

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

Polycom announces the release of the Polycom® RealPresence® Collaboration Server 8.8 software. This document provides the latest information about this release.

## Contents

[What's New in this Release](#)

[Automatically Send Usage Data](#)

[Security Updates](#)

[Products Tested with this Release](#)

[Upgrade Information for the RealPresence Collaboration Server](#)

[Upgrade a RealPresence Collaboration Server 1800/2000/4000](#)

[Upgrade a RealPresence Collaboration Server, Virtual Edition](#)

[Verify the RealPresence Collaboration Server Configuration After the Upgrade](#)

[Known Issues](#)

[Known Limitations](#)

[Resolved Issues](#)

[Copyright and Trademark Information](#)

## What's New in this Release

RealPresence Collaboration Server 8.8 includes the features and functionality of previous releases, the software fixes identified in [Resolved Issues](#) section, and the following new features:

- [Enhanced Support for TIP Endpoints](#)
- [Increased Port Capacity for RealPresence Collaboration Server, VE](#)
- [New Telepresence Layout View](#)
- [Custom Logo Displayed in Conference](#)
- [Increase Maximum Number of Conference Participants](#)
- [Increase Maximum Number of Characters in a Message Overlay](#)

### *Enhanced Support for TIP Endpoints*

This release of the RealPresence Collaboration Server includes two new enhancements for TIP telepresence endpoints.

- The RealPresence Collaboration Server now supports version 8 of Telepresence Interoperability Protocol (TIP), which allows TIP endpoints to receive content at higher resolutions using the Binary Floor Control Protocol (BFCP). BFCP enables endpoints to provide users better coordinated access to conferencing resources.
- Support for transcoding (sending and receiving) content in a TIP virtual meeting room (VMR), so that all TIP endpoints reserve the bandwidth required for the selected resolution and rate.

The TIP encoder supports the following resolutions:

- XGA 5fps @512K
- 720p5 @768K
- 1080p5 @1Mbps
- 720p30 @2.25Mbps
- 1080p30@4Mbps

The TIP encoder works at one of the above resolutions only. Any TIP endpoint not supporting the selected rate and resolution is unable to receive the content.

TIP endpoints marked as legacy receive content when the **Send Content to Legacy Endpoints** check box is selected, but the endpoints don't have the required capabilities to meet content threshold in a TIP VMR conference.

### *Increased Port Capacity for RealPresence Collaboration Server, VE*

This release of the RealPresence Collaboration Server, Virtual Edition has an increased port capacity that can accommodate more calls on the same virtual machine configuration.

Enable this capacity increase by setting the `RPCSVE_ENHANCE_CAPACITY` system flag to YES. When enabled, the RealPresence Collaboration Server supports only AVC-only or SVC-only conferences; the system rejects all mixed-mode conferences.

## ***New Telepresence Layout View***

This release of the RealPresence Collaboration Server supports a new telepresence layout view with the following properties:

- It shows the active speaker (regardless of the participant's location) in the middle screen. All other participant rooms (zoomed out) are displayed in grid view in either the left or right screen.
- It displays a maximum of 20 rooms/endpoints on left and right screen each (in 5x4 grid view).
- To include all participants present in single cell, OTX endpoints send single stream (zoomed out to cover whole room) to the RealPresence Collaboration Server. Then, the MCU sends three streams to OTX endpoints.
- RealPresence Collaboration Server automatically switches layouts as and when participants leave/join conferences.

## ***Custom Logo Displayed in Conference***

Organizations can upload a custom logo image through the RMX Manager that the RealPresence Collaboration Server then displays to participants during conferences. Image files must be of type .jpg, .jpeg or .bmp and must be 1 MB or smaller.

## ***Increase Maximum Number of Conference Participants***

This release of the RealPresence Collaboration Server increases the maximum number of conference participants allowed in a conference to 180 participants. You can change the maximum number of conference participants in an active conference using the RealPresence Collaboration Server API.

## ***Increase Maximum Number of Characters in a Message Overlay***

This release of the RealPresence Collaboration Server increases the maximum number of characters allowed in a message overlay to 120 characters.

## ***Additional Changes in This Release***

This release also includes several smaller feature enhancements as documented in this section.

### **RealPresence Clariti License**

When licensed as part of Polycom® RealPresence Clariti™, the RealPresence Collaboration Server version 8.8 and above will only work with the RealPresence DMA system version 10.0 and above, and it will block incoming and outgoing SIP and H.323 calls that are not routed through the RealPresence DMA system with the following exceptions:

- Dial-in and Dial-out participant PSTN/ISDN calls
- RealConnect calls

- Cascading link calls
- Recording link calls
- Calls involving MMCU (SoftBlade)

This means the following types of calls will fail in a RealPresence Clariti licensing environment:

- Calls routed directly to RMX will be rejected with error code 6060
- Inbound calls from alternate SIP registrar
- Direct meeting room calls and entry queues (EQ)/meeting room (MR) calls
- MCU prefix-based calls
- RMX SIP Trunk calls

This list identifies some examples only; it is not all inclusive.

Note that Virtual Entry Queues (VEQ) hosted on the RMX are allowed while in Clariti licensing mode.

## Administrator Message on Content Stream

Previously the RealPresence Collaboration Server allowed the administrator to send messages to conference participants through the video stream, but for some endpoint types the message was small and unreadable.

This capability has now been enhanced so that administrator messages can be sent through both the video stream and the content stream and hence are more readable.

## Free Talking Conference View

This release of the RealPresence Collaboration Server enables a free discussion conference view with an assigned chairperson

- If there is no active speaker or if the chairperson is the active speaker, then the chairperson's view cycles through a display of the other participants, while the other participants view the chairperson in full screen.
- If a participant other than chairperson is the active speaker, then the active speaker views the chairperson in full screen and the other participants (including chairperson) view the active speaker.

## .NET Upgrade

This release of the RealPresence Collaboration Server includes an upgrade to .NET 4.7. For more information about .NET 4.7 see [What's new in the .NET Framework](#).

## RealPresence Collaboration Server Documentation Changes

To provide more usable, concise, and task-based administrator documentation, the Polycom technical communication organization moved the more technical, engineering- and support -oriented content from the *Polycom RealPresence Collaboration Server Administrators Guide* into the newly created *Polycom RealPresence Collaboration Server Reference Guide*. This change also paves the way to including the RealPresence Collaboration Server content on the new [Polycom Documentation Library](#).

## System Capabilities and Constraints

This section provides information about the RealPresence Collaboration Server system 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	✓	✓	✗

Features	CP Only	Mixed CP & SVC	SVC Only
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	✓	✗	✗

## ***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 of any kind by Polycom.

### **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]
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



## Conferencing Feature Capacities

System Functions	Benchmark System Capacity
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)	0.78	7	228	12	384
SVC 720p30	1.5	5	160	7	228
SVC 1080p30	1.5	5	160	5	160
TIP 720p30		1	30	1	30
WebRTC VGA/SD			20		20

**\* Non-Linear License Entitlement: The license ratio degrades when the maximum resource limit is reached.**

**Base License Ratio: The ratio between the purchased licenses and their consumption by the various Resource Types.**

**Maximum Capacity: The maximum capacity per Resource Type for a Benchmark System.**

The following table lists RealPresence Collaboration Server, Virtual Edition capacities on different reference platforms:

**Resource Capacity in Non-Mixed and Mixed Modes by Platform and License Mode (RealPresence Clariti/[a-la-carte])**

Port Type	RealPresence Collaboration Server Virtual Edition									
	Non-Mixed Mode					Mixed Mode				
	Quad AMD Opteron 6380 @ 2.5GHz 64 Cores	Dual E5-2690@2.9 Ghz 48 cores 64 GB	Dual E5-2690@2.9 Ghz 32 cores 32 GB	Dual E5-2690@2.9Ghz 24cores 24 GB	Dual E5-2690@2.9Ghz 8 cores 8 GB	Quad AMD Opteron 6380 @ 2.5GHz 64 Cores	Dual E5-2690@2.9 Ghz 48 cores 64 GB	Dual E5-2690@2.9Ghz 32 cores 32 GB	Dual E5-2690@2.9 Ghz 24cores 24 GB	Dual E5-2690@2.9 Ghz 8 cores 8 GB
AVC 1080p60	8	14	10	8	2	8	14	10	10	2
AVC 1080p30	16	21	16	12	3	16	21	15	12	3
AVC 720p30	33	42	32	24	7	33	42	32	24	7
AVC SDp30	66	84	64	48	14	66	84	64	48	14
AVC ClFp30	66	84	64	48	14	66	84	64	48	14
Audio	396	504	384	288	84	300	300	228	172	50
SVC (& SAC) 720p30	300 [165]	300 [300]	228 [228]	168 [168]	50 [50]	210 [165]	210 [210]	160 [160]	120 [120]	35 [35]
1080 SVC (&SAC)	310 [165]	210 [210]	160 [160]	120 [120]	35 [35]	210 [165]	210 [210]	160 [160]	120 [120]	35 [35]
WebRTC VGA/SD	22	28	20	10	5	22	28	20	10	5
Numbers in square brackets denote a-la-carte licensing mode while all others denote RealPresence Clariti licensing mode.										

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

	Non Mixed Mode			
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 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 ClFp30	110	84	62	18
Audio	598	504	372	109
SVC (& SAC) 720p30	300 [300]	300 [300]	221 [221]	65 [65]
1080 SVC (& SAC)	275 [275]	210 [210]	155 [155]	45 [45]

**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	1	33
	AVC 1080p30	15	50	5	7	50
	AVC 720p30	30	100	10	35	100
	AVC SDp30	60	200	20	70	200
	AVC ClFp30	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 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

## Automatically Send Usage Data

Beginning with Release 8.8, changes to any licensing parameter other than **Automatically Send Usage Data** (which is used for RMX Analytics) for RealPresence Collaboration Server, Virtual Edition is applied only after the MCU is restarted. In this case, the RMX Manager displays a message notifying the user that the MCU must be restarted.

## 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	Soft Blade
Apache	2.4.33	2.4.33	2.4.33	N/A
OpenSSL	1.0.2o	1.0.2o	1.0.2o	1.0.2o
NTP	4.2.8p11	4.2.8p11	4.2.6p5	4.2.6p5

For RealPresence Collaboration Server, Virtual Edition and Soft Blade, the CentOS version has been upgraded to 6.9.



**NOTE:** Soft Blade running CentOS version 6.9 requires approximately 15-18 minutes for initial synchronization with the MCU (during startup) and coming to 'Ready' state.

## Products Tested with this Release

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



Polycom recommends you upgrade all Polycom systems to the most current software to ensure that an issue has not already been addressed by recent software updates before reporting issues to Polycom Support.

Go to [http://support.polycom.com/PolycomService/support/us/support/service\\_policies.html](http://support.polycom.com/PolycomService/support/us/support/service_policies.html) to find the Current Polycom Interop Matrix.

Device	RMX 1800	RMX 2000/4000	Virtual Edition
<b>Gatekeepers/Proxies</b>			
Polycom® RealPresence® Resource Manager	10.4.0	10.4.0	10.4.0
Polycom® RealPresence® DMA® 7000	10.0.0_Build_7267	10.0.0_Build_7267	10.0.0_Build_7267
Polycom® RealPresence® DMA®, Virtual Edition	10.0.0_Build_7667	10.0.0_Build_7667	10.0.0_Build_7667
Polycom® RealPresence® DMA®, Hyper-V	10.0.0_Build_7667	10.0.0_Build_7667	10.0.0_Build_7667
Polycom ISDN Gateway	2.0.0.38	2.0.0.38	2.0.0.38
Polycom® RealPresence® Access Director™	4.2.5_P2_build_24 6990	4.2.5_P2_build_24 6990	4.2.5_P2_build_24 6990
Polycom® RealPresence® Web Suite Services Portal	-	-	2.2.1
Polycom® RealPresence® Web Suite Experience Portal	-	-	2.2.1
Polycom® Work Flow Server (OTD)	1.6.1	1.6.1	1.6.1

Device	RMX 1800	RMX 2000/4000	Virtual Edition
Microsoft Lync 2013 server	5.0.8308.1001	5.0.8308.1001	5.0.8308.1001
Microsoft Skype for Business Server 2015 (volume license key installed)	6.0.9319.516	6.0.9319.516	6.0.9319.516
Microsoft Exchange 2016	15.1(Build-1466.3)	15.1(Build-1466.3)	15.1(Build-1466.3)
<b>Recorders</b>			
Polycom® RealPresence® Media Suite Virtual Edition	2.8.2.0_32109	2.8.2.0_32109	2.8.2.0_32109
<b>MCUs, Call Managers Network Devices and Add-ins</b>			
Polycom® ContentConnect™ Server	1.6.2	1.6.2	1.6.2
Polycom® Multipoint Layout Application (MLA)	3.1.5.0	3.1.5.0	3.1.5.0
Cisco Unified Communications Manager	12.0(1)	12.0(1)	12.0(1)
Cisco TelePresence Video Communication Server	8.8.1	8.8.1	8.8.1
<b>Virtual Machines for RealPresence Collaboration Server VE Deployment</b>			
VMWare vSphere (vCenter) Client	-	-	6.5, 6.0
<b>Endpoints</b>			
Polycom® HDX®	3.1.12	3.1.12	3.1.12
Polycom® RealPresence® Group Series	6.1.8-430297	6.1.8-430297	6.1.8-430297
Polycom® RealPresence® Mobile for Apple® iOS	3.9.0	3.9.0	3.9.0
Polycom® RealPresence® Mobile for Android™	3.9.0	3.9.0	3.9.0
Polycom® RealPresence® Desktop for Windows®	3.9.0	3.9.0	3.9.0
Polycom® RealPresence® Desktop for Mac®	3.9.0	3.9.0	3.9.0
Polycom RealPresence Centro	6.1.8	6.1.8	6.1.8
Polycom RealPresence Immersive Studio	6.1.8	6.1.8	6.1.8
Polycom RealPresence Immersive Studio Flex	6.1.8	6.1.8	6.1.8
Polycom® Pano™	1.1.1	1.1.1	1.1.1
Polycom® Pano™ App	1.1.0	1.1.0	1.1.0
Polycom® VVX® 1500	4.0.1.13681	4.0.1.13681	4.0.1.13681
Polycom® RealPresence Debut	1.3.2	1.3.2	1.3.2
Polycom® Trio 8500	5.7.1	5.7.1	5.7.1

Device	RMX 1800	RMX 2000/4000	Virtual Edition
Polycom® Trio 8800	5.7.1	5.7.1	5.7.1
Polycom VVX UCS	5.8.0	5.8.0	5.8.0
Polycom® Touch Control (for use with RealPresence Group Series)	2.1.8	2.1.8	2.1.8
Polycom® RealPresence Touch	2.1.8	2.1.8	2.1.8
Polycom® CX5500	1.3.4	1.3.4	1.3.4
Avaya Scopia® XT5000	08.03.07.0051 V8_3_7_51	08.03.07.0051 V8_3_7_51	08.03.07.0051 V8_3_7_51
Cisco TelePresence System EX90	TC7.3.12	TC7.3.12	TC7.3.12
Cisco TelePresence SX10	CE9.2.4	CE9.2.4	CE9.2.4
Cisco TelePresence SX20	CE9.2.4	CE9.2.4	CE9.2.4
Cisco TelePresence SX80	CE9.2.4	CE9.2.4	CE9.2.4
Cisco MX300 G2	CE9.2.4	CE9.2.4	CE9.2.4
Cisco TelePresence TX9000	6.1.13	6.1.13	6.1.13
Cisco TelePresence TX1310	6.1.13	6.1.13	6.1.13
Cisco TelePresence System 500-32	6.1.12	6.1.12	6.1.12
Cisco TelePresence IX5000	8.1.1.1 and 8.3.1.1	8.1.1.1 and 8.3.1.1	8.1.1.1 and 8.3.1.1
Cisco DX70 / DX650	SIP10.2.5 and CE9.2.4	SIP10.2.5 and CE9.2.4	SIP10.2.5 and CE9.2.4
Cisco DX80	CE9.2.4	CE9.2.4	CE9.2.4
LifeSize Icon 600	LS_RM3_2.9.0 (1982)	LS_RM3_2.9.0 (1982)	LS_RM3_2.9.0 (1982)
LifeSize Express 220	LS_EX2_5.0.9(2)	LS_EX2_5.0.9(2)	LS_EX2_5.0.9(2)
Microsoft Lync 2013 client with Skype UI	15.0.5023.1000	15.0.5023.1000	15.0.5023.1000
Microsoft Skype for Business 2016	16.0.10228.20080	16.0.10228.20080	16.0.10228.20080
Microsoft Lync 2015 client	15.0.5071.1000	15.0.5071.1000	15.0.5071.1000
Microsoft Lync 2010 client	15.0.4420.1017	15.0.4420.1017	15.0.4420.1017
Microsoft Skype for Business MAC Client	16.13.182	16.13.182	16.13.182
Microsoft Skype for Business Client (Android)	6.21.0.12	6.21.0.12	6.21.0.12
Microsoft Skype for Business Mobile Client (iOS-Tablet)	6.20.2.2	6.20.2.2	6.20.2.2

Device	RMX 1800	RMX 2000/4000	Virtual Edition
Microsoft Lync MAC Client	16.17.65	16.17.65	16.17.65
Microsoft Hyper-V	-	-	Windows Server 2016 (10.0.14393.0)  Windows Server 2012R2 (6.3.9600.17238)

## Upgrade 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 8.8 software upgrade package includes:

- The RealPresence Collaboration Server (RMX) 8.8 software (\*.bin)
- The RealPresence Collaboration Server, Virtual Edition 8.8 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 8.8 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 8.8 Release Notes

The RMX API Kit Version 8.8 includes:

- RealPresence Collaboration Server API Version 8.8 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 8.8:

- 8.7.5
- 8.7.4
- 8.5.13

## ***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 8.8.
- 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 8.8.
- 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**

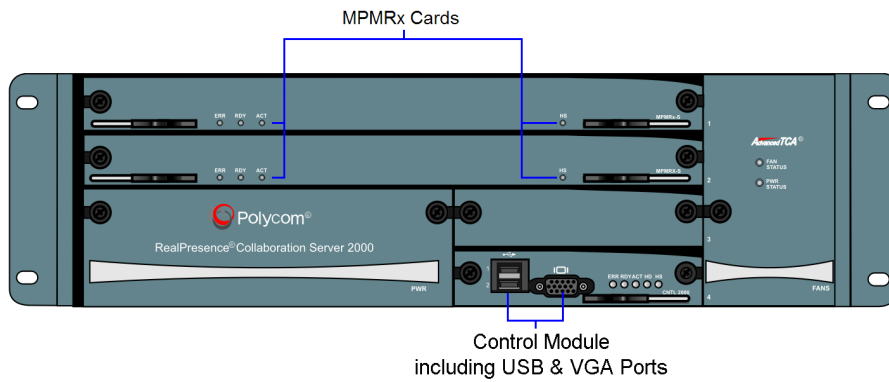
The following upgrade information relates to RealPresence Collaboration Server 1800/2000/4000 models only.

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

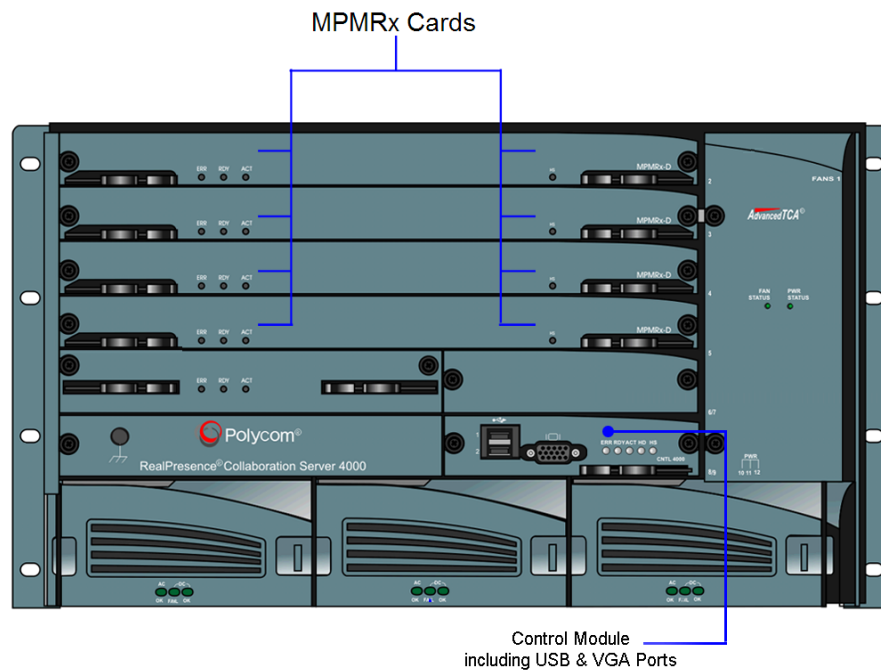
Because of hardware constraints, the RealPresence Collaboration Server (RMX) 2000/4000 is only compatible with specific software versions.

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 8.8 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 8.8.
- 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 8.8 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 all known issues and suggested workarounds for RealPresence Collaboration Server 8.8.



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.

Category	Issue ID	Description	Workaround
	EN-105596	In RealPresence Collaboration Server Soft Blade, after the software upgrade EMA displays the blades port count as Zero even if the blades are in Ready state. Also the port count of SoftMCU is shown as Zero even if the MCU becomes operational after startup.	Always click once anywhere on the EMA UI in order to correctly refresh the port count of RealPresence Collaboration Server Soft Blade and SoftMCU
API	EN-104254	If the system flag POLYCOM_EPS_DISPLAY_NAME_PREFIX_IN_LYN C_ROSTER is set to Empty, it does not take effect until the RealPresence Collaboration Server is reset.	None
Conference Management	EN-104432	In a mixed mode conference, RealPresence Collaboration Server sends only AES_128 crypto suite to RealPresence Group Series/Debut (SVC endpoint) when they join from VEQ to VMR.	None
Conference Management	EN-96090	In a cascade for size/bandwidth conference, cascade link remains in "Connected with problem" in mixed mode with all SVC endpoints.	None

Category	Issue ID	Description	Workaround
Conference Management	EN-94362	An 'Unhandled Exception' gets displayed on RMX Web Manager while importing a conference template.	None
Content	EN-93737	Not able to share content further after sharing and snatching the content multiple times in a Conference and RealPresence Collaboration Server H.323 endpoint experiences content freeze.	None
Content	EN-93254	In a Prefer TIP conference, when a RealPresence Collaboration Server H.263 endpoint snatches content from other endpoints connected to a Virtual Meeting Room, they receive black content.	None
Interoperability	EN-96692	In a conference call with Microsoft Lync and Polycom endpoints, Polycom endpoints experience stretching in site name and Message overlay when content is shared from Microsoft Lync endpoint with 512 Kbps line rate.	None
Interoperability	EN-95335	Slave RealPresence Collaboration Server endpoint joining a cascade conference experience distorted video.	None
Interoperability	EN-90857	In a conference call on RealPresence Collaboration Server 1800, endpoints receive empty message overlay text (containing Chinese, Russian and special characters) after starting and stopping content sharing multiple times.	None
Interoperability	EN-90487	Keeping the Portrait mode for Skype for Business Android endpoint causes distorted video in Polycom RealConnect conference.	None
Interoperability	EN-88474	In DMA VMR conference, after one day of load test on SoftMCU one of the Skype for Business endpoint doesn't receive video.	None
Interoperability	EN-82071	Intermittently, HDX (H263) endpoint experiences black stripes on layout.	None
Interoperability	EN-68490	In a cascade conference between RealPresence Collaboration Server 8.5 and 8.8, Tx/Rx rate in slave cascade link occasionally shows less than the line rate.	None
Video	EN-96362	In a RealPresence DMA System Virtual Meeting Room conference, content is not displayed on Cisco endpoints when an Avaya XT5000 endpoint tries to share content after one hour.	None
Video	EN-70537	In a master MCU conference with slave endpoint, the master endpoint shows loopback video of active speaker on cascade cell when participants of slave are waiting for chairperson to join.	None

## Known Limitations

The following table lists limitations and suggested workarounds for RealPresence Collaboration Server 8.8.

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.	
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.	

## Resolved Issues

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

### Issues Resolved in Version 8.8

Category	Issue ID	Description
	BRIDGE-27389	RealPresence Collaboration Server identifies MPMRx cards with hardware version 1.11 as 101.
	EN-68981	The Audio codec (Siren7) received at the TIP room system is not part of supported audio codecs on the Cisco TX9000.
	EN-69005	Rarely in a WebRTC conference, audio bleeds from one conference to another during conferences lasting longer than two hours.



Category	Issue ID	Description
	EN-69086	In RealPresence Collaboration Server 1800, logger receives several messages of ICE-related errors. The server experiences high CPU usage and generates core dump error.
	EN-69127	RMX2000 with MPMx-D cards stopped accepting new calls until the system was rebooted.
	EN-69178	The layout CP_LAYOUT_1X2HOR is not displayed in the PREDEFINED_AUTO_LAYOUT flag due to incorrect layout string comparison.
	EN-69194	Calls to a DMA system virtual meeting room (VMR) are rejected by the RMX system with a "No bandwidth" message.
Alert Management	BRIDGE-26788	RealPresence Collaboration Server experiences MAJOR alarm even after restoring power on all power supplies
Alert Management	EN-69011	After upgrading to 8.7.1, the RealPresence Collaboration Server 1800 reports a high CPU utilization alarm.
Alert Management	EN-69023	RealPresence Collaboration Server experiences MIP and ACK failures.
Alert Management	EN-69036	Moving endpoints from different conferences causes frequent alerts of media recovery.
Alert Management	EN-69072	The RealPresence Collaboration Server experiences the alarm "TLS handshake failure. RMX certificate failure:Service name=IP default (cs id 1)".
Alert Management	EN-69098	RealPresence Collaboration Server MPMx-S card experiences major alarm with Power-off alert. This affects ongoing calls and prevents new call connections.
Alert Management	EN-69116	The RealPresence Collaboration Server experiences the alarm "Unit not respondingCardsCard ID:1, Card Type:mpm, Description: Unit Failure".
Alert Management	EN-88245	The RealPresence Collaboration Server experiences "No connection with Rtmlsdn" major alarm. A system reboot fixes it but the issue reoccurs regularly every 6 – 8 weeks.
Alert Management	EN-88685	The RealPresence Collaboration Server experiences major alarm faults and displays Ice Server unavailable error.
Alert Management	EN-89165	The RealPresence Collaboration Server 1800 creates the TipThread core dump.
Alert Management	EN-91455	RealPresence Collaboration Servers stuck with Ice Server unavailable error as major alarm in the fault files.
Alert Management	EN-91967	In a Microsoft Environment, enabling the MULTIPLE_SERVICE system flag causes the AVMCU to reject the service request with 403 response and raise an alarm.
Application	EN-69061	In RealPresence Collaboration Server 8.7.3, user is unable to add IVR Services on the first attempt when clicking on the green plus sign.

Category	Issue ID	Description
Application	EN-69112	RealPresence Collaboration Server Web UI and RMX Manager show incorrect LAN status.
Audio	EN-100500	During a Polycom RealConnect call, RealPresence Group Series endpoints hear a Welcome audio if all other AVMCU participants are in the lobby.
Audio	EN-69076	Calls entered manually through 'drag and drop' in the Reservation panel intermittently end earlier than expected.
Audio	EN-69081	On the RealPresence Collaboration Server 1800 system, the entry or exit of IVR tone bleeds from one conference to another.
Audio	EN-69197	Polycom RealConnect calls on RealPresence Collaboration Server periodically experience no video from RealPresence Collaboration Server to the AVMCU.
Audio	EN-69252	IVR welcome slides no longer work in an Entry Queue after a RealPresence Collaboration Server build upgrade.
Audio	EN-93143	In a RealPresence Collaboration Server 1800 conference, RealPresence Platform Manager experiences a loud noise after turning the volume to the maximum, even while all other endpoints are on mute.
Call Management	EN-68941	RealPresence Collaboration Server calls get stuck in the entry queue.
Call Management	EN-68953	RealPresence Group Series endpoint gets connected at 64 Kbps after performing hold and resume call in a RealPresence Collaboration Server 1800 meeting room.
Call Management	EN-68984	RealPresence Collaboration Server experiences error when handling NOTIFY request from AVMCU endpoint and the AVMCU endpoint isn't able to join the call.
Call Management	EN-69187	RealPresence Collaboration Server rejects calls with 603 error response.
Call Management	EN-69222	After H.323 endpoint receiving SIP 488 error response in a RealPresence DMA VMR call, the call fails.
Call Management	EN-69255	RealPresence Collaboration Servers fails to join the AVMCU conference unless the INVITE includes the 'Ms-Conversation-ID'.
Call Management	EN-69356	Unable to connect all 20 dial-out participants when dialing in a VMR conference.
Call Management	EN-69945	RealPresence DMA system registered endpoints experience no audio and video while trying to rejoin during a Polycom RealConnect call.
Call Management	EN-70067	Call gets disconnected with MCU internal problem when RealPresence Collaboration Server gets loaded with 20-25% load.
Call Management	EN-76789	In a scheduled conference, Polycom RealConnect call gets disconnected automatically after 30 minutes.
Call Management	EN-91458	MCU Internal Problem alert during an ongoing conference on RealPresence Collaboration Server causes endpoints to get disconnected.

Category	Issue ID	Description
Conference Management	EN-68945	In a RealPresence Collaboration Server conference call, the notification counters aren't able to display the right number of participants.
Conference Management	EN-68959	When joining a RealPresence Collaboration Server conference, the participants hear a clicking noise.
Conference Management	EN-68963	In a RealPresence Collaboration Server 2000 conference, the participant cannot be deleted when disconnecting status is displayed.
Conference Management	EN-69015	Chairperson conference mute and unmute codes don't work for existing participant but work for new participants.
Conference Management	EN-69020	In a conference call, logger reports segmentation faults and all SIP endpoints are disconnected.
Conference Management	EN-69029	When making a change to the time of the scheduled conference, the duration field is not re-calculated.
Conference Management	EN-69068	RealPresence Media Suite endpoint dials into a PIN protected conference without being prompted for a PIN.
Conference Management	EN-69146	Accessing conference properties of Reservation conference causes duration of conference to change automatically.
Conference Management	EN-69157	In a VMR conference, an endpoint is unable to join the conference if forty participants are already in it.
Conference Management	EN-69251	In a conference, the DTMF tone doesn't play for dial-out endpoint with an extension.
Conference Management	EN-91466	After a major error in RMX Manager, Polycom RealConnect and audio conferences on RealPresence Collaboration Server got disconnected and resumed after 10 minutes.
Conference Management	EN-96229	Avoid selective mix logging in empty conferences to prevent performance impact.
Configuration	EN-69121	RealPresence Collaboration Server doesn't save static route configuration whether applied via console or SSH.
Content	BRIDGE-25725	In a RealPresence Collaboration Server conference, Cisco Jabber application keeps sharing content, after few seconds it automatically shut downs its content and the Polycom endpoint can see a frozen content.
Content	BRIDGE-25796	In a RealPresence Collaboration Server, the request for "trans_party" API gives irregular replies.
Content	EN-69111	RealPresence Collaboration Server experiences frozen content during restart.
Content	EN-69132	In a conference call with Polycom HDX endpoints, disconnecting the HDX endpoint causes the content sharing to stop automatically.
Content	EN-69155	Content sharing fails in a RealPresence Collaboration Server 4000 meeting.
Content	EN-69214	In a Polycom RealConnect call, Polycom RealPresence Centro 6.0.0 endpoint doesn't receive content intermittently after the RealPresence Collaboration Server upgrade.

Category	Issue ID	Description
Content	EN-69240	RealPresence Collaboration Server gets disconnected from Cisco endpoints after trying to send content.
Content	EN-69254	On RealPresence Collaboration Server, audio bleed happens while sharing the content from the con-tent only participant.
Content	EN-70844	In a RealPresence Collaboration Server cascading conference, SIP content sharing fails.
Content	EN-84031	Only Skype for Business user is unable to send or receive content when shared is by non-Skype for Business users, but non-Skype for Business users can see it in a direct dial VMR conference using Soft Blade
Content	EN-91464	Content sharing issue with RealPresence Collaboration Server Soft Blade and AS_MCU_Party disconnects after 2.5 hours
Content	EN-91554	No participant in the VMR is able to share content after interrupted content sharing from Cisco SX20 endpoint.
Directories/Address Books	EN-69150	New participants added into RealPresence Collaboration Server Address Book and Main group are invisible.
Directories/Address Books	EN-84646	Chairperson and Operator users can modify the Address Book but as per RealPresence Collaboration Server Admin Guide, only administrator users can modify Address Book.
Endpoint Management	EN-82476	Intermittently in a conference, only Cisco endpoints cannot see the site names in the layout.
Endpoint Management	EN-93564	Endpoints fail to connect to RealPresence Collaboration Server with 500 error and eventually connect after multiple attempts with failure rate of 75%.
General	BRIDGE-23218	FECC does not work properly when connected to RealPresence Collaboration Server 1800 using HDX8000 and RealPresence Platform Director.
General	BRIDGE-25388	Core Dump file generated on RealPresence Collaboration Server (RMX). There was no reboot or call interference.
General	BRIDGE-25785	After a conference is launched on RealPresence Collaboration Server (RMX) 1800, dialing out to Polycom endpoints fails and "Insufficient resource" alarm displays.
General	BRIDGE-26272	RealPresence Collaboration Server (MPMRx) reports "No media resources are available" even with sufficient resources license. Rebooting the server fixes the issue.
General	BRIDGE-27343	RealPresence Collaboration Server 1800 reboots and resets to factory default after connecting to the customer's network.
General	BRIDGE-27488	Polycom RealConnect cascading links intermittently experience failure.
General	BRIDGE-27498	RealPresence Group Series version 6.1.2 randomly dials 2-3 times to establish a call to Realconnect VMR due to RealPresence Collaboration Server OLC rejects.

Category	Issue ID	Description
General	EN-101052	RealPresence Collaboration Server experiences high CPU usage alarms and server crash. This results in loss of access and call failures.
General	EN-101238	In a multiparty call, the site name gets refreshed whenever the active speaker changes.
General	EN-68934	RealPresence Collaboration Server reboots with the message 'Internal MCU restMcmsDaemon reset due to Watch Dog policy decision: ConfParty Core dump'.
General	EN-68950	RealPresence Collaboration Server consumes all the space of the root partition with the logs under /opt/mcu/var/log/trace.
General	EN-68951	Recovery database experiences memory corruption for DSP cards and causes card crash and reboot of the system.
General	EN-68952	RealPresence Collaboration Server reboots once during the meeting.
General	EN-68973	Loading AVC calls on RealPresence Collaboration Server causes MPMRx card crash.
General	EN-68983	When some DSP cards reach FATAL state, the media cards get stuck in startup state and MPMRx-S card receives the "No usable unit for audio controller" error.
General	EN-68986	When RealPresence Collaboration Server 1800 connected through RMX Manager starts to ping after a soft reboot, it gets an error.
General	EN-68996	RealPresence Collaboration Server 4000 conferences get terminated unexpectedly.
General	EN-69016	Intermittently, RealPresence Collaboration Server Virtual Edition starts to run out of disk space on the lv_root partition due to logging.
General	EN-69024	In a TIP conference call on RealPresence Collaboration Server with MPMRx card, processing of negative ACK packets causes the card to reboot.
General	EN-69025	RealPresence Collaboration Server doesn't display its serial number and activation number after it is added to RealPresence Resource Manager as a managed device.
General	EN-69026	RealPresence Collaboration Server becomes inaccessible after a reboot.
General	EN-69034	RealPresence Collaboration Server tears down SIP sessions (internal SIP flow problem).
General	EN-69065	In RealPresence Collaboration Server 2000, no calls get connected to due to SIP Task and confparty code dump.
General	EN-69077	RealPresence Collaboration Server rejects non-encrypted endpoints when the conference profile is set to 'Encryption when possible'.
General	EN-69090	The RealPresence Collaboration Server rebooted unexpectedly during a meeting due to Watch Dog policy decision. Core dump is generated.
General	EN-69101	In RealPresence Collaboration Server, ConfParty core dump occurs with no user disconnection or user impact.

Category	Issue ID	Description
General	EN-69104	The MPMRx media card reported a message alert 'API EmbError VAPGeneralMcmsCommonH Failed'. Rebooted the control board for recovery.
General	EN-69105	RealPresence Collaboration Server reboots with a message 'Internal MCU resetMcmsDaemonMcmsDaemon reset due to Watch Dog policy decision'. Process failure leads to call drop for participants.
General	EN-69109	The RealPresence Collaboration Server reboots unexpectedly during a meeting due to Watch Dog policy decision. Core dump is generated.
General	EN-69110	Layout alignment issue occurs in case of multiple Polycom RealPresence Immersive Studio systems present in a call.
General	EN-69122	In RealPresence Collaboration Server, auto layout feature doesn't work.
General	EN-69126	RealPresence Collaboration Server reboots unexpectedly during a video conference call.
General	EN-69133	Undocumented extension size limitation affects customer operations.
General	EN-69143	RealPresence Collaboration Server unexpectedly reboots due to confparty core dump.
General	EN-69144	After core dump is created, RealPresence Collaboration Server 1800 bridge doesn't take any calls.
General	EN-69162	After upgrading to RealPresence Collaboration Server 8.5.11.51, the statistics for packet number and packet loss is always 0 for the user participant properties.
General	EN-69176	MCU reboot is required when system reports "No media resources are available".
General	EN-69177	For multiple RealPresence Collaboration Server, H.323 endpoint alternate gatekeeper fails as the connection between RealPresence DMA and RealPresence Collaboration Servers is lost.
General	EN-69184	Core dump file gets created randomly and causes RealPresence Collaboration Server to reboot.
General	EN-69191	Site name and message overlay font sizes are smaller on RealPresence Collaboration Server 1800 systems with three DSP cards as compared to on RealPresence Collaboration Server 1800 systems without DSP cards.
General	EN-69208	RealPresence Collaboration Server generates a new core file and reboots spontaneously.
General	EN-69231	After applying the RealPresence Collaboration Server debug build in the lab, MPMRx card experienced power off within 3 hours.
General	EN-69246	The RealPresence Collaboration Server gets rebooted randomly.
General	EN-69390	In a RealPresence Collaboration Server 1800 conference, after an escalation to video call, the Microsoft Lync participant connects with error.

Category	Issue ID	Description
General	EN-83445	Unable to detect invalid setting for the POLYCOM_EPS_DISPLAY_NAME_PREFIX_IN_LYNC_ROSTER flag while trying to set the flag.
General	EN-86805	MPMRx media card experiences power off issue intermittently.
General	EN-87181	After a major error in RMX Manager, Polycom RealConnect and audio conferences on Real-Presence Collaboration Server got disconnected and resumed after 10 minutes.
General	EN-87922	External endpoints connected to RealPresence Access Director are unable to see video coming from HDX endpoints in an ISDN call during a conference meeting through RealPresence Collaboration Server 2000.
General	EN-88679	After upgrading RealPresence Collaboration Server, it observes dial-out DTMF failure.
General	EN-90171	The RealPresence Collaboration Server rebooted unexpectedly during a meeting due to Watch Dog policy decision.
General	EN-90822	In a Microsoft environment, enabling MULTIPLE SERVICE = YES flag causes AVMCU to reject the service request with a 403 response and raise corresponding alarm.
General	EN-91210	RealPresence Collaboration Server GUI doesn't prompt for error when incorrect port range is entered.
General	EN-91418	Intermittently, Cisco endpoints are unable to view site names.
General	EN-91425	SIP task core dump gets generated on RealPresence Collaboration Server 1800 system.
General	EN-91434	In RealPresence Collaboration Server 1800, AS_MCU unexpectedly disconnects.
General	EN-91439	The RealPresence Collaboration Server rebooted unexpectedly during a meeting due to Watch Dog policy decision.
General	EN-91532	MPMPR-x media card causes power failure issue. The RealPresence Collaboration Server doesn't take any new calls.
General	EN-91541	RealPresence Collaboration Server observes fault "LdapModuleProcess is approaching memory utilization limit".
General	EN-91868	The RealPresence DMA system sends 502 Bad Gateway error to Avaya session manager when attempting to establish an audio cascade link.
General	EN-94852	RealPresence Collaboration Server 4000 does not transmit closed captions between Far End Camera Control (FECC) enabled conference participants.
General	EN-97644	The maximum of number of Meeting Rooms defined for RealPresence Collaboration Server 2000 is 2000.
Hardware	BRIDGE-25605	A RealPresence DMA system gets outage due to card failure of a RealPresence Collaboration Server (MPMRx) system, and the other RealPresence Collaboration Server systems that are connected to the same RealPresence DMA system get out of service.

Category	Issue ID	Description
Interoperability	BRIDGE-26069	Polycom SIP and H.323 endpoints are unable to dial into RealPresence DMA system VMR with AVC, 1920 Kbps.
Interoperability	BRIDGE-26846	RealPresence Collaboration Server returns SIP 500 errors to incoming calls.
Interoperability	BRIDGE-27793	During RealPresence Collaboration Server calls, 2 out of the 3 microphones for Cisco CTS3010/IX5000 endpoints fail to work.
Interoperability	EN-68908	The RealPresence Collaboration Server fails to connect with Skype for Business clients in a Polycom RealConnect call.
Interoperability	EN-68956	Microsoft Skype for Business MAC client sends different User-Agent Header value but RealPresence Collaboration Server doesn't handle it and causes INVITE with 603 response error.
Interoperability	EN-69028	During a RealPresence Collaboration Server 1800 conference call, two Polycom HDX 7000 endpoints disconnect due to unexpected mcu_internal_problem error.
Interoperability	EN-69031	After upgrading RealPresence Collaboration Server, no response is observed for "start click and view" layout change when pressing "***".
Interoperability	EN-69053	Participants are not automatically on mute when joining a lecturer enabled conference via an entry queue.
Interoperability	EN-69064	Detection of new core file (IpMediaRtpHandle) results in dropping of all media resources (conferences).
Interoperability	EN-69123	Skype for Business endpoint doesn't receive video when the video conference is launched with a cascade issue.
Interoperability	EN-69152	Using a different subnet IPV6 address for a Polycom endpoints, causes the far side to not receive any packets.
Interoperability	EN-69163	The online AVMCU participant isn't able to connect when RealPresence Collaboration Server SIP stack is stuck.
Interoperability	EN-69186	Setting the default IP service Ports tab to Fixed Ports and the UDP last port to 65535, initialization of the boards fail.
Interoperability	EN-69196	Missing entries in the Address Book when participant information got reimported to RealPresence Collaboration Server.
Interoperability	EN-69207	In a Polycom RealConnect conference, recording fails to start when dialing DTMF *2 from RealPresence Group Series remote control.
Interoperability	EN-69219	Outbound external SIP calls from RealPresence Collaboration Server VMR don't connect correctly and bypass SIP server RealPresence DMA and RealPresence Access Director.
Interoperability	EN-69229	Duplicate entries in the Address Book when participant information got reimported onto RealPresence Collaboration Server.
Interoperability	EN-74282	QoS tagging for signaling or management doesn't work on RealPresence Collaboration Server 1800 and RealPresence Collaboration Server, Virtual Edition.



Category	Issue ID	Description
Interoperability	EN-88689	RealPresence Collaboration Server Soft Blade experiences content sharing issue and disconnection of AS_MCU_Party after 2.5 hours.
Interoperability	EN-98362	After the RealPresence Collaboration Server reboots, some meeting rooms fail to register for Skype for Business presence.
IVR	BRIDGE-25760	Sometimes, a new IVR Service does not get created in the Video Services tab after the RealPresence Collaboration Server, Virtual edition is upgraded.
Logs	EN-69213	SIPTask and ConfParty core dump generated on RealPresence Collaboration Server causes participant disconnection.
Logs	EN-69814	MCU Manager core dump is generated on RealPresence Collaboration Server while placing AVMCU calls.
Logs	EN-76214	'FAULT' process core dump is observed with multiple exceptions and the MCU gets rebooted.
Logs	EN-76586	SIP task core dump is observed on RealPresence Collaboration Server 1800.
Logs	EN-83088	RealPresence Collaboration Server 2000 generates SIPTask core dump due to poor network or SSL block.
Logs	EN-94634	CertMngr Core dump gets created on RealPresence Collaboration Server.
Logs	EN-99178	After an upgrade, Soft Blade logs are not being deleted.
Scheduling	EN-69074	On RealPresence Collaboration Server, scheduled meetings fail to launch on time.
Security	EN-69209	Unable to upload SHA2 Certificate Authority file on the RealPresence Collaboration Server.
Software Updates	EN-69027	After upgrade, system experiences ISDN fault.
Software Updates	EN-99049	RealPresence Collaboration Server 4000 experiences video freezing and alarms related to internal DSP errors after upgrading to RealPresence Collaboration Server v8.7.5.
Video	EN-68978	People video sent from an RealPresence Collaboration Server 1800 to a LifeSize 220I is downgraded (more than expected) after content sharing is started. The rest of the participants are not affected.
Video	EN-68980	In a RealPresence Collaboration Server conference, a change in layout causes video distortion for connected participants.
Video	EN-69047	In a RealPresence Collaboration Server conference, Cisco IP phone 9971 doesn't receive video.
Video	EN-69115	In Polycom RealConnect calls, the video out from RealPresence Collaboration Server to AVMCU cascade link downspeeds to lower the call rate and resolution. This results in Lync clients to experience poor quality video.
Video	EN-69129	In a Polycom RealConnect call, the Skype for Business endpoint experiences jerky and freeze video.

Category	Issue ID	Description
Video	EN-69145	In a Polycom RealConnect call, RealPresence Collaboration Server doesn't send video to AVMCU.
Video	EN-69172	Intermittently, RealPresence Collaboration Server fails to send video to AVMCU endpoint in Polycom RealConnect calls.
Video	EN-69192	After every cycle of SIP session of refresh, 32 kilobytes of video is lost.
Video	EN-69869	Video layout changes from Auto to 1x1 is observed when sharing content is started or stopped in Gathering mode.
Video	EN-70080	Flickering or no video is displayed on changing the active speaker during an online AVMCU call.
Video	EN-70284	Video of RealPresence DMA system registered Polycom Trio endpoints doesn't display on any of the participants while sharing content during an on-premises AVMCU call.
Video	EN-75002	Black content appears on all endpoints during a RealPresence DMA VMR call when a remote Skype for Business Mac endpoints tries to share the content.
Video	EN-91441	During a HDX ISDN conference call via RealPresence Collaboration Server 2000, external endpoint connected to RealPresence Access Director receives no video.
Video	EN-91496	When connecting from the RealPresence Experience system to the RealPresence Collaboration Server Virtual Edition the top of the video is cut off.
Video	EN-91510	During a VMR call, the RealPresence Collaboration Server intermittently fails to send video to Skype for Business clients. Requires MCU reboot.

# Copyright and Trademark Information

Copyright© 2018, Polycom, Inc. All rights reserved. No part of this document may be reproduced, translated into another language or format, or transmitted in any form or by any means, electronic or mechanical, for any purpose, without the express written permission of Polycom, Inc.

6001 America Center Drive  
San Jose, CA 95002  
USA

**Trademarks** Polycom®, the Polycom logo and the names and marks associated with Polycom products are trademarks and/or service marks of Polycom, Inc. and are registered and/or common law marks in the United States and various other countries.

All other trademarks are property of their respective owners. No portion hereof may be reproduced or transmitted in any form or by any means, for any purpose other than the recipient's personal use, without the express written permission of Polycom.



**Disclaimer** While Polycom uses reasonable efforts to include accurate and up-to-date information in this document, Polycom makes no warranties or representations as to its accuracy. Polycom assumes no liability or responsibility for any typographical or other errors or omissions in the content of this document.

**Limitation of Liability** Polycom and/or its respective suppliers make no representations about the suitability of the information contained in this document for any purpose. Information is provided "as is" without warranty of any kind and is subject to change without notice. The entire risk arising out of its use remains with the recipient. In no event shall Polycom and/or its respective suppliers be liable for any direct, consequential, incidental, special, punitive or other damages whatsoever (including without limitation, damages for loss of business profits, business interruption, or loss of business information), even if Polycom has been advised of the possibility of such damages.

**End User License Agreement** By installing, copying, or otherwise using this product, you acknowledge that you have read, understand and agree to be bound by the terms and conditions of the [End User License Agreement](#) for this product. The EULA for this product is available on the Polycom Support page for the product.

**Patent Information** The accompanying product may be protected by one or more U.S. and foreign patents and/or pending patent applications held by Polycom, Inc.

**Open Source Software Used in this Product** This product may contain open source software. You may receive the open source software from Polycom up to three (3) years after the distribution date of the applicable product or software at a charge not greater than the cost to Polycom of shipping or distributing the software to you. To receive software information, as well as the open source software code used in this product, contact Polycom by email at [OpenSourceVideo@polycom.com](mailto:OpenSourceVideo@polycom.com).

**Customer Feedback** We are striving to improve our documentation quality and we appreciate your feedback. Email your opinions and comments to [DocumentationFeedback@polycom.com](mailto:DocumentationFeedback@polycom.com).

**Polycom Support** Visit the [Polycom Support Center](#) for End User License Agreements, software downloads, product documents, product licenses, troubleshooting tips, service requests, and more.