



RELEASE NOTES

Software Version 1.4 | December 2014 | 3725-03262-005/A1

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# Polycom<sup>®</sup> RealPresence<sup>®</sup> Content Sharing Suite



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# About the Polycom RealPresence Content Sharing Suite

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This document provides the latest information about the RealPresence Content Sharing Suite, Version 1.4.

The Polycom RealPresence Content Sharing Suite is a video collaboration application that enables users on disparate devices and clients, including Microsoft Lync 2010 and 2013 clients, H.323 or SIP video endpoints, and audio only participants, to participate in the full content sharing session. Through the RealPresence Content Sharing Suite, high quality content sharing is possible for everybody, including home workers and B2B access. The RealPresence Content Sharing Suite is a pure software extension of the Polycom RealPresence Platform and works with other appliance-based or virtual RealPresence Platform products for scalable and reliable content sharing experience.

# Release History

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This following table shows the release history of Polycom® RealPresence® Content Sharing Suite.

## Release History

<i>Release</i>	<i>Release Date</i>	<i>Features</i>
1.0	February 2013	Initial release.
1.0.1	April 2013	<ul style="list-style-type: none"><li>• Support for Acme Packet Net-Net Enterprise Session Director (ESD) as a session border controller so that users outside the company firewall can share and view content.</li><li>• Support for High Availability (Hot Standby) so that if one RealPresence Content Sharing Server (the master) fails, another Content Sharing Server (the slave) can take over.</li></ul>
1.1	June 2013	<ul style="list-style-type: none"><li>• Support for Microsoft Lync 2013.</li><li>• Support for viewing and sharing content over the Web, instead of using Lync.</li><li>• A new call-based licensing model. This license model specifies the maximum number of concurrent calls that can take place—per Content Sharing Server—at one time.</li><li>• Support for load balancing.</li></ul>
1.1.1	July 2013	Support for Hyper-V deployment. You can deploy RealPresence Content Sharing Suite server on Hyper-V built in windows Server 2012. The Hyper role enables you to create and manage a virtualized computing environment by using virtualization technology that is built in to Windows Server 2012.
1.1.2	September 2013	Fixes various bugs and optimizes RealPresence Content Sharing Suite Content Add-on for Lync sign-in process.
1.2	December 2013	<ul style="list-style-type: none"><li>• Option to upgrade and also roll back between different versions of client and server.</li><li>• Provides Office 365 support.</li><li>• Supports localization of the Content Add-on for Lync and web client, enabling you to configure them in additional languages on Windows or Mac operating systems.</li><li>• Offers Guest Web Access, which allows users to log in to the web session without authentication from corporate directory server.</li><li>• Provides an option to enable/disable web client access through administrator's web interface.</li><li>• Provides backward compatibility for clients.</li><li>• Supported on Mac browsers.</li><li>• Supports for 1080p (1920x1080) AVC content stream.</li><li>• Support for F5 Load balancing.</li></ul>

<i>Release</i>	<i>Release Date</i>	<i>Features</i>
1.3	June 2014	<ul style="list-style-type: none"> <li>• Support for a new licensing solution</li> <li>• Support for VMR calls cascading between Lync MCU VMR and Polycom RealPresence Collaboration Server systems.</li> <li>• Support for Lost Packet Recovery (LPR) on content channel.</li> <li>• Support for wildcard SAN and CN in certificate signing requests.</li> <li>• Remove additional local IP address and hostname from SAN.</li> <li>• Support for Personal Information Exchange (PFX).</li> <li>• Security Enhancement.</li> <li>• Support for NTP (Network Time Protocol).</li> </ul>
1.3.1	July 2014	<ul style="list-style-type: none"> <li>• Security enhancements and bug fixes.</li> <li>• Support OVA-format installation packages for VMware vSphere installation.</li> </ul>
1.4	December 2014	<ul style="list-style-type: none"> <li>• Support for Add-on-free (Gateway Mode) Lync content sharing, with the following major features: <ul style="list-style-type: none"> <li>➤ Cascading Lync calls from AVMCU to Polycom</li> <li>➤ Server scalability using Load Balancer</li> <li>➤ Guest access from Lync clients</li> <li>➤ Federated Lync client access</li> <li>➤ High Availability</li> </ul> </li> <li>• Support for external NTP servers</li> </ul>

# Hardware and Software Requirements

The following table lists the hardware and software required to deploy the RealPresence Content Sharing Suite. For the VM Ware host to run smoothly, it should meet or exceed the requirements specified in this table.



## Expand Your VM Guest Hard Disk to Minimal 100 GB When Upgrading from V1.3 or Earlier

If you are upgrading your CSS server from V1.3 or earlier, you must upgrade the hard disk space to 100 GB or above. 100 GB is the minimum requirement for free disk space in V1.4. For more information on how to update VM hard disk settings, refer to your RealPresence Content Sharing Suite Administrator's Guide, *To install the Content Sharing Server OVA file*.

## Requirements on VM Host for RealPresence Content Sharing Server, Gateway Mode

Configuration	High Performance	Medium Performance	Minimum Performance
Max. Num. Virtual Cores	16 cores	12 cores	8 cores
RAM	16 GB	12 GB	8 GB
NIC	2 x 1 Gb	2 x 1 Gb	2 x 1 Gb
Storage	64 GB	64 GB	64 GB
Max. High Quality meetings	15	12	10
Max. Standard Quality Meetings	30	25	20
CPU Model	Dual Intel Xeon® Processor E5-2620	Dual Intel Xeon® Processor E5-2620	Dual Intel Xeon® Processor E5-2620



## Note: About high quality and standard quality meetings

Meetings with content resolution 720 p30, 1080 p5 or higher are regarded as high quality meetings; those with content resolution 720 p15 or lower are regarded as standard quality meetings.

**Requirements on RealPresence Content Sharing Server and Client, Add-On Mode**

<i>Component</i>	<i>Add-On mode</i>
Polycom RealPresence Content Sharing server	VMware vSphere ESXi Hypervisor 5.0, 5.1, and 5.5 Hyper-V role on Windows Server 2012 <b>Minimum VM configuration</b> <ul style="list-style-type: none"> <li>• Host machine:                             <ul style="list-style-type: none"> <li>➤ CPU Processor Type: Intel® Xeon(R) CPU E5-2620 2.10 GHZ</li> <li>➤ CPU Cores: 12 CPUs x 2.099 GHZ</li> </ul> </li> <li>• VM guest: 8 CPUs, 8 GB RAM, 100 GB free disk space</li> </ul>
RealPresence Content Sharing Suite Client PCs	<ul style="list-style-type: none"> <li>• Microsoft .NET Framework 4 Client Profile</li> <li>• Microsoft Lync 2010 or 2013</li> <li>• Internet Explorer 8 (or later), Google Chrome (26 or later); or Mozilla Firefox (18 or later)</li> <li>• Safari 5.1 or higher for Mac</li> </ul> <b>Minimum system requirements:</b> <ul style="list-style-type: none"> <li>• Windows 7 (32-bit and 64-bit) or later</li> <li>• Mac OS X 10.7 or higher for systems running Mac operating systems</li> <li>• Intel Core i3 2 core CPU 1.6 GHz or higher</li> <li>• 250 MB storage</li> <li>• 2 GB RAM (4 GB recommended)</li> </ul>

# RealPresence Content Sharing Suite Feature Overview

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RealPresence Content Sharing Suite features include the following features:

- Common content sharing experience across endpoints
- Single sign-on through Microsoft Active Directory credential check
- Binary Floor Control Protocol (BFCP) (Session Initiation Protocol [SIP]-based content video) up to 1080p HD 5fps for RealPresence Content Sharing Suite 1.2 version and later. 1080p HD 5fps is supported in V1.4, in both the Add-on and Gateway mode.
- Ability to share a monitor or program (PC application)
- A software package (OVA/VHD format) to run on a VMware/Hyper-V virtual machine environment

Security features include the following:

- **Content security** SIP Session Description Protocol Security Descriptions (SDS) over Transport Layer Security (TLS) + Secure Real-time Transport Protocol (SRTP) and AES-128 bit Media Encryption.
- **Server authentication** NTLMv2 pass-through authentication to AD and HTTPS/TLS-based provisioning.



# What's New in Release 1.4

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The RealPresence Content Sharing Suite version 1.4 offers the following new features:

- Add-on-free Lync content sharing

When you set your RealPresence Content Sharing Suite server running mode as Gateway, you can share content from Lync in Polycom RealPresence Collaboration Server-hosted conferences without the Polycom RealPresence Content Add-on for Lync Service.

In the Gateway Mode, various Lync clients are supported: PC, Mac, Lync Web App, Lync Room System, and mobile devices running on iOS, Android, or Windows mobile platforms.

Gateway mode works only when your RealPresence Content Sharing Suite server is part of Polycom RealConnect deployment.

Major features in the Gateway Mode include:

- Cascading Lync calls from AVMCU to Polycom RealPresence Collaboration Server

When Lync clients dial in to a conference, their video or audio is handled by Lync AVMCU, while their content is sent to the RealPresence Content Sharing Suite content gateway through Lync ASMCU (Application Sharing MCU). Content is cascaded between Lync ASMCU and Polycom RealPresence Collaboration Server through the RealPresence Content Sharing Suite content gateway.

- Server scalability using Load Balancer

A minimum of 500 concurrent calls is supported by each RealPresence Content Sharing Suite server. RealPresence Content Sharing Suite servers are now scalable using a Load Balancer.

- Guest access from Lync clients

In the Gateway mode, corporate Lync users behind their enterprise firewall can now join a VMR meeting and share content.

- Federated Lync client access

Lync users from different enterprises can join a video conference and send and receive content in the Gateway mode.

- High Availability

The content stream transcoding state is now synchronized between active and standby RealPresence Content Sharing Suite servers in High Availability environment. In case of master server failure, the slave server takes over with the same configuration and works as the master server. If the original master recovers, it then works as the slave server.

- Support for external NTP servers

You can configure one or several NTP servers to obtain system time automatically.

# Upgrade RealPresence Content Sharing Suite to Version 1.4

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By default, RealPresence Content Sharing Suite server 1.4 works in the Gateway mode and existing Lync client with RealPresence Content Sharing Suite Add-ons will be disabled automatically by the server.

If your RealPresence Content Sharing Suite server is set to work in the Add-on mode, Lync clients with RealPresence Content Sharing Suite add-ons version 1.3 or earlier will be notified to download a new version add-on to work with RealPresence Content Sharing Suite 1.4 server.



**Note: Issue new order before you upgrade to version 1.3 or later**

To continue using old versions of Lync client with the new version of RealPresence Content Sharing Suite server, enable the feature Client-Server Compatibility in your RealPresence Content Sharing Suite administrator's web interface.

# Resolved Issues in Release 1.4

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The following table lists resolved issues for RealPresence Content Sharing Suite.

<i>Issue ID</i>	<i>Description</i>
CCS-1058	RealPresence Content Sharing Suite server system time is not set correctly, and it's hard for RealPresence Content Sharing Suite administrators to adjust it. This is fixed in V1.4. From Content Sharing Server Web Configuration Tool, <b>Admin &gt; Time Configuration</b> , you can now configure one or several NTP servers to obtain system time automatically, or set the time manually.
CCS-1052	If you log in to the RealPresence Content Sharing Suite server from an SSH client tool (such as PuTTY) with cssadmin account, you can view all system files. This is fixed in V1.4 by restricting the cssadmin account permissions.
CCS-1046	You can view RealPresence Content Sharing Suite server version on the Content Sharing Server Web Configuration Tool login page. This is fixed in V1.4.
CCS-1220	System log level settings are not saved after the Content Sharing Server reboots.

# Known Issues

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The following tables list known issues for RealPresence Content Sharing Suite. If a workaround is available, it is noted.

## Client Known Issues

<i>Issue ID</i>	<i>Description</i>	<i>Workaround</i>
CCS-311	When you join a VMR over TLS for the first time, you need to accept a certificate window within 30 seconds; otherwise the call will disconnect.  This problem applies to both the RealPresence Content Sharing Suite web client and Lync add-on.	Reconnect the call.
CCS-581	A RealPresence Content Sharing Suite client does not work when placed behind NAT in a corporate network.	Remove the NAT device.
CCS-713	When sharing an application on Mac PC using the RealPresence Content Sharing Suite web client, the shared content does not pop up.	Manually click the shared window to appear on front end.
CCS-720	The Lync add-on crashes when LyncAddonConfigTool is running for RealPresence Content Sharing Suite server configuration, and simultaneously a VMR window is opened or a VMR call is set up.	Do not open a VMR window or set up a VMR call when LyncAddonConfigTool is running.
CCS-819	(Add-On mode only) If your network connection is not stable and you dialed in from a public network over the RealPresence Access Director, sometimes, content sharing request may time out as a result of network latency and packet loss and you receive no error prompts.	Re-connect and send the content again.
CCS-972	If you accept a VMR call initiated by a Polycom RealPresence Collaboration Server system, you cannot receive or send content.	None.
CCS-997	You cannot join VMR meetings using Lync if the VMR number contains non-numerical characters.	None.

<i>Issue ID</i>	<i>Description</i>	<i>Workaround</i>
CCS-1276	If you add a Polycom VMR number as a participant when you schedule meetings from the Lync client <b>Meet Now</b> menu, the meeting is cascaded to Polycom RealPresence Collaboration Serve.  But if you remove the VMR from the Lync participant list, existing gateway instances are not terminated as expected.	None.
CCS-1287	When accessing the RealPresence Content Sharing Suite web client on a Mac computer using the Safari 8, after you press the Enter full screen, the button doesn't change into the Exit full screen button as expected.	None.
CCS-1307	If an endpoint with the maximum content capability as 720p joins an ongoing meeting where a Lync client is sharing 1080p content, the content resolution doesn't change to 720p as expected. As a result, the endpoint cannot receive the 1080 p content.	From the RealPresence Content Sharing Server Web Configuration Tool, set <b>Server Configuration &gt; Server &gt; Call Rate</b> as 384 Kbps or lower to limit the gateway capacity to 720p.

#### Server Known Issues

<i>Issue ID</i>	<i>Description</i>	<i>Workaround</i>
CCS-1140	After you upgrade the RealPresence Content Sharing Suite from earlier versions to V1.4, the default time zone is not set correctly.	Change the time zone manually from the RealPresence Content Sharing Server Web Configuration Tool: <b>Admin &gt; Time Configuration</b> .
CCS-1156	(Gateway mode only) If you add a Polycom VMR number as a participant when you schedule meetings from the Lync client <b>Meet Now</b> menu, the meeting is cascaded to Polycom RealPresence Collaboration Serve.  But if you delete the VMR from the RealPresence Collaboration Server, RealPresence Content Sharing Suite gateway instances still try to connect to this VMR for few times.	None.
CCS-1236	In an HA deployment, if the master server is restarted, the slave server takes over as the master as expected. However, sometimes, when the original master server restarts, it works as the master too.	Disable HA and then reconfigure the HA between the RealPresence Content Sharing Suite master and slave servers.

<i>Issue ID</i>	<i>Description</i>	<i>Workaround</i>
CCS-1274	If you upgrade earlier versions of RealPresence Content Sharing Suite installed on a Hyper-V VM to version 1.4, you cannot modify settings such as CPU cores and memory.	Re-install the RealPresence Content Sharing Suite V1.4 on the Hyper-V VM.
CCS-1289	(Gateway mode only) When hosted on a Hyper-V VM with eight cores and eight GB memory, nearly half of the RealPresence Content Sharing Suite gateway instances are terminated when all Lync clients are sharing dynamic video.	None.
CCS-1293	(Gateway mode only) If a conference ends and a new one starts right after it using the same VMR number, sometime, the new gateway instance cannot be initiated immediately.	None. The gateway instance will be re-started automatically several minutes later.
CCS-1301	(Gateway mode only) With peak workload, if Polycom endpoints and Lync clients compete for content sharing over and over again within a short time frame (< 60 seconds), the content sent from the Polycom endpoints may be blurry or greenish.	Restart content sharing.

# Known Limitations

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Known limitations for RealPresence Content Sharing Suite include

- During a VMR call, you cannot use Lync to invite a third party to the call. In addition, if you're already in a Lync call, you cannot join a VMR call.
- You cannot use the RealPresence Content Sharing Suite license of an earlier version with a later version RealPresence Content Sharing Suite. For example, V1.2 of the Content Sharing Server license with RealPresence Content Sharing Suite V1.3. If you upgrade from RealPresence Content Sharing Suite V1.2 to V1.3, you need to reactivate the Content Sharing Server license.
- To upgrade from RealPresence Content Sharing Suite earlier versions to V1.3, you need ask your Polycom Sales contact to re-place the order.

# Products Tested with this Release

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The RealPresence Content Sharing Suite systems are tested extensively with a wide range of products. The following list is not a complete inventory of compatible equipment. It indicates the products that have been tested for compatibility with this release.



## Note: Supported products

You are encouraged to upgrade all your Polycom systems with the latest software before contacting Polycom support to ensure the issue has not already been addressed by vendor software updates.

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 Supported Products matrix.

## Interoperability List for the Add-on Mode

<i>Category</i>	<i>Versions</i>
<b>Session Border Controllers</b>	
Polycom RealPresence Access Director (RPAD)	4.0, 4.1
Acme Packet® Net-Net Enterprise Session Director (ESD)	Net-Net 3820 Firmware SCX6.3.0 F-2 GA (Build 163)
<b>Management Systems and Recorders</b>	
Polycom RealPresence Capture Server	1.8
Microsoft Active Directory	2008 R2, 2012 R2
<b>Gatekeepers, Gateways, and MCUs</b>	
Polycom RealPresence Collaboration Server (RMX) 1800/2000/4000	8.4, 8.5
Polycom RealPresence Distributed Media Application (DMA) 7000	6.1, 6.2
Microsoft Lync Server	2010, 2013
<b>Load Balancers</b>	
Polycom has tested the following load balancer: F5 BIG-IP LTM 1600    BIG-IP 10.2.1.297.0	
<b>Endpoints</b>	
Microsoft Lync client	2010, 2013



Category	Versions
<p>Your environment requires one or more video endpoints that receive content from RealPresence Collaboration Server (RMX). For more information on interoperability, see the Interoperability Tables section in the RealPresence Collaboration Server (RMX) 1500/1800/2000/4000 Release Notes, available by navigating to your system from the <a href="#">Collaboration &amp; Conferencing Platforms</a> Support page.</p> <p>Polycom has tested the following endpoints:</p>	
Polycom HDX	3.1.3
Polycom RealPresence Mobile	3.2
Polycom RealPresence Desktop	3.2, 3.3
Polycom RealPresence Group Series 300/500/550/700	4.1.3, 4.2
Polycom Converged Management Application (CMA) Desktop	5.2.5
Polycom Telepresence m100	1.0.7
Polycom ITP	3.1.2
Cisco TelePresence EX90	TC6.1.1.7d7af15
Cisco TelePresence Quick Set C20	TC3.1.5.282524



**Note: RealPresence Collaboration Server (RMX) TIP content support while working with RealPresence Content Sharing Suite**

The following RealPresence Collaboration Server (RMX) TIP Compatibility settings are supported when used with the RealPresence Content Sharing Suite 1.2 release or later:

- None (default)
- Video Only

**Interoperability List for the Gateway Mode**

Category	Versions
<b>Session Border Controllers</b>	
Polycom RealPresence Access Director (RPAD)	4.0, 4.1
Acme Packet® Net-Net Enterprise Session Director (ESD)	Net-Net 3820 Firmware SCX6.3.0 F-2 GA (Build 163)
<b>Management Systems and Recorders</b>	
Polycom RealPresence Capture Server	1.8

<i>Category</i>	<i>Versions</i>
Microsoft Active Directory	2008 R2, 2012 R2
<b>Gatekeepers, Gateways, and MCUs</b>	
Polycom RealPresence Collaboration Server (RMX) 1800/2000/4000	8.5
Polycom RealPresence Distributed Media Application (DMA) 7000	6.2
Microsoft Lync Server	2013
<b>Load Balancers</b>	
Polycom has tested the following load balancer: F5 BIG-IP LTM 1600    BIG-IP 10.2.1.297.0	
<b>Endpoints</b>	
Microsoft Lync client	2010, 2013
<p>Your environment requires one or more video endpoints that receive content from RealPresence Collaboration Server (RMX). For more information on interoperability, see the Interoperability Tables section in the RealPresence Collaboration Server (RMX) 1500/1800/2000/4000 Release Notes, available by navigating to your system from the <a href="#">Collaboration &amp; Conferencing Platforms</a> Support page.</p> <p>Polycom has tested the following endpoints:</p>	
Polycom HDX	3.1.3
Polycom RealPresence Mobile	3.2
Polycom RealPresence Desktop	3.2, 3.3
Polycom RealPresence Group Series 300/500/550/700	4.1.3, 4.2
Polycom Converged Management Application (CMA) Desktop	5.2.5
Polycom Telepresence m100	1.0.7
Polycom ITP	3.1.2
Cisco TelePresence EX90	TC6.1.1.7d7af15
Cisco TelePresence Quick Set C20	TC3.1.5.282524

# Get Help

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For more information about installing, configuring, and administering Polycom products, refer to Documents and Downloads at [Polycom Support](#).

To find all Polycom partner solutions, see [Polycom Global Strategic Partner Solutions](#).

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