

# Polycom RealPresence Collaboration Server 1800/2000/4000/Virtual Edition

Polycom announces the release of the Polycom RealPresence Collaboration Server 8.9.1 software. This document provides the latest information about this release.

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## What's New in This Release

RealPresence Collaboration Server includes the features and functionality of previous releases and includes the following new features:

- [Support for Japanese Font Display](#)
- [Loopback Video in Telepresence Conferences](#)
- [Display Participant Count in TIP-Enabled Conferences](#)

### ***Support for Japanese Font Display***

RealPresence Collaboration Server 1800/2000/4000 and Virtual Edition can now display Japanese characters in site name, message overlay, and Gathering slides using the appropriate font and style, based on the system configuration.

For more information, refer to the *Administrator Guide of RealPresence Collaboration Server 1800/2000/4000/Virtual Edition* available at [Poly Support](#).

## ***Loopback Video in Telepresence Conferences***

When there's only one endpoint present in a conference, RealPresence Collaboration Server 1800/2000/4000 and Virtual Edition can now display the participant's loopback video in Telepresence conferences.

Previously, this feature was available only to single-screen endpoints in Telepresence conferences. Now it's also available to multiscreen endpoints, such as Poly Immersive Telepresence (ITP) rooms and TIP-enabled Cisco endpoints. However, for multiscreen endpoints, the loopback video displays for the center screen only.

This feature is enabled by default. To disable it, set the system flag **DISABLE\_ITP\_LOOPBACK** to **YES**.



To use this feature, you must set the **Telepresence Layout Mode** option as **Speaker Priority** or **CP-Auto**.

## ***Display Participant Count in TIP-Enabled Conferences***

If you set the **TIP Compatibility** mode as **Prefer TIP**, RealPresence Collaboration Server 1800/2000/4000 and Virtual Edition can now display the audio and video participant count on each video participant's display.

This feature is enabled by default and is available for TIP-enabled and non-TIP endpoints.

To disable this feature, set the system flag **DISABLE\_TIP\_ICONS\_INDICATIONS** to **YES**.

## **System Capabilities and Constraints**

This section provides information about the RealPresence Collaboration Server capabilities and constraints.

### ***Licensing Models***

The RealPresence Collaboration Server has two licensing models:

- Standalone (A-la-carte)—the number of resources is determined by the capacity of the MCU, including the number of ports.
- RealPresence Clariti (Solution)—the number of resources is determined by the license agreement.

### ***Supported Conferencing Options***

The following table summarizes the conferencing capabilities and options available in the different Conferencing Modes.

Features	CP Only	Mixed CP & SVC	SVC Only
Reservations	✓	✓	✓
Operator Conferences	✓	✗	✗
Entry Queues	✓*	✓*	✓*
Dial Out	✓	✗	✗
Cascading	✓	✓**	✗
IVR	✓	✓	✓ Reduced IVR set for SVC endpoints
Permanent Conferences	✓	✓	✓
LPR	✓	✓***	✓***
Auto Redial	✓	✓	✗
Content	✓ All Content Settings, All Content Protocols	✓ Graphics Only, H.264 Cascade & SVC Optimized	✓ Graphics Only, H.264 Cascade & SVC Optimized
Presentation Mode	✓	✗	✗
Lecture Mode	✓	✗	✗
Same Layout	✓	✓	✗
Layout Selection	✓	✓ AVC endpoints only	Layout set to Auto Layout and defined on the endpoint
Skins	✓	✓ AVC endpoints only	✗
Encryption	✓	✓	✓
Recording	✓	✓ AVC recording only	✗
Site Names	✓	✓ AVC endpoints only	Managed by the endpoint (not via MCU)
Message Overlay	✓	✗	✗
<p><b>Legend</b></p> <p>* Entry Queue and Destination Conference must have the same profile (i.e. CP Only to CP only, SVC Only to SVC Only, Mixed CP &amp; SVC to Mixed CP &amp; SVC)</p> <p>** In a Mixed CP &amp; SVC conference, the Cascade link is always AVC.</p> <p>*** For AVC endpoints the LPR error resiliency mechanism is used, however for SVC endpoints new error resiliency methods are used.</p>			

## RealPresence Collaboration Server, Virtual Edition Host Server Platform Profile

This section provides information on the minimal Virtual Machine host settings and configuration, required for deploying RealPresence Collaboration Server, Virtual Edition.

To maximize audio and video quality, Polycom strongly recommends a dedicated VM server per Collaboration Server.

The described configuration is not mandatory; however, failing to follow it may result in degraded video and audio performance. Due to differences between hardware and VM environments, the performance information below is provided for guidance purposes only, and does not represent a guarantee

### Deployment Settings - Minimum / Recommended

Component	Minimum Deployment Settings	Recommended Deployment Settings
vCPU	25000 MHz Reservation	90000 MHz Reservation
Memory	16 GB Reservation	32 GB Reservation
Network Adapter (NIC)	2 x 1Gbit	2 x 1Gbit
Hard Disk (Thin/Thick Provisioning)	30 GB	30 GB
Performance	14 SD ports or 7 HD ports	60 SD ports or 30 HD ports



#### Notes:

- For Intel CPUs, when Hyperthreading is enabled, the numbers above refer to logical cores (vCores) and not physical ones.
- Depending on the environment, the virtual machine might need a Network Interface Card (NIC) from the host dedicated for the virtual machine. For more information, refer to your VMware administrator.

An example for a recommended deployment is a 32 logical-cores machine at 2.9GHz.

## CPU Reservations for Licenses Purchased

The Administrator is required to change the *number of cores per socket* so that the *total number of cores* reflects the CPU cores required for the purchased licenses.

The table below demonstrates the more common/likely machines. Other systems might require some experimentation.

**Number of Cores Required for Licenses Purchased**

Number of Licenses Purchased	CPU Configuration				
	Dual Intel E5-2690 32 cores	Dual Intel E5-2680 32 cores*	Dual Intel E5-2650 32 Cores*	Dual Intel E5-2620 24 Cores	Dual Intel X5660 24 Cores*
5 ports	5	5	7	8	8
10 ports	10	11	14	16	16
15 ports	16	17	21	24	24
20 ports	21	23	29	NA	NA
25 ports	26	29	NA	NA	NA
30 ports	32	NA	NA	NA	NA

\* These numbers are estimates only, and may require adjustment.

**Notes:**

- An example for a typical deployment is a 32 logical cores at 2.9 GHz.
- These numbers are estimates only, and may require adjustment.
- These numbers assume that hyperthreading is enabled in the physical server's BIOS. If hyperthreading is disabled, the above numbers are approximately halved.
- Do not over-allocate cores.

For information on the capacity of RealPresence Collaboration Server, Virtual Edition platforms, see the Performance Benchmarks section.

## ***Conferencing Capacities for RealPresence Collaboration Server, Virtual Edition***

**Note:**

Numbers in square brackets denote the increased capacity when the RPCSVE\_ENHANCE\_CAPACITY feature is enabled.

**Conferencing Feature Capacities**

System Functions	Benchmark System Capacity
Maximum number of Video participants per conference	32 [42]
Maximum number of Video participants per SVC only conference	200
Maximum number of Voice participants per conference	360 [504]
System maximum number of VOIP participants	360 [504]

**Conferencing Feature Capacities**

<b>System Functions</b>	<b>Benchmark System Capacity</b>
Maximum number of Audio calls per second	5
Maximum number of Video calls per second	2
Maximum number of Conferences	200
Maximum number of Meeting Rooms	1000
Maximum number of Entry Queues	40
Maximum number of Profiles	80
Maximum number of Conference Templates	100
Maximum number of SIP Factories	40
Maximum number of IVR Services	40
Maximum number of Recording Links	100
Maximum number of IVR Video Slides	40
Maximum number of Log Files (1Mb max.)	4000
Maximum number of CDR Files	2000
Maximum number of Fault Files	1000
Number of Participant alerts	Unlimited
Maximum number of concurrent RMX Web Client connections to the MCU	20
Maximum number Address Book entries	4000
Maximum number of Users	100
Maximum number of Reservations (internal Scheduler)	4000
Maximum number of concurrent Reservations	80
Maximum number of participants in a template	200
Maximum number of users concurrently logged into MCU	20

## Resource Capacities

The benchmarks for Conferencing and Resource Capacities are based on a Benchmark System (Reference Host) equipped with two Intel E5-2690 processors (2.90GHz), each containing 8 physical cores (16 logical cores with hyper-threading enabled) and 16 GB of RAM. This is the equivalent of 32 logical cores each running at 2.90GHz.

### Resource Capacity in Non-Mixed and Mixed Modes by Base License Ratio and Maximum Capacity

Resource Type	Maximum Line Rate (Mbps)	Mixed Mode		Non Mixed Mode	
		Base License Ratio	Maximum Capacity	Base License Ratio	Maximum Capacity
Licenses			32		32
1080p60 (asymmetric)	6	0.33	10	0.33	10
1080p30	4	0.5	16	0.5	16
720p30	2	1	32	1	32
SD30 (4CIF)	1	2	64	2	64
CIF30	1	2	64	2	64
Audio/VoIP (AVC or SAC)	0.128	7	228	12	384
SVC 720p30	1.5	5	160	20	600
SVC 1080p30	3	5	160	5	160
TIP 720p30		1	30	1	30
WebRTC VGA/SD			20		20
<p><b>* Non-Linear License Entitlement: The license ratio degrades when the maximum resource limit is reached.</b>  <b>Base License Ratio: The ratio between the purchased licenses and their consumption by the various Resource Types.</b>  <b>Maximum Capacity: The maximum capacity per Resource Type for a Benchmark System.</b></p>					

The following tables list RealPresence Collaboration Server, Virtual Edition capacities on different reference platforms:

**Resource Capacity in Non-Mixed by Platform and License Mode (RealPresence Clariti)**

Port Type	Dual E5-2690@2.9Ghz 48 cores 64 GB	Dual E5-2690@2.9Ghz 32 cores 32 GB	Dual E5-2690@2.9Ghz 24cores 24 GB	Dual E5-2690@2.9Ghz 32cores 16 GB	Dual E5-2690@2.9Ghz 8 cores 8 GB
AVC 1080p60	14	10	8	10	2
AVC 1080p30	21	16	12	16	2
AVC 720p30	42	32	24	32	5
AVC SDp30	84	64	48	64	10
AVC ClFp30	84	64	48	64	10
Audio	504	384	288	384	60
SVC (& SAC) 720p30	600	600	480	600	100
1080p SVC	210	160	120	160	25

**Resource Capacity in Mixed Modes by Platform and License Mode (RealPresence Clariti)**

Port Type	Dual E5-2690@2.9Ghz 48 cores 64 GB	Dual E5-2690@2.9Ghz 32 cores 32 GB	Dual E5-2690@2.9Ghz 24 cores 24 GB	Dual E5-2690@2.9Ghz 8 cores 8 GB
AVC 1080p60	14	10	8	2
AVC 1080p30	21	15	12	2
AVC 720p30	42	32	24	5
AVC SDp30	84	64	48	10
AVC ClFp30	84	64	48	10
Audio	300	228	172	35
SVC (& SAC) 720p30	210	160	120	25
1080p SVC	210	160	120	25



**Resource Capacity in Non-Mixed Mode by Platform and License Mode (RealPresence Clariti/[a-la-carte]) - With RPCSVE\_ENHANCE\_CAPACITY Flag Set to YES**

Port Type	Non Mixed Mode			
	Dual E5-2690 @ 2.9GHz 48 cores 64 GB	Dual E5-2690 @ 2.9GHz 32 cores 32 GB	Dual E5-2690 @ 2.9GHz 24cores 24 GB	Dual E5-2690 @ 2.9GHz 8 cores 8 GB
AVC 1080p60	18	14	10	3
AVC 1080p30	27	21	15	4
AVC 720p30	55	42	31	9
AVC SDp30	110	84	62	18
AVC CIFp30	110	84	62	18
Audio	598	504	372	109
SVC (& SAC) 720p30	600	600	600	140
1080 SVC (& SAC)	275	210	155	35

**Resource Capacity in Mixed Modes by RMX Hardware Platform**

	Port Type	Single MPMRx-S	Single MPMRx-D	1800-0(10)	1800-1(35)	1800-3(100)
<b>Mixed Mode</b>	AVC 1080p60	10	33	3	11	33
	AVC 1080p30	15	50	5	17	50
	AVC 720p30	30	100	10	35	100
	AVC SDp30	60	200	20	70	200
	AVC CIFp30	60	200	20	70	200
	Audio	300	300	116	300	300
	720p SVC (& SAC)	150	300	30	175	300
	1080p SVC (& SAC)	150	150	30	175	150

**Resource Capacity in Non-Mixed Modes by RMX Hardware Platform**

	Port Type	Single MPMRx-S	Single MPMRx-D	1800-0(10)	1800-1(35)	1800-3(100)
<b>Non Mixed Mode</b>	AVC 1080p60	10	33	3	11	33
	AVC 1080p30	15	50	5	17	50
	AVC 720p30	30	100	10	35	100
	AVC SDp30	60	200	20	70	200
	AVC CIFp30	60	200	20	70	200
	Audio	300	300	110	300	300
	720p SVC (& SAC)	150	300	30	175	300
	1080p SVC (& SAC)	150	300	30	175	150

The following table lists the Soft Blade (on its own reference platforms) resource capacities:.

**Soft Blade Resource Capacity by Platform**

Port Type	Dual E5-2690v3@ 2.6GHz 8 Cores	Dual E5 -2620@ 2.0GHz 16 Cores	Dual E5-2620@2.0GHz 8 Cores
RDP	21	33	16

## Security Updates

The RealPresence Collaboration Server supports upgraded versions of Apache, OpenSSL, NTP, and CentOS as shown in the following table:

Open Source Software	RMX 1800	RMX 2000/4000	Virtual Edition
Apache	2.4.39	2.4.39	2.4.39
OpenLDAP	2.4.47	2.4.47	2.4.47
Perl	5.28.1	5.28.1	5.28.1
Busybox	1.31.0	1.31.0	N/A

## Products Tested with This Release

The RealPresence Collaboration Server is tested with a wide range of products. The following tables identify the products that have been tested for compatibility with this release; it is not a complete inventory of compatible equipment.



Poly recommends that you upgrade your Poly 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.

### Polycom Gatekeepers, Gateways, SIP Servers and MCUs

Product Name	Version
RealPresence Resource Manager	10.8.0
RealPresence DMA	10.0.0 10.0.1
Polycom ISDN Gateway	2.0.0
RealPresence Collaboration Server 1800	8.9.1
RealPresence Collaboration Server 2000/4000 MPMRX	8.9.1
RealPresence Collaboration Server Virtual Edition	8.9.1
RealPresence SoftBlade	8.9.1
Polycom ContentConnect	1.6.2.433
RealPresence Access Director	4.2.5.3
HARMAN Media Suite	3.6.1
Cisco Unified Communications Manager	12.0
Microsoft Lync 2013 (AVMCU)	5.0.8308.1091
Microsoft Skype for Business Online	6.0.9319
Microsoft Skype for Business AVMCU (2015)	6.0.9319.548
Microsoft Lync 2013 Edge Server	5.0.8308.1091
Microsoft Skype for Business 2015 Edge Server/Pool	6.0.9319.548
Microsoft Exchange 2016 server	15.01.0845.036
Microsoft Exchange Online	15.01.1531.003
Microsoft Skype for Business server 2019	7.0.2046.123

### Virtual Machines

Product	RMX 1800/2000/4000	RMX Virtual Edition
KVM	N/A	Centos 7.8
VMware vCenter Server	N/A	6.7.0.31000

**Virtual Machines**

Product	RMX 1800/2000/4000	RMX Virtual Edition
Polycom DMA	10.0.0	10.0.0
Hyper-V Server (2016)	N/A	10.0.14393

**Endpoints**

Product	Version
Poly X30	3.2.1
Poly X50	3.2.1
RealPresence Group Series 300/500/550/700	6.2.2 6.2.2.4
HDX 4500/7000/8000	3.1.14.56008
RealPresence OTX Studio	6.1.3.390050
Polycom VVX Series (VVX1500)	5.8.0.1527 5.1.3.1675
Poly Trio 8800/8500	5.9.5.2830
Poly Trio VisualPro	6.2.2.4
RealPresence Debut	1.3.2-69919
Web Suite	2.2.2.1789.248022
RealPresence Web Suite (WebRTC Client)	2.2.3.2005
RealPresence Mobile for Android	3.10.1.71327
RealPresenceDesktop for Mac	3.10.3.72504
RealPresence Desktop for Windows	3.10.3.72504
RealPresence Mobile for iOS	3.10.1
Polycom Content App	1.3.2.71755
Polycom Multipoint Layout Application (MLA)	3.1.6.2
Microsoft Skype for Business Desktop Client Windows (SfB 2016)	16.0.12527.21230
Microsoft Skype for Business Desktop Client Windows (Lync 2013)	15.0.5159.1000
Microsoft® Skype for Business Desktop Client Windows (SfB 2015)	15.0.5137.1000
Skype for Business Desktop Client Mac (SfB 2016)	16.29.41
Skype for Business Mobile Client iOS (SfB 2016)	6.27.1.6
Skype for Business Mobile Client Android (SfB 2016)	6.27.0.18

**Endpoints**

Product	Version
Skype for Business Desktop Web App-Client Windows	2020.0813.1001
Skype for Business Desktop Web App-Client Mac	2011.14.4.3
Cisco EX90	TC7.1.4.908 TC7.3.17
Cisco CTS 500	6.1.12 6.1.13
IX5000	9.1.0(4)
Cisco DX80	ce 9.13.1
Cisco SX10	ce 9.13.1
Cisco SX80	ce 9.13.1

## Information for the RealPresence Collaboration Server

The following sections provide important general information about upgrading RealPresence Collaboration Servers to this release.

### *Upgrade Package Contents*

The RealPresence Collaboration Server 8.9.1 software upgrade package includes:

- The RealPresence Collaboration Server (RMX) 8.9.1 software (\*.bin)
- The RealPresence Collaboration Server, Virtual Edition 8.9.1 software
  - The \*.upg file is for upgrading RealPresence Collaboration Server, Virtual Edition on VMware.
  - The \*.ova file is for deploying RealPresence Collaboration Server, Virtual Edition on VMware.
  - The \*.vhd file is for deploying RealPresence Collaboration Server, Virtual Edition on Hyper-V.
- The RealPresence Collaboration Server (RMX) 1800/2000/4000/Virtual Edition 8.9.1 Soft Blade
  - The \*.ova file is for deploying Soft Blades on VMware.
  - Soft Blade upgrade is along with MCU upgrade via MCU upgrade software.
    - ◆ \*.bin for RMX 1800/2000/4000
    - ◆ \*.upg for Virtual Edition
- The RealPresence Collaboration Server Local Web Client (RMX Manager)
- The RealPresence Collaboration Server 8.9.1 Release Notes
- The RMX API Kit Version 8.9.1 includes:
  - RealPresence Collaboration Server API Version 8.9.1 Release Notes

- RealPresence Collaboration Server XML API Overview
- RealPresence Collaboration Server XML API Schema Reference Guide
- XML Schemas

## ***Supported Upgrade Paths***

You can upgrade the following versions of RealPresence Collaboration Server directly to version 8.9.1:

- 8.8.1.6
- 8.9.0.4

## ***Important Upgrade Notes***

Please carefully review the following important upgrade notes.

- In a RealPresence Clariti environment, install or upgrade to RealPresence DMA 7000 system version 10.0 or greater before installing or upgrading to RealPresence collaboration Server version 8.9.1.
- When upgrading to this release, Polycom requires that you upgrade from the latest maintenance release of the version currently running on the server.
- To enable the MMCU function, Polycom recommends that you upgrade the system to version 8.9.1.
- This release does not support MPM, MPM+ or MPMx cards. DO NOT upgrade to this release if MPM, MPM+ or MPMx cards are installed in the RealPresence Collaboration Server (RMX); Polycom also recommends trained people to do the upgrade as mentioned in the Prepare for the Upgrade part.
- Customers currently using the new RealPresence Collaboration Server Soft Blades solution for supporting Microsoft Remote Desktop Protocol (RDP) content can choose to continue using the same solution. However, if a customer has deployed (or requires to deploy) the Polycom RealConnect solution then it's recommended to migrate to the Polycom ContentConnect for sharing content as it's more fully featured. Customers who are currently using Polycom ContentConnect should continue to use it.

## ***Upgrade a RealPresence Collaboration Server 1800/2000/4000***

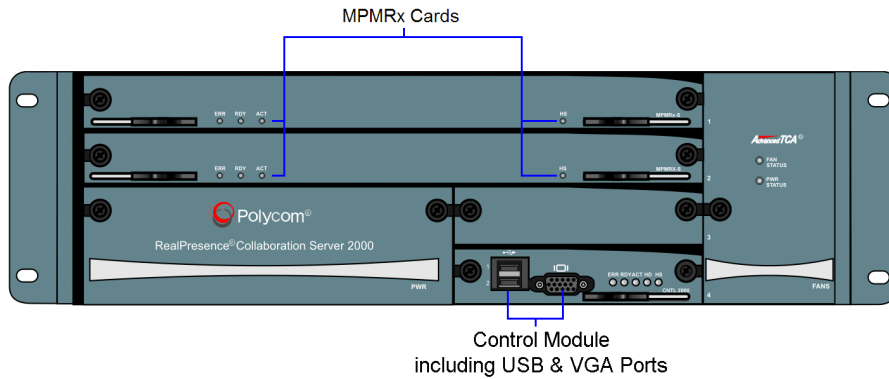
The following upgrade information relates to RealPresence Collaboration Server 1800/2000/4000 models only.

### **RealPresence Collaboration Server (RMX) 2000/4000 Hardware and Software Compatibility**

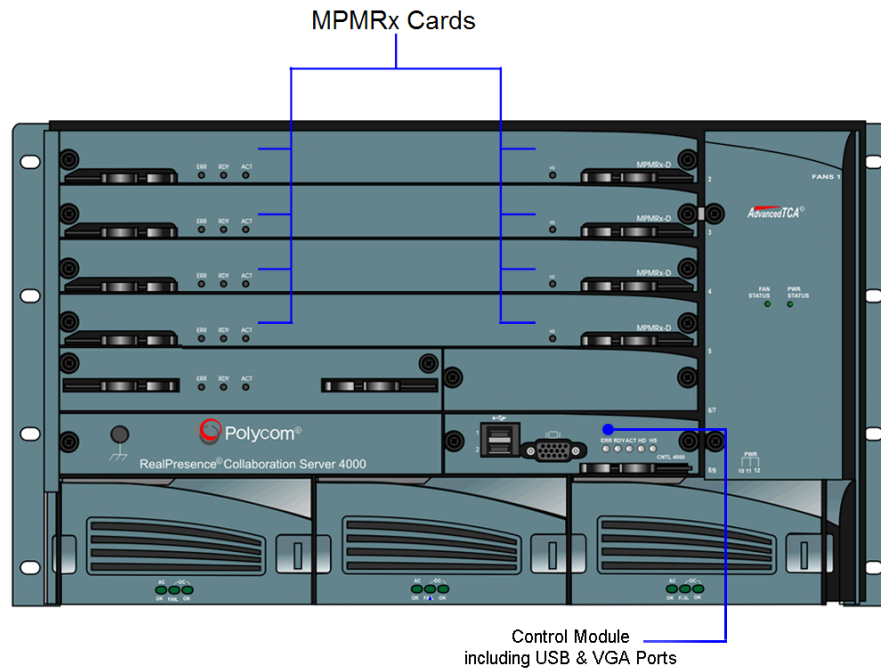
Because of hardware constraints, the RealPresence Collaboration Server (RMX) 2000/4000 is only compatible with specific software versions.

Both Control Modules BRD2534B-L0/BRD2535B-L0 include USB and VGA ports on the front panel.

**RMX 2000 system with CNTL 2000 Module BRD2534B-L0**



**RMX 4000 system with CNTL 4000 Module BRD2535B-L0**



**Prepare for the Upgrade**

Prepare the RealPresence Collaboration Server 1800/2000/4000 for upgrade by verifying that the server meets the upgrade requirements identified in this procedure and securing a backup of the current configuration.

**To prepare for the upgrade:**

- 1 Back up the RealPresence Collaboration Server.
  - a Select **Administration > Software Management > Backup Configuration**.
  - b In the **Backup Configuration** pane, click **Browse** to select a backup directory and click **Backup**.  
Once backup is complete, you may upgrade the RealPresence Collaboration Server.
- 2 Verify that all MCU cards are compatible with the 8.9.1 software. RealPresence Collaboration Server 2000/4000 with MPMx media cards are not supported by this release.  
If the MCU contains MPM, MPM+, MPMx media cards, refer the *DOC2754A RMX 2000/4000 MPMRx Migration Procedure*.

## Perform the Upgrade

The RealPresence Collaboration Server 1800/2000/4000 being upgraded cannot host conferences during the upgrade.

### To upgrade to the RealPresence Collaboration Server 1800/2000/4000 software

- 1 Download the `.bin` file from the Polycom Support Site.
- 2 If the RealPresence Collaboration Server is integrated with a RealPresence DMA system, disable the connection. To do this, on the RealPresence DMA system, edit the **Network > MCU > MCUs** connection, select the MCU, and choose either **Stop Using** or **Busy Out**.  
Again note that in a RealPresence Clariti environment, install or upgrade to RealPresence DMA 7000 system version 10.0 or greater before installing or upgrading to RealPresence collaboration Server version 8.9.1.
- 3 On the RealPresence Collaboration Server and RealPresence DMA system, verify that all conferences (including permanent/recurrent conferences) targeted to the MCU being upgrade are terminated.
- 4 At the **RMX Manager**, click **Administration > Software Management > Software Download**.
- 5 Browse to the location where you saved the `.bin` file and click **Install**.
- 6 When the files have copied successfully, click **OK**.  
The upgrade procedure takes approximately 20 minutes.  
Once you click OK, the **Install Software** information box indicates that **Software Loading** is in progress. A series of Active Alarms are displayed indicating the progress of the upgrade process. The **Install Software** information box then indicates that IPMC Burning is in progress. A further series of Active Alarms are displayed indicating the progress of the upgrade process.
- 7 If a system message alert is displayed, click Next/Cancel.  
At the end of the process, connection to the Collaboration Server is terminated.
- 8 When a **Please wait for system reboot** message alert appears, click **Next**.  
Connection to the RealPresence Collaboration Server is terminated and you are prompted to reopen the browser.
- 9 Close any open browser windows and wait approximately 10 minutes.
- 10 After 10 minutes, reconnect to the RealPresence Collaboration Server by entering its IP address into the browser address bar.



- 11 Enter your User Name and Password, and click **Login**.

When the progress indicator shows Complete, the RealPresence Collaboration Server is ready.

- 12 If the RealPresence Collaboration Server was integrated with a RealPresence DMA system, re-establish the connection.

To do this, on the RealPresence DMA system, edit the **Network > MCU > MCUs** connection, select the MCU, and choose **Start Using**.

## Upgrade a RealPresence Collaboration Server, Virtual Edition

The following sections provide important information about upgrading a RealPresence Collaboration Server, Virtual Edition.

For information on deploying RealPresence Collaboration Server, Virtual Edition, see the *Polycom RealPresence Collaboration Server 1800/2000/4000/Virtual Edition Getting Started Guide*.

### Soft Blade Requirements

Installing and upgrading Soft Blade require the following minimal virtual machine host (VMware) settings:

#### Deployment Settings - Minimum

Component	Minimum Deployment Settings
Number of vCPU	4
Memory	8 GB
Hard Disk (Thin Provision)	60 GB

For more information, see the Modular MCU section.

### Prepare for the Upgrade

Prepare for the RealPresence Collaboration Server upgrade by verifying the server meets the upgrade requirements identified in this procedure and securing a backup of the current configuration.

#### To prepare for the upgrade:

- » Back up the RealPresence Collaboration Server.
  - a Select **Administration > Software Management > Backup Configuration**.
  - b In the **Backup Configuration** pane, click **Browse** to select a backup directory and click **Backup**.  
Once backup is complete, you may upgrade the RealPresence Collaboration Server.

## Perform the Upgrade

The RealPresence Collaboration Server, Virtual Edition can remain active during an upgrade and can host conferences until you are required to reboot to complete the upgrade procedure.

### To upgrade a RealPresence Collaboration Server, Virtual Edition:

- 1 Download the `.upg` file from the Polycom Support Site.
- 2 If the RealPresence Collaboration Server is integrated with a RealPresence DMA system, disable the connection. To do this, on the RealPresence DMA system, edit the **Network > MCU > MCUs** connection, select the MCU, and choose either **Stop Using** or **Busy Out**.
- 3 On the RealPresence Collaboration Server and RealPresence DMA system, verify that all conferences (including permanent/recurrent conferences) targeted to the MCU being upgrade are terminated.
- 4 At the **RMX Manager**, click **Administration > Software Management > Software Download**.
- 5 Browse to the location where you saved the `.upg` file and click **Install**.
- 6 Download the `.upg` file from the Polycom Support Site.
- 7 When the files have copied successfully, click **OK**.

The upgrade procedure takes approximately 20 minutes. During this time the **Install Software** information box indicates that Software Loading is in progress and a series of Active Alarms display, indicating the progress of the upgrade process.

- 8 Reset the MCU.
- 9 If the RealPresence Collaboration Server was integrated with a RealPresence DMA system, re-establish the connection.  
To do this, on the RealPresence DMA system, edit the **Network > MCU > MCUs** connection, select the MCU, and choose **Start Using**.

## Verify the RealPresence Collaboration Server Configuration After the Upgrade

After upgrading the RealPresence Collaboration Server, you may need to reset some server configuration items.

### To verify the RealPresence Collaboration Server configuration after the upgrade:

- 1 Verify that the version number on the Welcome page is updated, signifying that the upgrade is complete.
- 2 Install the RMX Manager software that is part of the RealPresence Collaboration Server 8.9.1 release.
- 3 Reschedule any permanent conferences that were terminated before the upgrade.
- 4 Check **IVR Services** to ensure that changed or additional DTMF codes do not conflict with previously defined DTMF codes.
- 5 After an upgrade, the **Enable Gathering** check box is selected by default for pre-existing Profiles. To disable it for those profiles go to **Profile Properties > Gathering Settings**.

- **SIP Proxy Registration** is configured in the **Conference Profile > Network Services** dialog beginning with version 7.1.
- **Media Encryption** is enabled by a Conference Profile setting from version V7.6.1, replacing the **ALLOW\_NON\_ENCRYPT\_PARTY\_IN\_ENCRYPT\_CONF** System Flag. Modified the profile to meet your environment's encryption requirements.
- **Automatic Muting of Noisy AVC-based Endpoints** is not automatically enabled in existing Profiles and has to be manually enabled, if required. In new Profiles that are created after the upgrade, auto mute of noisy endpoints option is enabled by default.
- **RealPresence DMA** system in the environment requires that the value of the flag **MAX\_CONF\_PASSWORD\_REPEATED\_CHAR** System Flag value be set to 4 system for compatibility from version 7.7.

## Known Issues

The following table lists known issues and suggested workarounds for RealPresence Collaboration Server 8.9.1.



These release notes do not provide a complete listing of all known issues that are included in the software. Issues not expected to significantly impact customers with standard video conferencing environments may not be included. In addition, the information in these release notes is provided as-is at the time of release and is subject to change without notice.

Issue ID	Description	Workaround
EN-194486	If a Poly Trio joins a conference as an audio-only participant, and then it turns on the video, it receives a black screen if a far end shares content.	Use Poly Trio in video-enabled mode to join a conference.
EN-190644	(Internet Explorer only) When a user can't add a mixed mode profile with <b>RPCSVE_ENHANCE_CAPACITY</b> flag set to <b>YES</b> , RMX Manager displays a pop-up with an error code instead of a text error message.	Use the RMX Manager application, instead of the RealPresence Collaboration Server Web Client with Internet Explorer.
EN-187679	During multiple content sharing and snatching scenario, occasionally, the Virtual Edition reboots with vComposer core.	None.
EN-181108	A standard restore on the Virtual Edition doesn't delete the address book entries as expected.	None.
EN-181107	Intermittently, RMX Manager fails to display all notifications when set to <b>Enable All Notifications</b> .	None.
EN-169711	The <b>System Information</b> tab on RMX Manager displays incomplete or wrong information for HD size and BIOS version.	None.

Issue ID	Description	Workaround
EN-186936	In 512 Kbps conferences, RealPresence Desktop endpoints display call speed as 576 Kbps after they join the call via VEQ to VMR.	None.
EN-194096	Muted WebRTC clients with latest version of Chrome are intermittently highlighted as the active speaker in the conference.	None.

### Known Limitations

Description	Workaround
If a conference exceeds 180 participants and H.264 content is shared, the MCU may appear unresponsive as it renegotiates the rate for all users. The RealPresence DMA system will interpret this unresponsiveness as an MCU outage and begin a fail over sequence.	Polycom recommends Use Cascading for Size for large conferences.
When using Polycom Trio version 5.4.4 and RealPresence Collaboration Server 1800 version 8.7.3, you may experience the following video connection issue: When Polycom Trio dials in/out to an AVC conference on RealPresence Collaboration Server 1800, no video is seen on Polycom Trio, if it is set to use 1080p resolution. Instead only splash screen is observed.	None.
When using Skype for Business 2015 client on a Microsoft Surface (x86) to join a meeting and receive content, your Skype for Business 2015 client may crash.	To fix the issue, install the <a href="#">February 7, 2017, update (KB3141501)</a> for Skype for Business 2016. For more information, see <a href="https://support.microsoft.com/en-gb/help/4010281/the-long-term-fix-for-skype-for-business-2016-crashes-when-you-receive-a-content-from-a-third-party-rdp-implementation">https://support.microsoft.com/en-gb/help/4010281/the-long-term-fix-for-skype-for-business-2016-crashes-when-you-receive-a-content-from-a-third-party-rdp-implementation</a>
When the system configuration flag LAN_REDNDANCY is set to 'YES' for RealPresence Collaboration Server 1800, and every time when the interface reaches more than 10 Mbps, an alarm is raised on the RealPresence Platform Director informing that "40% of the network capacity has reached". Even maximum speed of interface is 100 Mbps.	None.
RealPresence Collaboration Server doesn't support multicast packets. Please configure your network so as to avoid sending any multicast traffic to RealPresence Collaboration Server.	None.

## Resolved Issues

The following table lists the issues resolved in this release of the RealPresence Collaboration Server.

### Issues Resolved in Version 8.9.1

Key	Summary
EN-191838	The Virtual Edition can't decode the incoming video from Cisco 8845 because it uses H.264 high profile with weighted prediction.
EN-189124	RealPresence Collaboration Server 1800 reboots after 35 hours running <b>SRTP_nonEncrypted_AV_2cps_20partic._Connect/Disconnect_75%</b> load with 1% packet loss.
EN-186365	RealPresence Collaboration Server 1800 stops responding due to media recovery.
EN-185704	RealPresence Collaboration Server doesn't use DNS resolved gatekeeper addresses to send GRQ. Instead, it sends GRQ to the original stored IP address.
EN-184881	If you <b>Enable RDP Content</b> and set <b>H.264 Cascade Optimize</b> from the content protocol drop-down menu and save the profile, it shows only the <b>H.264 HD</b> option.
EN-183724	The alert message <b>System did not shut down properly</b> shows each time a RealPresence Collaboration Server system restarts.
EN-183588	Parties can't dial out due to a large connection delay introduced by RealPresence Collaboration Server 1800.
EN-181760	Many endpoints disconnect from a conference with the disconnection cause <b>MCU internal problem</b> .
EN-181560	After you add a SIP dialout participant to a RealPresence Collaboration Server conference and the participant attempts to dial out, RealPresence Collaboration Server truncates the dial prefix.
EN-181532	Software installation fails when you try to upgrade the RealPresence Collaboration Server from version 8.9.0 to 8.9.0.1. The failure cause is not enough free space available in RealPresence Collaboration Server 1800. Fix is applicable only when you upgrade from 8.9.1 to a later version.
EN-181148	During a SIP dial-out from RealPresence Collaboration Server, the URI of the endpoint changes from the domain name to the IP address, which affects further redialing of the endpoint.
EN-180606	All Conferences on RealPresence Collaboration Server drop and can't reconnect until you reboot RealPresence Collaboration Server.
EN-180598	The ConfParty core causes RealPresence Collaboration Server to reboot.
EN-179432	You can observe the McuMngr core after you reboot RealPresence Collaboration Server 1800.
EN-179043	In a reserved meeting, the defined participant layout changes to Auto after a dial-out failure.
EN-178305	Polycom ContentConnect gateway drops from the conference due to high CPU usage on RealPresence Collaboration Server.
EN-176775	RealPresence Collaboration Server doesn't respond to the PresentationTokenRequest and causes content sharing failure.

Key	Summary
EN-176333	RealPresence Collaboration Server randomly reboots due to a IpMediaRtpHandle core dump.
EN-173016	RealPresence Collaboration Server 2000 unexpectedly reboots and you can observe a core due to a Segmentation fault.
EN-171787	The media card reboots due to FPGA errors.
EN-171106	After a media recovery, multiple AMP-AmpAHEnc cores cause RealPresence Collaboration Server to reboot.
EN-168269	After you select a lecturer and then close the <b>Meeting Room Properties</b> window, your change isn't saved.
EN-167747	RealPresence Collaboration Server can't resolve the far end FQDN due to incorrect parsing of the DNS agent.
EN-167205	Participants can't get an FECC token because RealPresence Collaboration Server rejects multiple FECC requests.
EN-165424	Softblades disconnect in the middle of a conference, causing the content disconnection.
EN-165269	Cisco endpoints disconnect from RealConnect conferences due to incorrect handling of ICE related flags.
EN-165240	Audio participants drop 15 minutes after they dial through an external SIP peer audio service, which then lands the audio call to the RealPresence Collaboration Server bridge.
EN-164576	The ConfParty core dump causes RealPresence Collaboration Server to reboot.
EN-164538	Multiple Logger cores and ICE manager cores cause RealPresence Collaboration Server to reboot.
EN-163598	An SNMP task core causes RealPresence Collaboration Server reboot.
EN-163232	Participant names spellings are incorrect in the <b>Log Collection</b> tab.
EN-162299	After rebooting RMX, a SUPPORT user can't open RealPresence Collaboration Server through RMX Manager. Only the POLYCOM user can access it.
EN-161908	AVMCU connection changes to the idle state and conferences fail to start on RealPresence Collaboration Server 1800.
EN-161889	RealPresence Collaboration Server rejects calls from Cisco endpoints with a 500 Internal Error.
EN-160266	The bit rate of the people video channel doesn't increase to the expected rate even after you stop the content.
EN-160192	The address book disappears from RMX Manager after you factory restore the Virtual Edition.
EN-159652	New conferences can't complete the connection to dialout participants on RealPresence Collaboration Server 1800.
EN-159182	IpMediaRtpHandl core observed on the Virtual Edition that leads to media recovery alarms causes RealPresence Collaboration Server to reboot.
EN-157964	The <b>Advanced</b> information under the <b>System Information</b> tab isn't visible in RMX Manager.

Key	Summary
EN-156706	After you add participants to meeting rooms in RealPresence Collaboration Server, RealPresence Collaboration Server doesn't display them after you close the <b>Meeting Room Properties</b> tab.
EN-155370	McuMngr core observed, causing RealPresence Collaboration Server to reboot.
EN-153822	Multiple conferences disconnect on RealPresence Collaboration Server due to core dumps in the rtcpreceive code leg on the media card.
EN-149893	If you place an H.323 call with Life Size, Cisco, or ISFlex into a <b>TIP enabled</b> conference, the call fails if you use a line rate other than 1 Mbps or 6 Mbps.
EN-146092	If you disconnect few participants from a CP/AVC conference, the wrong participant count displays on the endpoints for a duration of 30 to 60 seconds. After this time, participant count displays correctly.
EN-145365	If you use two computers to log in to RMX Manager at the same time and add contacts to the address book, changes aren't synchronized between these two computers.
EN-142433	Trio systems can't share content after you upgrade a call from Audio to Video.
EN-142242	You can see video from one conference in another conference (video bleed) because these two conferences use the same video decoder buffer at that time.
EN-124827	RealPresence Collaboration Server 1800 can't accept new H.323 calls occasionally on the LAN 2 interface.
EN-69865	In a CAA (call auto attendance) Audio-Only conference, the participant count for the first audio-only Microsoft Skype for Business participant displays incorrectly on Poly endpoints.
EN-69347	A RealPresence Debut system may not receive video if it dials into a <b>Prefer TIP</b> VMR after a Cisco DX80.

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