Release Notes

Polycom® RealPresence® Collaboration Server 800s Virtual Edition, Version 8.0

The Polycom RealPresence Collaboration Server 800s is a high performance, scalable, IP-network (H.323 and SIP) MCU that provides feature-rich and easy-to-use multipoint voice and video conferencing.

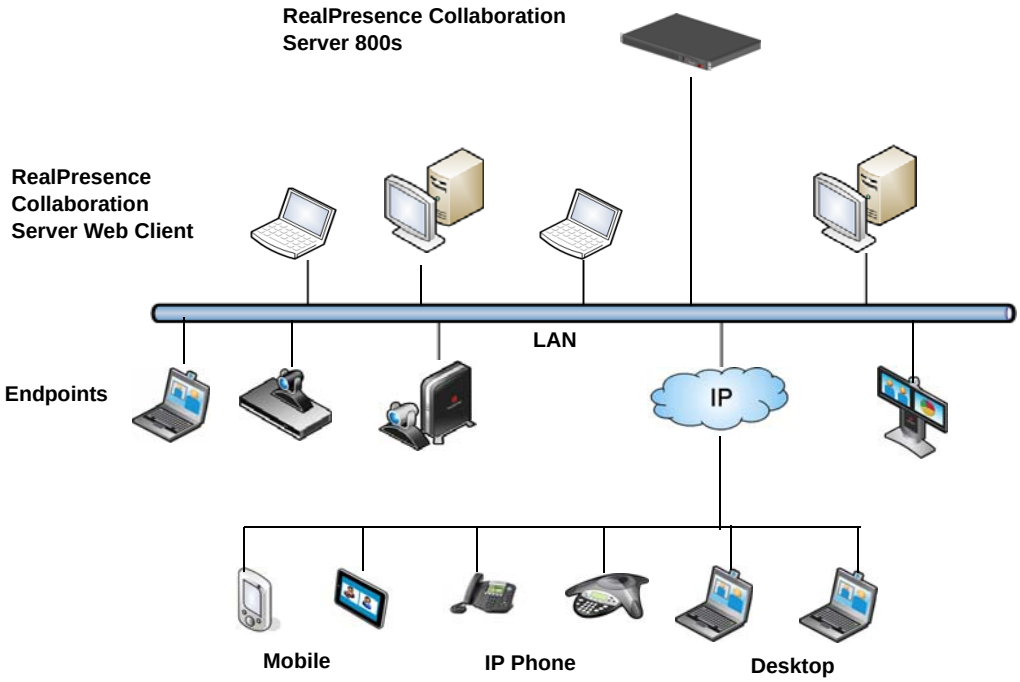

Figure 1-1 *Multipoint Video Conferencing using an Polycom RealPresence Collaboration Server 800s*

The Polycom RealPresence Collaboration Server 800s unit can be controlled via the LAN, by the *RP Collaboration Server Web Client* application, using Internet Explorer installed on the user's workstation or the RMX Manager application. The RMX Manager can control several MCU units. For more information about the RMX Manager, see Real Presence Collaboration Server Administrators Guide, "*RMX Manager Application*".

MCU management and IP conferencing are performed via two different LAN ports. The networks can be separated in Maximum Security Environments.

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Resources and Feedback

To find support and to report findings, register on the beta web site and use the following resources:

Polycom Support	For support please contact the Polycom Team at support@polycom.com.
Polycom Test Systems	Go to http://www.polycom.com/videotest for a list of worldwide numbers that you can use to test your video conferencing system.

Hardware Requirement

The RealPresence Collaboration Server 800s system uses the Dell® PowerEdge™ R620 E5-2690 Rack Server.

RP Collaboration Server Web Client

The following table lists the environments (Web Browsers and Operating Systems) with which the RP Collaboration Server Web Client was tested*. It is not recommended to run RP Collaboration Server Web Client and Polycom CMAD applications simultaneously on the same workstation.

Table 1-1 *Version 7.8 Environment Interoperability Table*

Web Browser	Operating System
Internet Explorer 7	Windows Vista™
	Windows 7
Internet Explorer 8	Windows 7

* The application requires Microsoft .Net 3.5 and above.

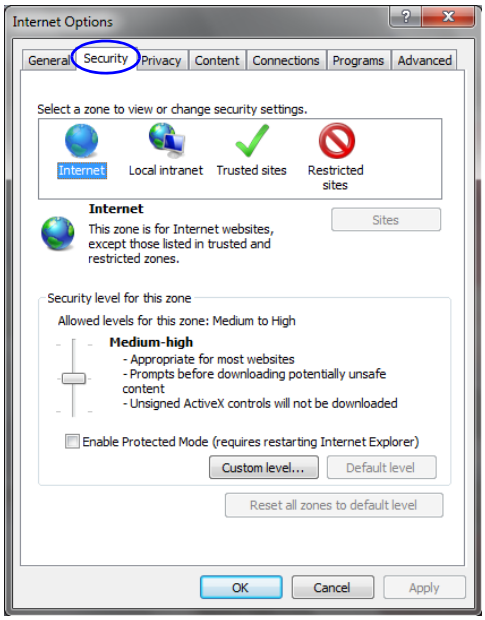
Windows 7™ Security Settings

If *Windows 7* is installed on the workstation, *Protected Mode* must be disabled before downloading the software to the workstation.

To disable Protected Mode:

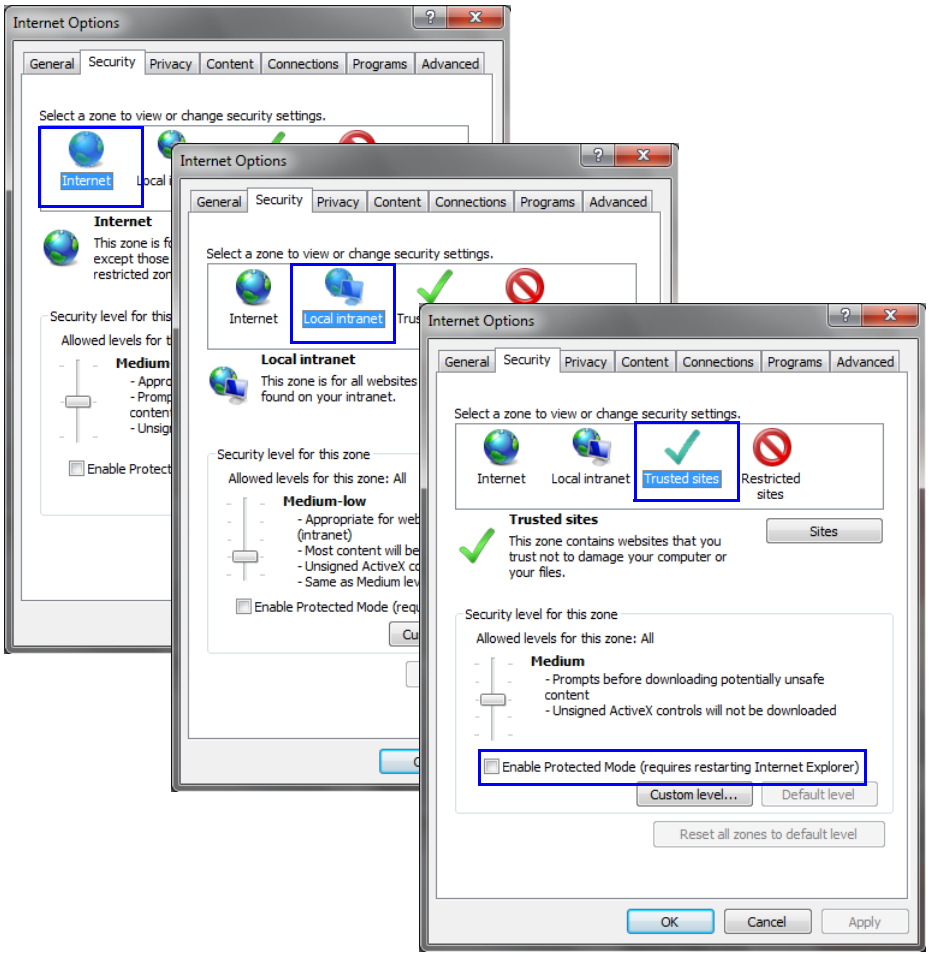
1 In the *Internet Options* dialog box, click the **Security** tab.

The **Security** tab is displayed.



2 Clear the *Enable Protected Mode* check box for each of the following tabs:

- *Internet*
- *Local intranet*
- *Trusted sites*



3 After successful connection to RP Collaboration Server, the *Enable Protected Mode* check boxes can be selected to enable *Protected Mode* for the following tabs:

- *Internet*
- *Local intranet*

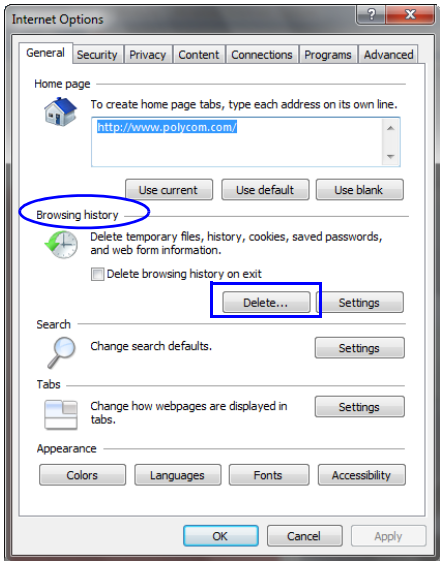
Internet Explorer 8 Configuration

When using *Internet Explorer 8* to run the *RealPresence Collaboration Server Web Client* or *RMX Manager* applications, it is important to configure the browser according to the following procedure.

To configure Internet Explorer 8:

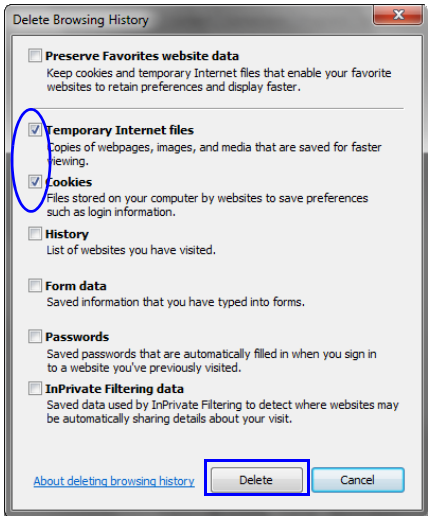
1. Close **all** browsers running on the workstation.
2. Use the *Windows Task Manager* to verify that no *iexplore.exe* processes are running on the workstation. If any processes are found, use the **End Task** button to end them.
3. Open *Internet Explorer* but do **not** connect to the MCU.
4. In the *Internet Explorer* menu bar select **Tools >> Internet Options**.

   The *Internet Options* dialog box is displayed with *General* tab open.



5. In the *Browsing history* section, click the **Delete** button.

The *Delete Browsing History* dialog box is displayed.



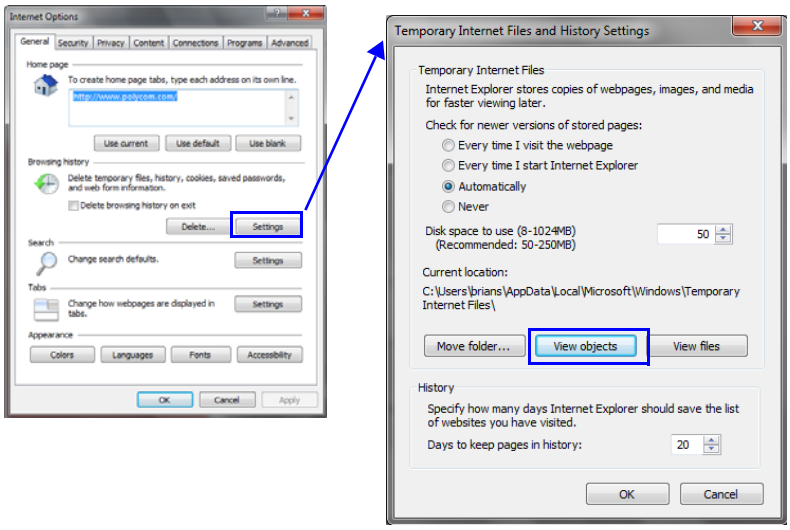
6 Select the **Temporary Internet** files and **Cookies** check boxes.

7 Click the **Delete** button.

8 The *Delete Browsing History* dialog box closes and the files are deleted.

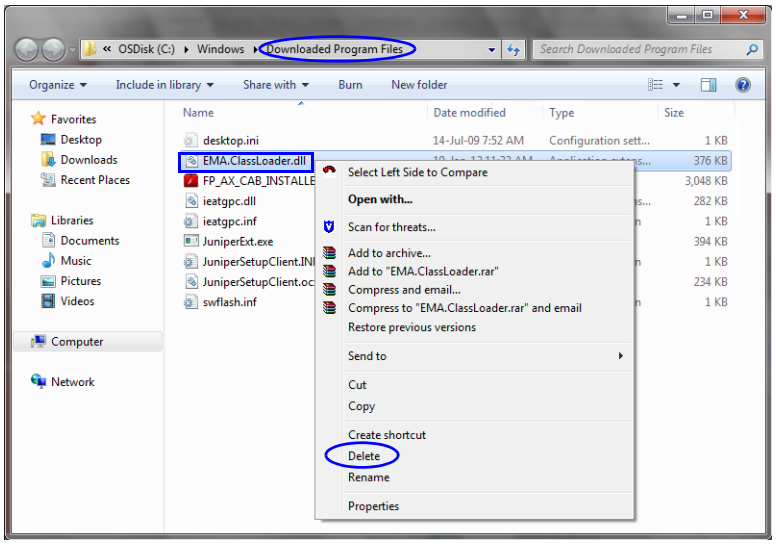
9 In the *Internet Options* dialog box, click the **Settings** button.

The *Temporary Internet Files and History Settings* dialog box is displayed.



10 Click the **View objects** button.

The *Downloaded Program Files* folder containing the installed *Program Files* is displayed.



11 Select the **EMAClassLoader.dll** file and press the **Delete** key on the workstation
or right-click the *EMA.ClassLoader.dll* file and then click **Delete**.

12 Close the *Downloaded Program Files* folder and the *Temporary Internet Files and History Settings* dialog box.

13 In the *Internet Options* dialog box, click the **OK** button to save the changes and close the dialog box.

Main Features

Conferencing Modes

The MCU system offers the following Conferencing Modes:

- Transcoding - AVC- CP Conferencing
- Media Relay - SVC Conferencing
- Mixed CP and SVC Conferencing

CP Transcoding - AVC- based Conferencing

A transcoded CP (Continuous Presence) conference is also described as an AVC (Advanced Video Coding) conference. It supports the standard video protocols. In this mode, video is received from all the endpoints using different line rates, different protocols (SIP, H.323) and video parameters:

- Video protocols: H.263, H.264 Base and High profile and RTV
- Video Resolutions: from QCIF, CIF and up to 720p
- Frame rates up to 30 fps

All endpoints that do not support the H.264 SVC protocol such as H.263, H.264, or RTV, are considered AVC endpoints.

The MCU process the received video, transcodes it and send the resulting video streams to the endpoints. The video processing that is required differs according to the video session set for the conference, with all the processing performed by the MCU. For more details, see *RealPresence Collaboration Server 800s*, *"AVC Conferencing - Video Session Types"* on page **2-2**.

Media Relay - SVC Conferencing

Media Relay SVC Conferencing is based on the SVC (Scalable Video Codec) video protocol and SAC (Scalable Audio Codec) audio protocol. It offers high resolution video conferencing with low end-to-end latency, improved Error Resiliency and higher system capacities.

The Polycom multipoint media server, serves as an integrated media relay engine that provides media streams for displaying conferences at low latency video experience in video conferences. For more details, see *RealPresence Collaboration Server 800s*, *"SVC-based Conferencing"* on page **2-8**.

Mixed CP and SVC Conferencing

This type of conference enables participants with SVC-enabled endpoints and AVC endpoints to participate in the same conference.

Each endpoint connects according to its capabilities. The MCU processes the AVC video streams and converts them into SVC video Streams and relays them to the SVC participants that constructs the video layout on the endpoint.

In the same way, the MCU processes the video streams received from the SVC participants, converts them into AVC video and then transcodes all the video streams to compose the video layout that is sent to the AVC endpoints.

Other Features

Other features and functionality:

- Encryption
- LAN Redundancy
- MCU Failover (Hot backup)
- CDR
- SVC and AVC conference support
  - Support for mixed SVC/AVC calls:
    10 720p30 AVC ports plus 30 SVC ports (up to 720p30)
  - Support for 20 720p30 AVC only ports
  - Support for 40 SD AVC only ports
  - Support for 60 SVC only ports
- Native Microsoft RTV support
- Direct IP dialing into conferences
- Easy "Off-the-Shelf" setup
- Support for the following audio and video protocols:

Audio	G.711a.u G.722, G.722.1, G.722.1C G.729A Polycom Siren™ 14 (in mono and stereo) Polycom Siren 22 (in mono and stereo) Polycom Siren 22 LPR Polycom SAC LPR
Video	H.263 H.264 H.264 High Profile (Constrained High Profile) SVC RTV

RealPresence Collaboration Server 800 Features List

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

Table 1-2 *Conferencing Capabilities in the Different Conferencing Modes*

Feature	CP Only	Mixed CP & SVC	SVC Only
Reservations	✓	✓	✓
Operator Conferences	✓	✕	✕
Entry Queues	✓*	✓*	✓*
Dial Out	✓	✓ (AVC Only)	✕
Cascading	✓**	✓**	✕
IVR	✓	✓	✓ Reduced IVR set for SVC endpoints
Permanent Conference	✓	✓	✓
LPR	✓	✓***	✓***
Auto Redial	✓	✓	✕
Content	All Content Settings, All Content Protocols	✓ Graphics Only, H.264 Cascade & SVC Optimized	✓ Graphics Only, H.264 Cascade & SVC Optimized
Presentation Mode	✓	✕	✕
Lecture Mode	✓	✕	✕
Same Layout	✓	✓	✕
Layout Selection	✓	✓ AVC endpoints only	Layout set to Auto Layout and defined on the endpoint
Skins	✓	✓ AVC endpoints only	✕

Table 1-2 *Conferencing Capabilities in the Different Conferencing Modes (continued)*

Feature	CP Only	Mixed CP & SVC	SVC Only
Encryption	✓	✓	✓
Recording	✓	✓ AVC recording only	✕
Site Names	✓	✓ AVC endpoints only	Managed by the endpoint (not via MCU)

* Entry Queue & Destination Conference must have the same profile (i.e. SVC only to SVC only, Mixed CP and SVC to Mixed CP and SVC)
** Only Basic Cascading is available
*** For AVC, the LPR error resiliency is used, however for SVC endpoints new error resiliency methods are used.

Interoperability

The following table lists the devices with which Version 8.0 was tested.

Table 1-3 *Version 8.0 Device Interoperability Table*

Device	Version
Gatekeepers/Proxies	
Polycom® CMA* Gatekeeper	6.2
Polycom® RealPresence® Resource Manager (XMA)**	7.1
Cisco (Tandberg) Gatekeeper	N6.1
Cisco 3745 Gatekeeper	12.40
Microsoft Lync Server W14***	4.0.7577.199 CU6
Recorder	
Polycom® RSS 4000	8.5
MCUs, Call Managers Network Devices and Add ins	
Polycom® RealPresence® Virtualization Manager (DMA)	5.1, 5.2
Polycom® RealPresence® Collaboration Server (RMX)	7.8
Acme Packets SBC	SBC v- Model net-net-3820 nnSCX63flp7
Polycom® RealPresence® Access Director™ (RPAD)	2.0 & 2.0.3
Endpoints	
Polycom HDX Family	3.1
RealPresence Group Series software	4.0.1
Polycom® VSX and V-Series Family	9.0.6.2
Polycom® Viewstation Family	7.5.4 or higher
Polycom® Viewstation FX/EX	6.0.5 or higher
Polycom® CMA Desktop*	5.2.3
Polycom® CMA Desktop for MAC*	5.2.3
Polycom® QDX6000	4.0.3
Polycom® Real Presence® Mobile - iOS	2.0
RealPresence® Mobile - Android	2.0

Table 1-3 *Version 8.0 Device Interoperability Table (continued)*

Device	Version
RealPresence® Desktop for Windows	2.0
Polycom® m100	1.4
Polycom® VVX1500	4.0.2
LifeSize 200	4.7.21(4)
LifeSize Room and Express	4.7.21(4)
LifeSize Desktop Client	2.0.2
LifeSize Express 220	4.11.3(8)
LifeSize Team 220	4.11.3(8)
LifeSize Passport	4.11.3(8)
Cisco (Tandberg) 150 MXP	L6.1
Cisco (Tandberg) 6000 B	B10.3
Cisco (Tandberg) 6000 E	E5.3
Cisco (Tandberg) EX90	5.1.3, 5.1.4
Cisco (Tandberg) C Series	5.1.3, 5.1.4
Cisco (Tandberg) MXP F-Family	F9.1.2
Cisco SX20	5.1.3, 5.1.4
Cisco E20	4.1.1
Microsoft Lync W14 client***	4.0.7577.4356 (CU6), 4.0.7577.4109 (CU5)

* RealPresence Collaboration Server 800 registration to the CMA Gatekeeper is supported. Bridge information (management & monitoring) and scheduling are not supported.

** RealPresence® Resource Manager (XMA) can schedule calls through the DMA. Reservations are not supported. Wave 7 version of RealPresence® Resource Manager (XMA) does not support management, monitoring and scheduling of conferences on the RPCS 800s that are directly managed by RealPresence® Resource Manager (XMA).

*** Lync 2013 not supported.

Known Issues Version 8.0

Table 1-4 *Known Issues Version 8.0*

#	Key	Category	Description	Detected in Version	Workaround
1	BRIDGE-2812	General	When the RPCS 800s is in a secure mode (https), after the system reboots, you cannot install the RMX Manager application from the Login screen.	V8.0	Do not use secure mode.
2	BRIDGE-2811	Hardware	On the RPCS 800s with a backup power supply, the Hardware Monitor pane lists the power supply (PWR) Status as Major instead of Normal.	V8.0	
3	BRIDGE-2786	Partners - Microsoft	When a Lync client connects as Audio only to a conference and later attempts to escalate to Video, the endpoint's video does not connect. Video Escalation not enabled on the RPCS 800s.	V8.0	
4	BRIDGE-2767	General	When adding a new participant to conference and then saving the participant to the address book, the RPCS 800s client may freeze and the user is logged out.	V8.0	
5	BRIDGE-2754	DTMF	During a conference, when using a DTMF code to initiate an operation, while pressing the error key identifier (e.g. # and then *1 for pausing the recording), the operation will not be executed unless you wait 10 seconds before entering the required DTMF code (*1).	V8.0	Wait 10 seconds before entering the next DTMF codes.
6	BRIDGE-2726	General	On systems with the Microsoft Outlook PCO add-in, Gathering Settings are not available.	V8.0	
7	BRIDGE-2706	Inter-operability	Rarely, during low bit rates and resolutions, when Lync clients connect the aspect ratio switches between the VGA (4X3) and 6X9 formats.	V8.0	

Table 1-4 *Known Issues Version 8.0*

#	Key	Category	Description	Detected in Version	Workaround
8	BRIDGE-2696	CDR	Retrieve the CDR file, the SVC SIP PARTICIPANT CONNECTED event does not display any information.	V8.0	SVC CDR is supported in v. 8.1.
9	BRIDGE-2675	Recording	During a recorded conference on the RPCS 800s, endpoints cannot view the Recording or the Pause icons on their desktop.	V8.0	
10	BRIDGE-2673	General	Using the Fast Configuration Wizard to configure the IP service, if the Signaling, Router and Gateway IP addresses are left blank, no warning popup message appears.	V8.0	
11	BRIDGE-2661	General	When the "H.264 Cascade and SVC Optimized" option in the conference profile is selected, RPD endpoints cannot send content during an H.323 conference.	V8.0	
12	BRIDGE-2649	Inter-operability	When Wave 15 Lync clients connect to a meeting room from external and internal network (federated call) in a disabled Microsoft ICE environment, no video could be seen.	V8.0	Stop and then restart the video.
13	BRIDGE-2642	Resource Capacity	Resources are not calculated correctly on the RPCS800s, and hence an audio only non-SAC call consumes 1 SD/CIF resource.	V8.0	
14	BRIDGE-2639	Encryption	An RPD endpoint fails to connect to a mixed CP and SVC conference, when Encryption is set to “Encrypt when possible”.	V8.0	
15	BRIDGE-2602	Partners - Microsoft	When a Lync Participant connected to a Mixed CP and SVC conference is abruptly disconnected, its video remains on display but frozen.	V8.1	
16	BRIDGE-2586	General	When creating a new conference Profile, after selecting SVC only and clicking the Video Setting tab, the conferencing mode changed to mixed CP and SVC.	V8.0	

Table 1-4 *Known Issues Version 8.0*

#	Key	Category	Description	Detected in Version	Workaround
17	BRIDGE-2572	Content	When an RPD endpoint that is connected to an SVC conference sends content, it is not reflected in the Participant Properties - Channel status dialog box, Content in/out fields.	V8.0	
18	BRIDGE-2556	General	When creating a new conference Profile, after selecting SVC only and accessing the line rate drop down list includes the unsupported line rates of 68 & 96 Kbps.	V8.0	
19	BRIDGE-2437	Partners - Microsoft	When connecting a Lync endpoint to a Meeting Room, the RTV Media information in the Participant Properties, Channel Status - Advanced tab, is incorrect (CIF or VGA should be displayed).	V8.0	
20	BRIDGE-2401	General	When enabling the Secure Communication Mode on the Collaboration Server, you must wait at least 1 minute after system restart before trying to connect using https, otherwise the security mode is not implemented for login.	V8.0	
21	BRIDGE-2392	IVR	In the conference Profile - Advanced tab, configure the conference to "Auto Terminate" to 6 minutes before the end and select "When last participant remains". The conference terminates 6 minutes before the end, however the audio message "End conference Alert" could not be heard when it should.	V8.0	
22	BRIDGE-2331	Partners - Microsoft	When a conference is started on RPCS 800s that is registered to the same Lync Server, the conference is listed as offline in the Lync client when it should be online.	V8.0	
23	BRIDGE-2326	Content	When sending content in a conference set to H.264 Tandberg endpoints cannot view content, as they use H.263 for content sharing.	V8.0	Set the conference to H.263.

Table 1-4 *Known Issues Version 8.0*

#	Key	Category	Description	Detected in Version	Workaround
24	BRIDGE-2224	General	A "Filter Syntax Error" is not generated in the Network Traffic Capture when entering random words in the Filter field and the capture fails.	V7.8.0	
25	BRIDGE-2213	H.323	Packet Loss value always shows "0" in the Channel Status - Advanced dialog box even when there is packet loss.	V8.0	
26	BRIDGE-2111	Resource Capacity	The Resolution Slider > Detailed Configuration dialog box displays inaccurate consumption ratios.CIF and SD should appear together (same line) and display (1 resource). HD720p30 should display (2 resources)		
27	BRIDGE-2206	Video	On mixed AVC and SVC calls, when SVC endpoints experience packet loss, video artifacts may appear on AVC endpoints.	V7.8.0	
28	BRIDGE-2191	General	When a DNS string is entered in the IP address field of the Ping dialog box (Administration > Tools), an error is displayed stating "Failure Status”.	"V7.8.0	

Table 1-4 *Known Issues Version 8.0*

#	Key	Category	Description	Detected in Version	Workaround
29	BRIDGE-2138	General	In the RPCS 800s Web client, the Agent's Engine Identification (ID) field is missing in the SNMP Properties dialog box (Setup > SNMP) and is a requirement for SNMPv3.	V7.8.0	
30	BRIDGE-2136	General	The RPCS 800s client is only supported on Windows 7 32 bit machines. When using the RPCS 800s Web client on Windows 7 64 bit platform, a pop-up dialog box appears requesting you to perform a new client installation or restart the MCU.	V7.8.0	Run Internet Explorer as administrator or use RMX Manager.
31	BRIDGE-1907	IP	In IP Service - Fixed Ports, when configuring a number of TCP ports that is lower than the number of UDP ports, no warning message is displayed indicating that this may affect the MCU capacity.	V7.8.0	

Notices

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