clicking

<http://response.polycom.com/05-DR-C-RPRM-System-v8.0Software-Aug2013> and submitting the order information to Polycom.

Migrating from a CMA System

Existing Polycom CMA system customers can migrate to RealPresence Resource Manager. Please see the support site for Polycom CMA System for detailed migration information.



You should always check the Polycom support site (<http://support.polycom.com>) to verify that you have the latest software release and release information for the product.

Web Interface System Requirements

The following table describes the requirements for the RealPresence Resource Manager system web interface.

Note that you cannot use Mozilla Firefox and Apple Safari to upload files to the RealPresence Resource Manager system. It is not supported. To upload files, use Google Chrome or Internet Explorer.

Product	Versions
Microsoft Internet Explorer®	8.0, 9.0 or 10.0
Mozilla Firefox®	11 or higher
Apple Safari	5.1.6 or 5.1.7
Google Chrome	17 or higher
Adobe Flash Player	9.x or 10.x

Products Tested With This Release

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



Polycom recommends that you upgrade all of your Polycom systems. Any compatibility issues may have already been addressed by software updates. Go to http://support.polycom.com/PolycomService/support/us/support/service_policies.html to find the current Polycom Supported Products matrix.

Product	Tested Versions
Polycom Video Endpoints	
Polycom HDX systems	v3.1.2, v3.1.3
Polycom RealPresence Group Series (300, 500, 550, and 700)	v4.1.1, v4.1.3
CMA Desktop (Windows and Mac)	v5.2.5
RealPresence Mobile	v3.0, v3.1
RealPresence Desktop (Windows and Mac)	v3.0, v3.1
Polycom VVX 1500	v3.3.2
Polycom VSX 7000	v9.0.6
RealPresence Immersive Studio systems	4.1.2
Network Devices	
RealPresence Collaboration Server 800s	v8.1 ^a , v8.3
RealPresence Collaboration Server 1800	v8.3
Polycom RMX system (1500/2000/4000)	v8.1 ^b , v8.3
Polycom MGC system	v9.0.4
Polycom DMA 7000	v6.0.2, v6.0.3
RealPresence Access Director	v3.0, v3.1
Polycom VBP-ST	v11.2.16
Third Party Products	
Acme Packet Net-Net Enterprise Session Director	6.3
LifeSize 200 Series	4.7.22
Tandberg MXP Series (1700MXP)	F9.3.1 PAL

Product	Tested Versions
Cisco C20	6.0, 6.2
Tandberg T150	L6.1
Cisco EX90	6.2
Cisco SX20	6.2

- a. The RealPresence Resource Manager system reports port numbers based on resource usage for CIF calls. Version 8.1 and later Polycom MCUs report port numbers based on resource usage for HD720p30 calls. In general, 3 CIF = 1 HD720p30, but it varies depending on bridge/card type and other factors.
- b. The RealPresence Resource Manager system reports port numbers based on resource usage for CIF calls. Version 8.1 and later Polycom MCUs report port numbers based on resource usage for HD720p30 calls. In general, 3 CIF = 1 HD720p30, but it varies depending on bridge/card type and other factors.

Resolved Issues

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

Issue Number	Description
XMA-6294	If one of a series of scheduled recurring conference fails, the subsequent recurring conferences also fail.
XMA-6289	RealPresence Resource Manager system using Traditional Chinese failed to schedule a future conference.
XMA-6219	If guests in different areas have the same number, the conference monitoring screen will show duplicate guests. In addition, no additional guests can be added to the conference.
XMA-6198	When you create a pooled conference with the API, not all dial-in participants are included.
XMA-6190	When you use the API to create a direct conference future direct conference with a chairperson passcode, the chairperson passcode requirement is not shown in the RealPresence Resource Manager system's web interface.
XMA-6163	The API does not return the recurrence-ID when working with recurring conferences.
XMA-6146	Endpoints cannot always register with directory services.
XMA-6111	When you add or delete a site-link, the RealPresence Resource Manager system's web interface does not reflect the change.
XMA-6093	If an Active Directory user name starts with an underscore, the underscore is not ignored.
XMA-6084	CMA Desktop users were getting logged out when using single sign-on.
XMA-6079	RealPresence Resource Manager system becomes unresponsive when the Active Directory server is too busy to respond.
XMA-6070	RealPresence Resource Manager system allows set up if system name is left blank.
XMA-6042	Get Devices call in the API does not include room name.

Issue Number	Description
XMA-6041	You cannot create a recurring conference with the API when the conference recurs less than three times.
XMA-6039	When creating a recurring conference with the API, the API will not validate for all required fields.
XMA-6038	Direct conferences created with the API sometimes display in the Future Conferences screen as pooled conferences.
XMA-6001	Endpoints cannot register for directory services.
XMA-5978	In a redundant configuration, the primary server does not completely come back up when you switch server roles.
XMA-5949	Sometimes scheduled pooled conferences do not include participants information.
XMA-5911	JServer logs not written when you use a UTC timezone.
XMA-5882	Polycom OTX and RPX telepresence systems do not display in the directory properly.
XMA-5851	Sometimes RealPresence Manager system is not available after you reboot the system.
XMA-5777	Polycom HDX systems unable to dial an H.323 Annex-0 numbers from the Global Address Book, if not registered to a gatekeeper.
XMA-5702	You cannot use asterisks in the names of guests in the guest book.
XMA-5539	RealPresence Resource Manager system crashes if managing more than 20000 endpoints AND you try to download a bundled provisioning profile.
XMA-1185	When a conference includes more than 255 participants, RealPresence Resource Manager won't allow you to mute or unmute participants.

Known Issues

The following table lists the known issues in these release.

Issue Number	Description
XMA-6269	If you try to configure more than three territories with host conference rooms, the RealPresence Resource Manager cannot configure remaining territories correctly.
XMA-6249	Cannot schedule a direct conference with a SIP URI used as the dial-in number.
XMA-6214	If you upgrade 8.0.1 or 8.1 to v8.1.1, the RealPresence Resource Manager Info on the Dashboard does not correctly display monitoring of the battery, fan, and temperature. This occurs when using SNMP v2.
XMA-6213	When you schedule a direct conference with the API, guest numbers are not included in the conference.
XMA-6198	When you create a pooled conference with the API, not all dial-in participants are included.

Issue Number	Description
XMA-6194	If you add an extension number to a guest participant after the conference has been scheduled, the extension information is not added to the conference.
XMA-6190	When you use the API to create a direct conference future direct conference with a chairperson passcode, the chairperson passcode requirement is not shown in the RealPresence Resource Manager system's web interface.
XMA-6172	RealPresence Mobile clients cannot connect to direct conferences if the conference is configured for IP dialing.
XMA-6169	When integrated with a DMA system, RealPresence Resource Manager system performance for the Site Topology pages decreases when more than three territories are added to the topology.
XMA-6164	When you schedule a pooled conference with the API and specify a specific pool order, the conference fails.
XMA-6070	RealPresence Resource Manager system allows set up if system name is left blank.

Where to Get the Latest Product Information

To view the latest Polycom product documentation, visit the Support page of the Polycom website at <http://support.polycom.com>