

Cisco Collaboration Meeting Rooms (CMR) Premises Release 4.0

Release Notes January 2015

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Introduction

These release notes are for Cisco Collaboration Meeting Rooms (CMR) Premises Release 4.0.

New in CMR Premises Release 4.0

Item	Description
Name change	In this release the solution name is Cisco Collaboration Meeting Rooms (CMR) Premises. Previously it was <i>Optimized Conferencing for Cisco Unified Communications Manager and Cisco VCS</i> .
Scheduled conferencing	In previous releases, conference bridges used for scheduled conferences were connected directly to the call controller. They are now managed by the TelePresence Conductor, which is connected to the call controller (so all conference types are now TelePresence Conductor- managed).
	Two resource allocation methods are possible for scheduled conferences:
	 Scheduling—dedicated bridge. Deploy one or more bridges that are dedicated just for scheduled conferences, with each bridge in a pool of its own. Optionally a second dedicated bridge and pool combination can be used as a backup.
	 Scheduling—shared bridge. Allow bridges to be used for non- scheduled as well as scheduled conferences. In this case resource availability for scheduled conferences cannot be guaranteed, as the necessary resources might already be in use by non-scheduled conferences.
	CAUTION: If you use clustered TelePresence Conductors, be aware that Cisco TMS only recognizes one TelePresence Conductor node. If that cluster node should fail, the Cisco TMS scheduling service and its CMR provisioning service will be out of service (until the TelePresence Conductor is brought back up or Cisco TMS is updated to communicate with a different TelePresence Conductor in the cluster).
	The main changes and limitations associated with the new scheduling approach are listed in <u>Differences when Scheduling TelePresence</u> Conductor-Managed Bridges [p.5].
Configuring Personal CMR / rendezvous conferences (permanent	Two methods are supported to configure permanent conferencing aliases (Personal CMR / rendezvous conferences):
conferences)	 Cisco TMSPE with the TelePresence Conductor provisioning API.
	 TelePresence Conductor web user interface.
	To take advantage of recent scale and performance improvements, we recommend the Cisco TMSPE with Conductor API method.
ActiveControl	 The ActiveControl feature on the TelePresence Server is supported in cascade conferences for up to 500 participants.
	 The iX protocol (which supports ActiveControl) is now enabled by default on the TelePresence Server. In the previous TelePresence Server it was disabled by default.

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Cascading	The solution now supports conference cascading (distribution) across TelePresence Servers. Some limitations and requirements apply, as detailed in <u>Cisco Collaboration Meeting Rooms (CMR) Premises</u> <u>Solution Guide</u> .
Resource optimization	Because all conference bridges now connect behind TelePresence Conductor (TelePresence Server in remotely managed mode), in this release the TelePresence Server resource optimization feature is supported for all conference types.
	Note: If you use a dedicated conference bridge for scheduled conferences, Cisco TMS will plan bridge usage ahead of actual usage. This means that the resources recovered by optimization are not actually re-used.
TelePresence Server - capacity	The new Cisco Multiparty Media 400v offers an increased port capacity.
	The Cisco Multiparty Media 310/320 and Cisco TelePresence Server on Virtual Machine support improved call capacities.
TelePresence Server - conference experience	This release of the TelePresence Server supports new features to enhance the conference experience for participants:
	 Improved consistency and usability in the existing screen layouts.
	 Two-screen layouts.
	 Avatar display for audio-only participants, or video participants who have muted their video.
	 Endpoint-managed local audio mixing and directional audio.
	 Redesigned message background for text messages rendered in the main video sent to endpoints.
	 A new participant overflow icon indicates when more participants are present than can be displayed by an endpoint's layout. The icon is on by default.
	 Name labels are now enabled by default, and align with the design of on-screen messages.
	 Improvements to the user experience around content video. H.264 will always be the preferred codec, and sharpness is prioritized over motion.
	For details see the latest <u>release notes</u> for TelePresence Server Version 4.1.
Improved conference placement algorithm	The algorithm that determines the conference bridge on which TelePresence Conductor places a new conference has been improved.
	Note: We strongly recommend that all conference bridges within a pool have the same capacity, so that conferences can be distributed efficiently across conference bridges. If there are conference bridges with different capacities in the same pool, this may lead to unbalanced conference placement in some scenarios.

Table 1: Summary of new features and architecture changes (contin	ued)
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Item	Description	
Mixed-model deployments and mixed-mode escalation methods are not supported	We no longer support hybrid deployments with call control provided by both Cisco VCS and Unified CM in the same enterprise. This scenario is technically possible, and often required as a short-term measure during migration, but it has not been tested for long-term operation in this release.	
	We no longer support using ad hoc conferencing (the Unified-CM method of instant/escalated conferencing) in Cisco VCS-Centric deployments, or Multiway (the Cisco VCS escalation method) in Unified CM-Centric deployments.	
Cisco Business Edition 6000 and Cisco Business Edition 7000	CMR Premises is now available on the latest Cisco Business Edition 6000 hardware, as well as on Cisco Business Edition 7000.	
Personal Multiparty Advanced licensing	The new Personal Multiparty Advanced licensing model supports extended numbers of conference participants. Personal Multiparty Basic is still available, and supports up to four participants (including a named host).	
Host and guest roles for Personal CMRs	When creating a template for Personal CMRs, you can choose whether or not the CMR owner will be able to distinguish between host and guest participants. You can also enable Guest Lobby, which means that guests must wait in the lobby unless at least one host is present in the CMR.	
Integrating Personal CMRs and CMR Hybrid	R If you deploy Cisco Collaboration Meeting Rooms Hybrid (CMR Hybrid), you can include WebEx in Personal CMRs so that users may connect using either TelePresence or WebEx.	
Normalization scripts (Unified CM- Centric deployments only)	If your deployment uses encryption and TLS on SIP trunks used for TelePresence you must add one or more of the TelePresence normalization scripts to Cisco Unified Communications Manager.	
	CAUTION: New versions of the scripts are required for this release. To avoid unexpected call disconnects, you must ensure that the latest versions are installed.	
	Details about how to download the scripts and add them to Unified CM are in the latest <u>Cisco Collaboration Meeting Rooms (CMR) Premises</u> Deployment Guide, Appendix: Adding the Normalization Scripts.	
Endpoints	CMR Premises now supports the Cisco DX70 and DX80, and Cisco TelePresence IX5000 endpoints.	
Documentation	A solution Deployment Guide is now available. Deployment-related information which was previously in the Solution Guide, is now in the Deployment Guide.	
	These two individual guides for the previous release have also been moved into the Deployment Guide: <i>Provisioning Display Names in</i> <i>Optimized Conferencing for Cisco Unified Communications Manager and</i> <i>Cisco VCS</i> and <i>ActiveControl in Optimized Conferencing for Cisco</i> <i>Unified Communications Manager and Cisco VCS</i> .	

Table 1: Summary of new features and architecture changes (continued)

Differences when Scheduling TelePresence Conductor-Managed Bridges

Before moving to a TelePresence Conductor scheduling deployment, note the following differences between scheduling direct-managed bridges and bridges managed by a TelePresence Conductor:

	Direct-managed	TelePresence Conductor-managed
Booking	 Conference configurations can be set per conference, over-riding default conference settings. Cisco TMS chooses the SIP URI to provide the dial-in number for the conference. Can be added to Cisco TMS participant and conference templates. No option to overbook bridge resources. 	 Some conference configurations are set on the TelePresence Conductor conference template, and cannot be changed during booking. Users can input the variable part of the alias during booking to create the dial-in number for the conference. Cannot be added to Cisco TMS participant and conference templates. Overbooking of bridge resources: Using the service preference capacity adjustment feature, you can configure Cisco TMS to allow overbooking of the actual resource available on the bridges in the pools associated with the service preference. By doing this, you allow for the case where users unnecessarily book more ports than they need for conferences, thereby freeing up unused resources for other users.
Cascading	 Does not support cascaded TelePresence Servers. Cisco TMS decides whether to cascade MCUs when routing conferences. Cisco TMS cannot create a cascade after the conference has started if more participants join than the capacity on the hosting MCU(s). More functionality in Conference Control Center for example, moving participants from one cascaded MCU to another. Cascading is selected using the Distribution options when booking a conference. Cascading is not possible when booking using clients that use Cisco TMS Booking API (Cisco TMSBA) for example: Microsoft Outlook and Smart Scheduler. 	 Supports cascaded TelePresence Servers. TelePresence Conductor cascades the bridges. TelePresence Conductor can cascade on the fly if more participants join than the initial capacity of the hosting bridge(s). No functionality in Conference Control Center except visibility of which bridge a participant is connected to. You have to select an alias that supports cascading when booking the conference. Cascading is possible when booking using clients that use Cisco TMS Booking API (Cisco TMSBA) for example: Microsoft Outlook and Smart Scheduler.

Table 2: Differences when scheduling TelePresence Conductor-managed bridges

	Direct-managed	TelePresence Conductor-managed
Conference Control Center	Full functionality dependent on the bridge type hosting the conference.	The following functionality is not available for conferences hosted on a TelePresence Server managed by a TelePresence Conductor:
		 Video protocol
		 Audio protocol
		 Encryption status
		 Number
		 Participant Audio Level
		 Video Resolution
		 Duo Video Status
		 Snapshots
Reporting	Full functionality.	 Call Detail Records (CDRs) from TelePresence Conductor-managed conference bridges will not contain any ConferenceIDs.
		 TelePresence Conductor itself does not feed back any conference CDRs to Cisco TMS. The bridges themselves will however, if added to Cisco TMS.
		 Depending on the call direction you might get incomplete CDR data, as dialing out can lead to incorrect data.
		 Bridge utilization reporting is not supported for conferences hosted on a TelePresence Conductor.
Zones	Cisco TMS uses IP zones to ensure that systems use bridges that are geographically closer.	Cisco TMS chooses which TelePresence Conductor to use based on IP zones but will disregard any IP zone information for the bridges themselves.

Table 2: Differences when scheduling TelePresence Conductor-managed bridges (continued)

Required Versions for CMR Premises Release 4.0

For CMR Premises to operate across your network, the network devices must be running the following software or firmware. Your organization may not use all these products but those that are used must be at the specified version:

Table 3: Required software versions	s for infrastructure products
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Product	Required Version	Role
TelePresence Conductor	XC3.0	Conference resource allocation
Cisco TMS	14.6	Conference management & scheduling
TelePresence Server 7010 and MSE 8710, TelePresence Server on Multiparty Media 310/320, TelePresence Server on Virtual Machine, Cisco Multiparty Media 400v	4.1	Conference bridge resource
MCU 5300 Series, 4500 Series, 4501 Series, MCU MSE Series 8510	4.5	Conference bridge resource
Unified CM	9.1(2)SU2 or 10.5(2)	Call control
Cisco Expressway-C	X8.5 X8.2.2 or later if you only need Microsoft Lync interworking.	Remote endpoint registration, business-to- business connectivity, and Microsoft Lync interworking.
Cisco Expressway-E	X8.5	Secure firewall traversal
Cisco VCS Control	X8.5 X8.2.2 or later if you only need Microsoft Lync interworking. X7.2.3 or later if you only need H.323 interworking.	Call control (Cisco VCS- Centric deployments). Microsoft Lync interworking. H.323 interworking.
Cisco VCS Expressway	X8.5	Secure firewall traversal. Registration of standards- based endpoints across the Internet.
Cisco TMSPE	1.4	Conference provisioning
Cisco TMSXE	4.1	[Optional] Conference scheduling for Microsoft environments
Microsoft SQL Server	Microsoft SQL Server 2012 R1 recommended. Microsoft SQL Server 2008 R2 64-bit minimum.	Database for Cisco TMS

Table 3: Required software versions for infrastructure products (continued)

Product	Required Version	Role
Cisco WebEx	T29.11	Cloud conferencing with audio, video, and content sharing capabilities for WebEx clients

Table 4: Required software versions for endpoints, soft clients and peripherals

Product	Required Version	Supported in deployments
Cisco TelePresence IX5000	IX 8.0.1	Unified CM-Centric
Cisco TelePresence MX200 and MX300	TC7.1.3	Unified CM-Centric Cisco VCS-Centric
Cisco DX70, DX80	10.2(2)	Unified CM-Centric
Cisco DX650	10.2(2)	Unified CM-Centric
Cisco TelePresence EX Series EX60 and EX90	TC7.1.3	Unified CM-Centric
Cisco TelePresence Quick Set C20, SX10, SX20, SX80		Cisco VCS-Centric
Cisco TelePresence SX80 Codec		
Cisco TelePresence Codec C Series C40, C60, C90		
Cisco TelePresence Profile Series		
Cisco TelePresence MX200 and MX300		
Cisco TelePresence Systems CTS 3010, CTS 3210	CTS 1.10.5 or later	Unified CM-Centric
Cisco TelePresence System CTS 500-32, CTS 1100, CTS 1300	CTS 1.10.5 or later	Unified CM-Centric
Cisco TelePresence TX9000 and TX9200 immersive systems	TX6.1.2 or later	Unified CM-Centric
Cisco Unified IP Phone 9900 Series and 8900 Series	9.4(2)	Unified CM-Centric
Cisco Jabber for Android	10.6	Unified CM-Centric
Cisco Jabber for iPad		Unified CM-Centric
Cisco Jabber for iPhone		Unified CM-Centric
Cisco Jabber for Mac		Unified CM-Centric
Cisco Jabber for Windows		Unified CM-Centric
Cisco Jabber Video for TelePresence	4.8.8	Cisco VCS-Centric
Microsoft Lync Client	Lync 2013 Client	Unified CM-Centric Cisco VCS-Centric

Installing / Upgrading the Solution

Instructions for installing or upgrading the solution are provided in <u>Cisco Collaboration Meeting Rooms</u> (CMR) Premises Deployment Guide.

CAUTION: We recommend that you install the solution components in the sequence specified in <u>Cisco</u> Collaboration Meeting Rooms (CMR) Premises Deployment Guide.

Resolved Issues

The following issues were found in previous releases of CMR Premises (formerly Optimized Conferencing for Cisco Unified Communications Manager and Cisco VCS) and are resolved in Release 4.0.

Resolved Since Release 3.0

Identifier	Description
CSCuo82382	Resolved the issue of no media in H.323 TelePresence Server ad hoc conference until after hold/resume.
CSCuo26979	Resolved the issue where in some cases the Cisco TMS might not resolve participants when scheduling Microsoft Lync participants. As a result, the Cisco TMS Live Service could instruct the conference bridge to dial the Lync participants repeatedly, even though the participants are actually connected. This issue was seen with this call flow: <i>MCU - Conductor - CUCM - VCS - VCS(Lync GW) - Lync</i> . Other deployments where bridges dial to participants through both a Unified CM and a Cisco VCS could also have been affected.

Resolved Since Release 2.0

Identifier	Description
CSCud89449	Provided that SIP messaging is configured for Early Offer (as recommended for this release) this resolved the issue where if a call between an H.323 endpoint to a Unified CM endpoint is escalated, the H.323 endpoint might receive the presentation in the main video rather than the presentation channel.
CSCug89748	Unified CM Version 9.1.2 resolved an issue in Versions 9.0, 9.1, and 9.1.1, where pressing Hold on a CTS (or TC) endpoint in a conference hosted on a TelePresence Server through TelePresence Conductor caused the call to drop.
CSCuh00285	Resolved the issue where the "conference ends in five minutes" warning message to participants was not adjusted if a conference master extended the meeting duration (the warning to the conference master was adjusted, but not to other participants).
CSCuh60040	Resolved the issue where for outdialed calls the TelePresence Conductor-generated Call Tags (UUIDs) are used in user interface displays and in event logs, instead of participant names.
CSCuh60704	Resolved the issue where in encrypted calls, Cisco DX650 endpoints do not send video to Cisco VCS-managed H.323 endpoints.
CSCuh64139	Resolved the issue where CTS endpoints in escalated conferences send content in the main video channel.
CSCuh69830,	[Only applies to Cisco VCS-Centric model of CMR Premises] Resolved the issue where Cisco
CSCuh89695	DX650 endpoints with encryption enabled stop sending audio and video after escalating to a Multiway conference on an MCU.
CSCuh78199	Resolved the issue where joining a Unified CM-registered endpoint into an existing Multiway conference on the Cisco VCS fails.
CSCuh99378	Resolved the issue where scheduled conferences that include immersive endpoints are routed direct to the conference bridge rather than via TelePresence Conductor, even though TelePresence Conductor is defined as the preferred bridge type.

Identifier	Description
CSCui01713	Resolved the issue where for an H.323 endpoint defined with an E.164 number (and no SIP URI) Cisco TMS does not correlate an active interworked H.323 to SIP call with scheduled outdialed calls to that same endpoint.
CSCui06221	Resolved the issue where the Touch controller on endpoints running TC6.2 displayed a button to change the layout of remote participants in ad hoc, Multiway, and CMR conferences. The button had no effect as it is only relevant in multisite conferences.
CSCui15452	Resolved the issue where "Session Interval Too Small" (422) SIP messages are not proxied back to the call originator and instead the interworking function tries to send them out over H.323 as an interworked call.
CSCui40418	Resolved the issue where EX90 endpoints occasionally exhibited high latency and video corruption in low bandwidth calls.

Resolved Since Release 1.0

Identifier	Description	
CSCtx16122	Resolved the issue of intermittent lack of video or audio experienced by H.323 endpoints registered to a Cisco VCS when in a call with a Unified CM endpoint.	
CSCud38739	Resolved the issue of no received video on H.323 endpoints if the vcs-interop script was enabled on TelePresence Conductor.	
CSCud59961	EX60 endpoint users added to a Unified CM ad hoc conference may see the Welcome screen with a randomly generated conference name. This does not impact the conference.	
	Instructions have now been added to the TelePresence Conductor user documentation to explain how to suppress the Welcome screen.	
CSCud83749	Resolved the issue where if a participant left a 3-party ad hoc conference, the remaining two endpoints in the call might lose video or audio after the participant left the call.	
CSCue04207	[Reassigned to ID <u>CSCue58577]</u>	
CSCue21164	Resolved the issue where calls were not resumed after de-escalating from an ad hoc conference involving Jabber for Windows or EX90 (running TE6.x) endpoints and endpoints registered to another Unified CM.	
CSCue58577	Resolved the issue where CTS 3000 endpoint users might experience corrupted video on calls de-escalated from MCU or TelePresence Server ad hoc conferences.	
CSCug94725	[This was found during Early Field Trials of CMR Premises Version 2.0 and is now resolved in TelePresence Conductor XC2.2] Previously some HTTPS clients caused high CPU loads on MCU 4500 Series and MCU 4200 Series devices when connected to the MCU.	
	Note: High CPU loading may still occur if HTTPS traffic to the MCU does not maintain its session.	

Open Issues

Identifier	Description	
CSCup49770	Low frame rate on video between Microsoft Lync and TelePresence MCU behind TelePresence Conductor after hold/resume.	
CSCus26169	Cannot join PIN-enabled conference from Cisco TelePresence IX5000.	
CSCus28591	B2BUA hangs up call from DX to Microsoft Lync.	
CSCus28595	Poor video quality from MCU to Microsoft Lync when three participants in a conference.	
CSCus40116	The current WebEx-enabled CMR solution is only implemented and tested with WebEx of type 'SIP' when provisioning data to the TelePresence Conductor.	
CSCus40272	Instant WebEx meeting link appears in portal even when disabled.	
CSCuc34385	Unified CM does not support Multiway with Cisco ad hoc call escalation (see Ad Hoc Escalation of Other Conference Types [p.14]).	
CSCud83776	Clustering TelePresence Conductors is currently not supported in Cisco TMS. Only add one node from the TelePresence Conductor cluster into the Cisco TMS.	
CSCug68727	CTS endpoint users sometimes hear audio corruption while joining as the first participant in an MCU-hosted conference.	
[CSCuh64828]	Reassigned to ID CSCuo82382	
CSCuj40302	A 500 internal server error occurs when Microsoft Lync dials audio-only to TelePresence Server. The call connects but then disconnects immediately (TelePresence Server sends BYE to Lync on receipt of the error from Cisco VCS).	
CSCun25443	The Cisco DX650 endpoint does not decode 720p60fps properly. Corrupted video is seen on the DX650 when receiving 720p60fps. The workaround is to reduce the call settings bandwidth to 2M.	
CSCun76724	When the DN range for a direct managed bridge in Cisco TMS is changed, the old values are cached for a while. Conferences booked shortly after the change are still allocated using the old DN range. The issue has been observed with the Cisco TelePresence MCU Series, but other bridge types could be affected as well.	
CSCun81590	MCU 5300 Series series may not decode video streams from endpoints that experience packet loss.	
CSCuo69660	Endpoints running TC 7.1 or later send 768 x 448 resolution after de-escalating from an MCU to Unified CM ad hoc conference to a point-to-point call.	
CSCuo69663	Incoming FECC breaks after Hold/Resume in a Multiway call to TelePresence Conductor- managed MCU.	
CSCuo69672	Resuming a call fails when Cisco Collaboration Edge is used in the specific scenario of a participant in an existing ad hoc conference adding a new participant to the conference. The new participant is added, but the original participant is not correctly resumed back into the conference.	
	The workaround is for the original participant to Resume at their endpoint, which will rejoin the conference.	
CSCuo69678	It is not possible to enable auto answer on TC7.1 endpoints registered to Unified CM.	

The following issues apply to CMR Premises Release 4.0.

Limitations

The following limitations apply to CMR Premises Release 4.0.

Scheduling

CAUTION: If you use clustered TelePresence Conductors, be aware that Cisco TMS only recognizes one TelePresence Conductor node. If that cluster node should fail, the Cisco TMS scheduling service and its CMR provisioning service will be out of service (until the TelePresence Conductor is brought back up or Cisco TMS is updated to communicate with a different TelePresence Conductor in the cluster).

It is not possible to schedule Cisco TMSPE-provisioned CMRs in CMR Premises.

If you use TSP Audio provided by a TSP that is configured to use the same bridge as the previous scheduled conference, we recommend that you turn off the auto-extend function in Cisco TMS.

The scheduling solution with TelePresence Conductor and Cisco TMS has some notable limitations at this time, and significant differences exist from the previous method in Release 3.0 (scheduling to direct-managed bridges). We strongly recommend that before you enable scheduling, you review the following documents:

- Table of differences between scheduling direct-managed bridges (previous release) and scheduling TelePresence Conductor-managed bridges (this release) in <u>Cisco TelePresence Conductor with Cisco</u> TelePresence Management Suite Deployment Guide.
- Limitations section in the latest release notes for Cisco TMS 14.6.
- Limitations section in the latest release notes for TelePresence Conductor XC3.0.

Personal CMRs with WebEx Cannot be Rejoined After Original Conference

This limitation applies if you deploy CMR Hybrid with CMR Premises and use Cisco TMSPE to allow Cisco WebEx users to connect to Personal CMRs. It can occur after a CMR Hybrid conference has taken place, when all participants (WebEx and TelePresence) leave the CMR and the associated conference is deleted from the conference bridge.

If a WebEx user now reconnects to the CMR by re-clicking the existing WebEx link in the user portal (or reclicking the link in the notification email) then a new WebEx meeting is started. However, if TelePresence users reconnect to the CMR, a new TelePresence conference is started. WebEx users cannot access the TelePresence conference, and TelePresence users cannot access the WebEx conference.

Participants Threshold for ActiveControl on TelePresence Server

The ActiveControl feature on the TelePresence Server supports up to 500 participants.

No Priority for Conference Organizer if Maximum Participants Reached

No preference is given to participants who have organized a conference. If the maximum number of participants is reached before the participant who organized the conference has dialed in, this participant is rejected.

This applies to any conference where a maximum number of participants is defined, including Personal CMRs provisioned through Cisco TMSPE and conferences defined through the TelePresence Conductor.

Unified CM Version 10.0 is Not Supported

We support Unified CM Version 9.1(2)SU2 or Version 10.5(2) with CMR Premises Release 4.0. Do not use Unified CM Version 10.0, as some issues currently exist with this version in relation to CMR Premises (see identifier CSCun21354 in <u>Bug Search Tool</u> for details).

Mixing Escalated Conferencing Types Not Supported

Hosting mixed ad hoc escalation via Unified CM-registered endpoints and Multiway escalation via Cisco VCS-registered endpoints on the same set of conference bridges is not supported.

We recommend migrating endpoint registration from Cisco VCS to Unified CM. For cases where endpoints must remain registered to Cisco VCS, separate, dedicated bridge resources should be implemented for ad hoc conferencing and for Multiway conferencing respectively.

Ad Hoc Escalation of Other Conference Types

- Ad hoc call flows (which are managed by Unified CM) should not be used to add participants to conferences created by another method, such as a Personal CMR / rendezvous conference.
- Other call flows should not be used to add participants to ad hoc conferences.

Resource Allocation by TelePresence Conductor

When you provision a CMR using Cisco TMSPE on TelePresence Conductor, TelePresence Conductor reserves resources for one participant with the defined quality level. When participants dial into the CMR and resource optimization is enabled, TelePresence Conductor optimizes the resources so that only the resources that are required are used on the conference bridge. However, the resources that were previously reserved are not freed up completely. The resources can be used by additional participants dialing into the same CMR. But the reserved resources cannot be used for other conferences. The conference bridge utilization on TelePresence Conductor shows the number of resources reserved if this number is higher than the number of resources used.

IPv6

This release of CMR Premises does not support IPv6. IPv6 is however supported for interworked calls through the Cisco VCS Control.

Reduced Feature Set for TMS Conference Control Center

The solution supports only a subset of the standard Cisco TMS**Conference Control Center** features, as listed in the table below.

Conference Control Center functions are not supported for cascaded conferences, except for visibility of which bridge a participant is connected to.

Table 5: Cisco TMS Conference Control Center features in the solution

On a conference	On a participant
Set picture mode mode (only applied to participants who join after the setting is changed)	Mute/unmute audio

Table 5: Cisco TMS Conference Control Center features in the solution (continued)

On a conference	On a participant
Add participant	Mute/unmute outgoing audio
End	Mute/unmute video
	Disconnect
	Change display name (the new name is not updated in the TMS interface)
	Send message
	Show snapshot (MCU bridges only)
	Set picture mode

MCU Auto Attendant

The MCU auto attendant is not supported (note that Unified CM has its own auto attendant).

Compatibility

We endeavor to make our Cisco TelePresence products interoperable with all relevant standards-based equipment. While it is not possible to test all scenarios within the CMR Premises solution, the tables below indicate the equipment and software versions that were tested for compatibility with this release of the solution.

Product	Hardware/platform	Software	Comments
TelePresence Conductor	 Cisco VCS appliance VMware (virtual) C220 M4 TRC#2 for BE6000 C240 M4 TRC#2 for BE7000 	XC3.0	B2BUA mode
Cisco TMS Windows Server 2008+ (64-bit)	 Specification-based hardware VMware (virtual) C220 M4 TRC#2 for BE6000 C240 M4 TRC#2 for BE7000 	14.6	
TelePresence Server	 TS 7010 MSE 8710 Multiparty Media 310 Multiparty Media 320 	4.1	
TelePresence Server on Virtual Machine (8-core)	 C220 M4 TRC#2 for BE6000 C240 M4 TRC#2 for BE7000 	4.1	
TelePresence Server on Virtual Machine (30-core)	Multiparty Media 400v	4.1	
MCU	 5300 Series, 4500 Series, 4200 Series MSE 8510 	4.5	
Unified CM	UCSVMware (virtual)	9.1(2)SU2 and 10.5(2)	

Product	Hardware/platform	Software	Comments
Cisco Expressway-C and Cisco	 Cisco VCS appliance 	X8.5	
Expressway-E	 VMware (virtual) 		
	 C220 M4 TRC#2 for BE6000 		
	 C240 M4 TRC#2 for BE7000 		
Cisco VCS Control	 Cisco VCS appliance 	X8.5	X7.2.3 also tested for H.323
	 VMware (virtual) 		registration only
Cisco VCS Expressway	 Cisco VCS appliance 	X8.5	
	 VMware (virtual) 		
Cisco TMSPE Windows Server 2008+ (64-bit)	 Specification-based hardware 	1.4	
	 C220 M4 TRC#2 for BE6000 		
	 C240 M4 TRC#2 for BE7000 		
Cisco TMSXE		4.1	
Cisco WebEx	T29.11	T29.11	

Table 6: Infrastructure equipment tested with CMR Premises Release 4.0 (continued)

Endpoints

Cisco VCS-managed H.323 endpoints with encryption switched off cannot call secure Unified CM endpoints (see identifier CSCui15439 in <u>Bug Search Tool</u> for details).

Configuration Requirements

This section provides guidance on configuration best practices to avoid potential issues with CMR Premises elements or between CMR Premises and external systems or networks.

Note: Only Cisco multiparty conference bridges (such as the Cisco TelePresence Server and Cisco TelePresence MCU Series) are supported by the TelePresence Conductor. We do not support other conference bridges.

SIP Trunk Configuration - Early Offer for SIP Messaging (Unified CM-Centric Deployments)

We recommend that all SIP trunks which carry TelePresence calls are configured for Early Offer. See <u>Cisco</u> Collaboration Meeting Rooms (CMR) Premises Deployment Guide.

Audio-Only Quality Setting in Ad Hoc Conferencing (TelePresence Servers)

TelePresence Conductor supports audio-only as a quality setting (service level) for TelePresence Server conference bridges. Some limitations and recommendations apply to the audio-only quality setting when it is used with ad hoc conferencing in Unified CM deployments, and system behavior may not be as you expect. See *Cisco Collaboration Meeting Rooms (CMR) Premises Deployment Guide*.

Configuring the iX Protocol (for ActiveControl)

ActiveControl uses the iX protocol, which is advertised as an application line in the SIP Session Description Protocol (SDP). Extensions to the SIP SDP are not fully supported in some older systems, which has implications for CMR Premises networks that connect to external networks or to older Unified CMs (Unified CM 8.x or earlier). No issues occur with iX in Unified CM 9.1(2) or later, or with iX in Cisco VCS systems. However, if you are enabling ActiveControl in CMR Premises networks which interface to older Unified CMs (8.x and earlier) or to third-party networks (business-to-business), you must be careful to follow the instructions for setting up ActiveControl in Cisco Collaboration Meeting Rooms (CMR) Premises Deployment Guide to isolate the iX protocol traffic from systems that do not support it. Failure to do so may lead to unpredictable consequences, including call failures.

For ActiveControl configuration details, including the iX limitations for external connections, see <u>Cisco</u> <u>Collaboration Meeting Rooms (CMR) Premises Deployment Guide</u>. We strongly advise that you review this guide before deploying ActiveControl.

Related Documentation

Title	Link
Cisco Collaboration Meeting Rooms (CMR)	http://www.cisco.com/c/en/us/support/conferencing/telepresence-
Premises Deployment Guide 4.0	conductor/products-installation-and-configuration-guides-list.html
Cisco Collaboration Meeting Rooms (CMR)	http://www.cisco.com/c/en/us/support/conferencing/telepresence-
Premises Solution Guide 4.0	conductor/products-installation-and-configuration-guides-list.html
Cisco TelePresence Conductor with Cisco Unified Communications Manager Deployment Guide Unified CM 10.x [see Appendix for 9. <i>x</i>]	http://www.cisco.com/c/en/us/support/conferencing/telepresence- conductor/products-installation-and-configuration-guides- list.html
Cisco TelePresence Management Suite	http://www.cisco.com/c/en/us/support/conferencing/telepresence-
Provisioning Extension with Cisco Unified CM	management-suite-extensions/products-installation-guides-
Deployment Guide	list.html
Cisco TelePresence Conductor with Cisco	http://www.cisco.com/c/en/us/support/conferencing/telepresence-
TelePresence VCS (B2BUA) Deployment	conductor/products-installation-and-configuration-guides-
Guide	list.html
Cisco TelePresence Management Suite	http://www.cisco.com/c/en/us/support/conferencing/telepresence-
Provisioning Extension with Cisco VCS	management-suite-extensions/products-installation-guides-
Deployment Guide	list.html
Cisco TelePresence Conductor Administrator	http://www.cisco.com/c/en/us/support/conferencing/telepresence-
Guide XC3.0	conductor/products-maintenance-guides-list.html
Cisco Unified Communications Manager Administration Guide, Release 10.5 <i>n</i>	http://www.cisco.com/c/en/us/support/unified- communications/unified-communications-manager- callmanager/products-maintenance-guides-list.html
Cisco Unified Communications Manager Administration Guide, Release 9.1 <i>n</i>	http://www.cisco.com/c/en/us/support/unified- communications/unified-communications-manager- callmanager/products-maintenance-guides-list.html
Cisco Unified Communications Manager with	http://www.cisco.com/c/en/us/support/unified-
Cisco Expressway (SIP Trunk) Deployment	communications/expressway-series/products-installation-and-
Guide, Cisco Expressway X8.5	configuration-guides-list.html
Cisco Unified Communications Manager with	http://www.cisco.com/c/en/us/support/unified-
Cisco VCS (SIP Trunk) Deployment Guide,	communications/telepresence-video-communication-server-
Cisco VCS X8.5	vcs/products-installation-and-configuration-guides-list.html
Cisco TelePresence Multiway™ Deployment Guide, Cisco VCS, MCU, Conductor	http://www.cisco.com/c/en/us/support/conferencing/telepresence- conductor/products-installation-and-configuration-guides- list.html
Cisco Expressway Basic Configuration Deployment Guide X8.5	http://www.cisco.com/c/en/us/support/unified- communications/expressway-series/products-installation-and- configuration-guides-list.html
Cisco TelePresence Video Communication Server Basic Configuration (Control with Expressway) Deployment Guide Cisco VCS X8.5	http://www.cisco.com/c/en/us/support/unified- communications/telepresence-video-communication-server- vcs/products-installation-and-configuration-guides-list.html

Title	Link
Cisco TelePresence Conductor with Cisco TelePresence Management Suite Deployment Guide	http://www.cisco.com/c/en/us/support/conferencing/telepresence- conductor/products-installation-and-configuration-guides- list.html
Cisco TelePresence Management Suite Administrator Guide Version 14.5	http://www.cisco.com/c/en/us/support/conferencing/telepresence- management-suite-tms/products-maintenance-guides-list.html
Cisco Collaboration Meeting Rooms (CMR) Hybrid Configuration Guide	http://www.cisco.com/c/en/us/support/conferencing/telepresence- management-suite-tms/products-installation-and-configuration- guides-list.html
Cisco TelePresence Conductor Product Programming Reference Guide XC3.0 (includes Conductor Provisioning API reference)	http://www.cisco.com/c/en/us/support/conferencing/telepresence- conductor/products-programming-reference-guides-list.html
Cisco Expressway Administrator Guide X8.5	http://www.cisco.com/c/en/us/support/unified- communications/expressway-series/products-maintenance- guides-list.html
Cisco TelePresence Video Communication Server Administrator Guide X8.5	http://www.cisco.com/c/en/us/support/unified- communications/telepresence-video-communication-server- vcs/products-maintenance-guides-list.html

More Product Documentation on Cisco.com

Product	Link
TelePresence Conductor	http://www.cisco.com/c/en/us/support/conferencing/telepresence-conductor/tsd-products- support-series-home.html
Cisco TMS	http://www.cisco.com/c/en/us/support/conferencing/telepresence-management-suite- tms/tsd-products-support-series-home.html
Cisco TMSPE and Cisco TMSXE	http://www.cisco.com/c/en/us/support/conferencing/telepresence-management-suite- extensions/tsd-products-support-series-home.html
Unified CM	http://www.cisco.com/c/en/us/support/unified-communications/unified-communications- manager-callmanager/tsd-products-support-series-home.html
MCU 5300 Series	http://www.cisco.com/c/en/us/support/conferencing/telepresence-mcu-5300-series/tsd- products-support-series-home.html
MCU 4500 Series	http://www.cisco.com/c/en/us/support/conferencing/telepresence-mcu-4500-series/tsd- products-support-series-home.html
MCU MSE Series	http://www.cisco.com/c/en/us/support/conferencing/telepresence-mcu-mse-series/tsd- products-support-series-home.html
TelePresence Server	http://www.cisco.com/c/en/us/support/conferencing/telepresence-server/tsd-products- support-series-home.html
Cisco Expressway	http://www.cisco.com/c/en/us/support/unified-communications/expressway-series/tsd- products-support-series-home.html
Cisco VCS	http://www.cisco.com/c/en/us/support/unified-communications/telepresence-video- communication-server-vcs/tsd-products-support-series-home.html

Using the Bug Search Tool

The Bug Search Tool contains information about open and resolved issues for this release and previous releases, including descriptions of the problems and available workarounds. The identifiers listed in these release notes will take you directly to a description of each issue.

To look for information about a specific problem mentioned in this document:

- 1. Using a web browser, go to the Bug Search Tool.
- 2. Sign in with a cisco.com username and password.
- 3. Enter the bug identifier in the **Search** field and click **Search**.

To look for information when you do not know the identifier:

- 1. Type the product name in the **Search** field and click **Search**.
- 2. From the list of bugs that appears, use the **Filter** drop-down list to filter on either *Keyword*, *Modified Date*, *Severity*, *Status*, or *Technology*.

Use Advanced Search on the Bug Search Tool home page to search on a specific software version.

The Bug Search Tool help pages have further information on using the Bug Search Tool.

Technical support

If you cannot find the answer you need in the documentation, check the website at www.cisco.com/cisco/web/support/index.html where you will be able to:

- Make sure that you are running the most up-to-date software.
- Get help from the Cisco Technical Support team.

Make sure you have the following information ready before raising a case:

- Identifying information for your product, such as model number, firmware version, and software version (where applicable).
- Your contact email address or telephone number.
- A full description of the problem.

To view a list of Cisco TelePresence products that are no longer being sold and might not be supported, visit: www.cisco.com/en/US/products/prod_end_of_life.html and scroll down to the TelePresence section.

Document Revision History

Date	Description	Changes
January 2015	Initial issue	First version.
January 2015	Re-issue	Added explanation to Limitations section that a Personal CMR with Cisco WebEx participants cannot be rejoined after the original conference ends. Updated links to product deployment guides.

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