

# Release Notes

Polycom® RMX 1000™ System, Version 2.1.1



POLYCOM®

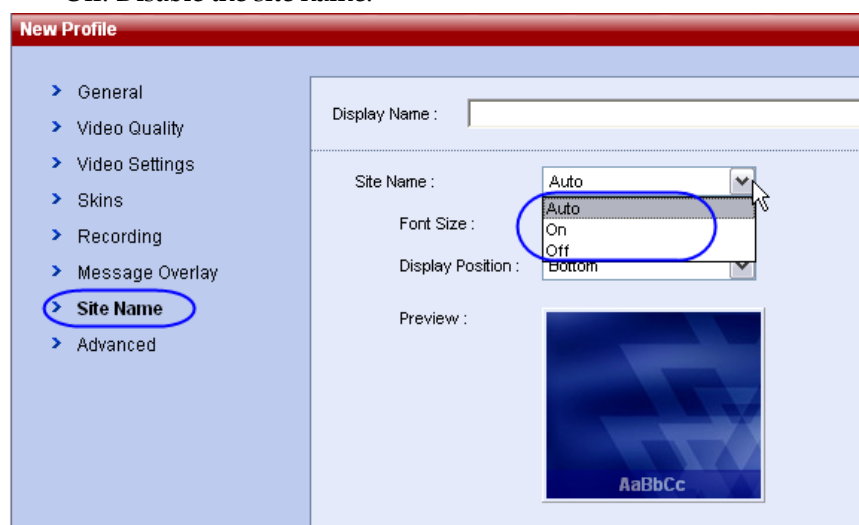
Polycom is pleased to announce the release of Polycom® RMX 1000™ system, version 2.1.1. This document provides the latest information about the Polycom® RMX 1000™ system and version 2.1.1 software.

For more information about using the features described in this document, refer to the product documentation available at [www.polycom.com/support/network/index.html](http://www.polycom.com/support/network/index.html).

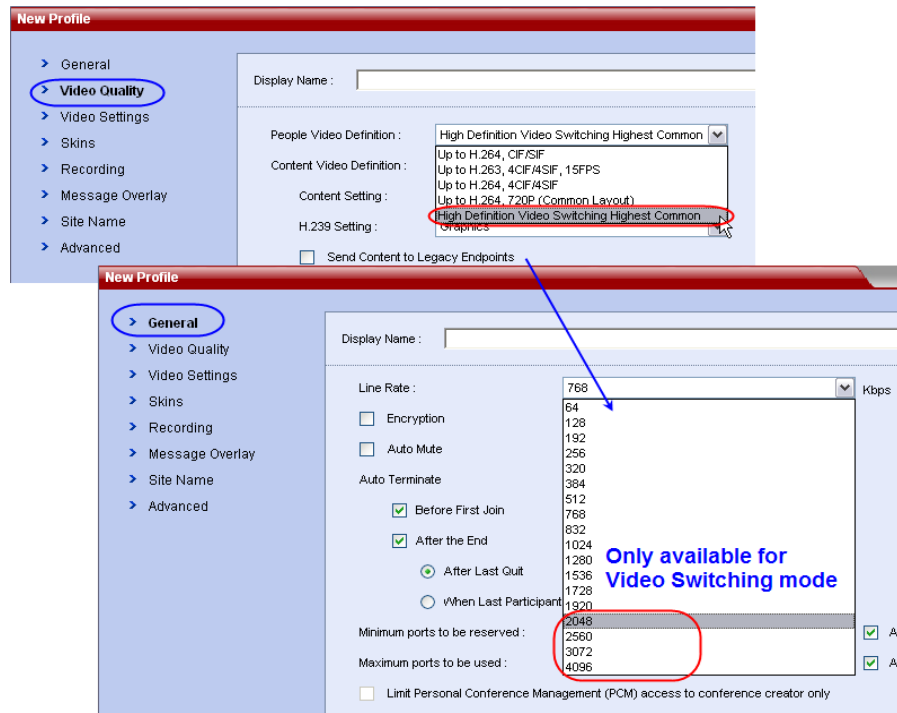
## What's New in Version 2.1.1?

Version 2.1.1 includes the following two enhancements:

- Site Name
  - Ability to specify the display policy of the site name:
    - Auto: Display the site name till the conference video layout has not changed for 10 seconds.
    - On: Always display the site name in the conference.
    - Off: Disable the site name.



- Line Rate  
Support for 2M-4M line rate for video switching conferences.



## What's New in Version 2.1?

The following table lists the new features in Version 2.1.

Subject	Feature Name	Description
Ease of Use	Personal Skins and UI Customization	Version 2.1 allows users to upload their own Logo to the Web UI, skins to the video layout, and customized welcome message to display on the login screen.
	Integration with CMA GK/ LDAP Address Book	The RMX 1000 Address Book can be configured to synchronize with the Global Address Book of a CMA-Server, indicating presence status of each device.
	Calendar Reservation View	Version 2.1 adds the calendar view to Reservation operation enabling users to schedule a conference in an Outlook-like interface.
	Move between Conferences	Version 2.1 supports moving participants between Continuous Presence conferences. Moves between non-encrypted and encrypted conferences are not allowed.
	Participant Snapshot	In Version 2.1, a snapshot of the video from each connected participant is available to the administrator.
	Online Help	Version 2.1 adds online help, which is available for users performing actions in the web UI. Online help is available in 2 languages: English and Japanese.

Subject	Feature Name	Description
	Resource Usage Bar Improvements	Version 2.1 improves the resource usage bar to provide more detailed information and a graphical view of the resource availability.
	Invite Improvements	In Version 2.1 a user can generate an ad hoc call and invite other endpoints immediately via remote control.
	Echo Exterminator	Version 2.1 introduces echo exterminator technology to suppress echo and keyboard noise, improving the user experience in a conference.
	Stereo IVR	Version 2.1 supports stereo playback of IVR messages.
	Personal Conference Management (PCM) Improvements	Version 2.1 enhances the PCM interface to provide additional functionalities, such as inviting participants via the Global Address Book, requesting chairperson permissions, and recording the conference.
Interoperability / Security	MTU Size Configuration	Version 2.1 supports MTU size configuration, enabling users to configure MTU size for each LAN connection.
	Content Support for Legacy Endpoint	The user can choose whether to allow a non H.239 endpoint to receive content in the video channel instead of the people video from the conference.
	SSL Support	Version 2.1 supports SSL/Https connections to the web UI for improved security.
	Auto terminate when one participant remains	This option enables users terminate a conference when only one participant is connected.
Dynamic Management Mode	SIP Support	Version 2.1 supports SIP
	SNMP Support	Version 2.1 supports SNMP
	CMA Support	Version 2.1 can fully integrate with CMA
	Recording Indicator	The RMX 1000 can be configured to display a recording icon in the conference video to alert participants when the conference is being recorded.
	G.719 Support	Version 2.1 supports G.719
Innovation	Video Clarity	This algorithm improves the user experience when using low bit rate or low resolution endpoints by enhancing the video received from these endpoints.

## Interoperability Table

The following are the list of devices that were tested with RMX 1000 V2.1.1.

Our recommendation is updating to the latest version of each standard device, however, we will make any reasonable effort to investigate any issues occur with other

type of devices, as long as they follow the H.323 or SIP Standard, and provide with a conclusion and a suggestion on how and if the issue can be resolved.

Product Type	Vendor	Model	Version (From and Above)
Endpoints	Polycom	HDX product line	2.0.2.2461
		VSX product line	9.0.1
		QDX 6000	3.0
		V500	9.0.5
		VS FX	6.0.5
		VS 4000	6.0.5
		VS EX	6.0.5
		VS SP	7.5.4.1
		VS 512	7.5.4.1
		iPower 9000	6.2.0
		PVX	8.0.4
		CMA Desktop	4.1.0
		DST B5	2.0.0
		DST K60	2.0.1
	Tandberg	MXP 770/990	F4.0
		1700 MXP	F8.0
		Edge95 MXP	F8.0
		880 E	E5.3
	Aethra	Vega Star Gold	6.0.49
	Sony	PCS1	3.2.2
PCS-G70		2.63	
LifeSize	Room system	1_4.1(17)	
MCUs	Polycom	RMX 2000	2.0
		MGC	8.0
Gatekeepers	Polycom	CMA 5000	4.0.1
		SE 200	2.1
		PathNavigator	7.0.11
SIP Phone	Polycom	VVX 1500	3.2.2.0481
	Polycom	soundpoint IP670	3.1.2
Recorder	Polycom	RSS 2000	4.0

# Upgrade Procedure

## Upgrading from Version 1.1/2.1 to Version 2.1.1



Please don't restart the system until both the two required packages are uploaded into RMX 1000 successfully. Otherwise the upgrade will failed and cause the unavailability of the Web UI. If that happens, you can use the RMX 1000 Rescue utility provided with the device to restore the upgrade. For details please refer to *System Recovery*.

- 1 Download the required software Version 2.1.1 (xx-File Systems-xx.ppm and xx-Kernel Systems-xx.ppm) from Polycom web site.
- 2 In the **Upgrade System** page, install the two upgrade packages of software Version 2.1.1.
- 3 Read the *License Agreement* and select **I Agree** if you accept the terms and conditions.
- 4 Click **Open** to select the *Kernel System* package (.ppm) in the folder where Version 2.1.1 files are saved and click **Upload File**.
- 5 The system displays "Software upload successfully - reboot system to activate new version now or later?", click **Reboot Later, do not restart the system**.
- 6 Continue to upload the *File System* package as described in Step 4.
- 7 When prompted whether to restart the system, click **Reboot Now** to restart your system.

This upgrade requires the installation of an upgrade activation Key. After the system reboot, you need to log into the Web UI to activate the system. Go to *Activating the Upgraded System* section for further operations.

If the upgrade failed due to restarting the system by mistake, move on to the following section for rescuing information.

## System Recovery



The following step is required before initiating an RMA (Return Material Authorization) or DOA (Damage on Arrival) Process with Polycom Support team.

In the rare scenario where the upgrade fails (Due to the fact that accidentally, a reset was done between the two upgrade files uploading or any other reason), you can restore the upgrade by the following procedures:

- 1 Start up the RMX 1000 system in the rescue mode via HyperTerminal.
- 2 Use the **RMX 1000 Rescue** utility located in the CD (or you can contact Polycom Support team) to reload software packages.

Each of these steps is described in the following sections.

### To start up the RMX 1000 system in the rescue mode:

- 1 Use the RS232 serial cable to connect the serial port of RMX 1000 and the user's

PC.

- 2 Run the HyperTerminal in the PC and set the parameters as below:
  - Port: COM1 (confirm on the basis of the port used on the PC)
  - Baud rate: 115200 bps
  - Data: 8
  - Parity: none
  - Stop bit: 1
- 3 In the Console session, press the **Enter** key. The login interface appears. Now enter the login password and press the **Enter** key. The default password is **POLYCOM**(case sensitive).

```
Welcome to Polycom RMX 1000 Console Utility
Copyright (C) 2008 POLYCOM
password: _
```

- 4 Enter the command **Reboot** and then **Y** to confirm. You can also restart the system manually. When the screen displays message as shown below, **do not press the Spacebar**.

```
Press <SpaceBar> to update BIOS.
```

- 5 Wait about 50 seconds, when the screen displays menu as shown below, highlight the **rescue** and press **Enter**.

```

GNU GRUB version 0.97 (639K lower / 2095936K upper memory)

normal
rescue

Use the ^ and v keys to select which entry is highlighted.
Press enter to boot the selected OS, 'e' to edit the
commands before booting, 'a' to modify the kernel arguments
before booting, or 'c' for a command-line.

```

If you have no operation for 5 seconds on the above interface, the system will automatically enter the normal mode. In that case you need to reboot the system again to recreate the opportunity to select **rescue**.

- 6 The system remains in a startup state for approximately 1 minute. When the screen shows the current system IP address, the system now is running under the rescue mode successfully.

```

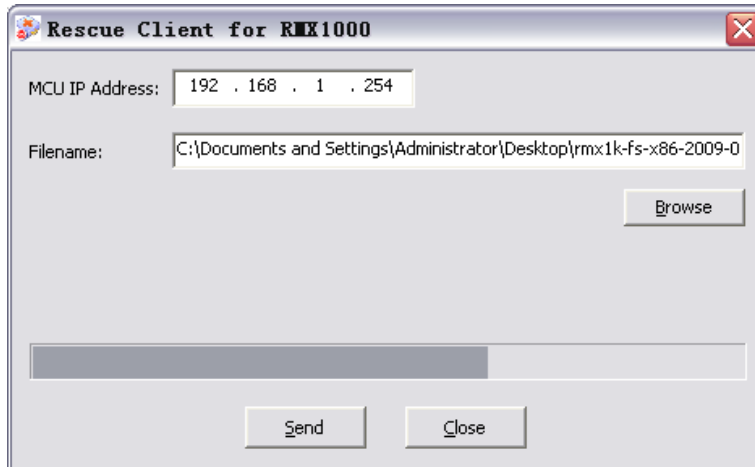
EXT3-fs warning: maximal mount count reached, running e2fsck is recommended
EXT3 FS on hda1, internal journal
EXT3-fs: mounted filesystem with ordered data mode.
kjournald starting. Commit interval 5 seconds
EXT3-fs warning: maximal mount count reached, running e2fsck is recommended
EXT3 FS on hda2, internal journal
EXT3-fs: recovery complete.
EXT3-fs: mounted filesystem with ordered data mode.
kjournald starting. Commit interval 5 seconds
EXT3-fs warning: maximal mount count reached, running e2fsck is recommended
EXT3 FS on hda3, internal journal
EXT3-fs: mounted filesystem with ordered data mode.
kjournald starting. Commit interval 5 seconds
EXT3-fs warning: maximal mount count reached, running e2fsck is recommended
EXT3 FS on hda4, internal journal
EXT3-fs: recovery complete.
EXT3-fs: mounted filesystem with ordered data mode.
cat: can't open '/etc/resolv.conf.eth1': No such file or directory
System started.

-----
LAN1 IP: 192.168.1.254/24
-----
.....

```

**To use the RMX 1000 Rescue tool to reload software packages:**

- 1 In the PC used for uploading the software packages, run the RMX 1000 Rescue utility in the CD provided with the product. Please make sure the PC can communicate with RMX 1000.
- 2 In the **Rescue Client for RMX 1000** interface, input the MCU IP address and then click **Browse** button to select *Kernel System* package (.ppm) in the folder where Version 2.1.1 files are saved.
- 3 Click **Send**, the progress bar will appear indicating the uploading progress if the PC is establishing a connection with the MCU.



- 4 When prompted whether to restart the system, click **NO** to upload the other package.
- 5 Continue to upload the *File System* package as described in Step 2 and Step 3.
- 6 When prompted whether to restart the system, click **Yes** to complete the upgrade.

## Activating the Upgraded System

- 1 Log in to the Web interface. The system displays the *Product Activation* page, requesting you to enter the activation key to activate the upgraded device. Click the **Polycom Resource Center** button on the page to enter the login page for *Polycom Resource Center*.
- 2 Enter your Email address and password in the login boxes, and then click **Sign In**. If you are a new user, click the **Register for an Account** link to be registered and obtain the login password.
- 3 After successful login, click **Service & Support -> License and Product Activation -> Activation/Upgrade** in the upper navigation bar on the interface.
- 4 Click the picture indicated with *Single Activation/Upgrade* in the page you enter.
- 5 Enter the serial number and version number (2.1.1) as the page prompts.  
You can find the serial number of the product from the document provided with the RMX 1000.
- 6 Click the **Retrieve** button to generate the Key Code required for system upgrade.
- 7 In the *Product Activation* page, fill the retrieved Key Code in the **Activation Key** input box. Finally, click the **Save** button to activate the RMX 1000.
- 8 After the system reboot, log into the Web UI and go to the *Administration>License Information* page, you will find the software version number changes to V2.1.1, and the purchased options are activated.

Now, the upgraded device is ready for use.



## Corrected Issues in Version 2.1.1

The following table lists corrected issues in version 2.1.1.

JIRA ID	Category	Description
DSTC-299	Conference Profile	The Skins Outline Color settings of the Conference profile returned default settings when rebooted the system.
DSTC-268	Audio	Audio corruption or no audio occurred randomly on newly installed RMX1000 conference.
DSTC-246	Audio	No audio during a conference after sending contents.
DSTC-266	Email	Mail server rejects email sent from RMX1000 due to email format which did not include domain name.
DSTC-238	Address Book	When RMX 1000 merges the local address book with the Directory Service address book the second page is not alphabetically contiguous with the last entry.
DSTC-216	Video	You cannot login directly to "enter conference password" screen on a meeting room with conference password.
DSTC-215	Command	"reset config" command doesn't work properly from serial port .
DSTC-234	Interoperability: VVX 1500	VVX1500 in SIP call don't receive the video from RMX1000 if the conference profile used is Up to H263.
DSTC-217	Interoperability: Polycom CMA	RMX1000 managed by CMA 4.1.x gives a unique system alert after nearly 15 minutes.
DSTC-209	Interoperability: Viewstation	Viewstation SP/VS model gets degraded video when connecting to RMX menu and first connecting to the RMX conference.
DSTC-207	Interoperability: Polycom CMA	When schedule a conference from CMA, the endpoints can't be dialed out automatically from RMX 1000.
DSTC-206/SSGE-668	Interoperability: Polycom CMA	When schedule a conference from CMA , the conference launched on RMX 1000 is empty.
EXT-2445	GAB	The RMX 1000 cannot re-register to the GAB automatically when the GAB connection is lost.
DSTC-205	Web UI	New value of the MTU Size isn't be reflected on the Web UI but be applied to the system configuration.
DSTC-203	Web UI	Major error message "NTP server unreachable" stays even though it has managed to sync with NTP server.
DSTC-202	Web UI	Control processor temperature sensor shows a high temperature.
MCS-1234	Web UI	Weekly reservation displays in a wrong time slot when it's switched to daily view.
MCS-1201	Web UI	The setting of <i>Recording Indication</i> should be gray-out on 720P and HD VSW profile.

JIRA ID	Category	Description
MCS-1193	Web UI	When you open the reservation calendar, Online Help doesn't open.


## Corrected Issues in Version 2.1

The following table lists corrected issues in version 2.1.

JIRA ID	Category	Description
DSTC-53	Time Synchronization	RMX 1000 cannot synchronize time when there are existing reservations.
DSTC-176	Time Synchronization	"RMX Time" will never be synced again after the first success synchronization or after the reboot procedure.
DSTC-62	Activation Key Code	RMX1000 keycode problems requiring 'cleankey' command in console to resolve web UI lockout.
DSTC-63	Integration with V2IU	RMX 1000 can only connect one site behind a V2IU, the second one coming from the same IP address gets dropped.
DSTC-73	Content	RMX1000 people video bit rate from RMX to HDX is not increased when H239 content is stopped.
DSTC-91	Video Improvements	RMX1000 video degraded when active speakers changes.
DSTC-108	Video Improvements	RMX1000 sends bad video (low actual video rate)
DSTC-150	Video Improvements	RMX1000 problems when bandwidth is + 8 MB. (CPU at %60+) Video issues seen include site names flickering and video artifacts.
DSTC-124	Video Improvements	"Skin" and "Endpoint Name" flickers and audio drop on some point during HD conference on RMX1000.
DSTC-94	QoS	The QoS value set in the Web UI when selecting Differv type restores to default value after rebooting the RMX 1000 system.
DSTC-116	Audio Improvements	Cannot hear audio during 3-party call with RMX1000.
DSTC-174	Audio Improvements	RMX 1000 audio quality reduces over time until reboot.
DSTC-112	HDX Interoperability	RMX1000 transmit H264 CIF resolution to HDX4000 in a 1024K, Up to H264 720p conference.
DSTC-146	HDX Interoperability	HDX receives SIF instead of 4SIF when connected in a "Up to H264 4SIF/4CIF" conference in RMX1000.
DSTC-120	Reservations	Participants predefined in a reoccurring Reservation disappear after 1 or 2 days.
DSTC-139	Reservations	Reservation conference will not start if the Local Date and GMT Date differ.
DSTC-145	Meeting Room	Lost configuration and could not enter meeting room.
DSTC-137	Recording Link	RSS2000 did not start immediate recording configured from RMX1000 recording link.

## RMX 1000 V2.1.1 Known Issues

The following table lists the known issues for this software version. If a workaround is available, it is noted in the table.

Category	JIRA ID	Found In Release	Description	Workaround
GK Registering	MCS-1547	V2.1	Inviting the endpoint from RMX 1000 address book failed when the GK is working in router mode.	When adding an endpoint which is registered with GK into address book, it is recommended to only input E.164 prefix and leave IP Address option blank.
GK Registering	MCS-1548	V2.1	Only one of LAN interfaces can be registered with GK.	None
GK Registering	MCS-1549	V2.1	ConferenceAdapter Ver 2.5.0 GK is not supported.	None
Recording	MCS-1550	V2.1	<ul style="list-style-type: none"> <li>If recording is stopped, resuming recording cannot occur in 25 seconds.</li> <li>If GK is not enabled and recording link is configured with both of IP address and E.164 number, inviting the recording link will fail.</li> </ul>	This is a system known limitation.
Reservation	MCS-1083	V2.1	No view of all occurrences in the reservation list, but it's still possible to delete a specific instance of the series.	To display all occurrences, switch to the calendar view by clicking the  button in the reservation list view.
Upgrading	MCS-1064	V2.1	RMX 1000 management interface didn't show correctly in IE browser after upgraded to a new version.	To prevent this problem, restart Internet Explorer after upgrading the RMX 1000.
Video	MCS-1530	V2.1.1	When you run a 720P conference on a RMX 1000 supported 12 video ports, if it connects with 5 H.264/4SIF endpoints and 1 HD endpoint, the last joined endpoint always becomes audio-only.	<p>This is because of that the Web UI resource report reflects the resources usage of 720p conferences in a simply way which is not accord with the actual internal calculation. For information about the internal calculation policy, refer to <i>Video Resource Calculation Policy</i>.</p> <p>To work around this issue, it is recommended you choose 4CIF/4SIF CP conference mode. If HD CP conference is a must, change at least one of the 4CIF/4SIF endpoints to an HD endpoint so that the last joined endpoint can have enough video resources.</p>

Category	JIRA ID	Found In Release	Description	Workaround
Video	MCS-1555	V2.1	For video switching conference, video format of an endpoint is unknown.	None
Audio	MCS-1536	V2.1.1	After moving a Polycom HDX endpoint participant from a 720P conference to a CIF conference, the transmission audio rate displayed in the HDX endpoint user interface is wrong.	None
Audio	MCS-1556	V2.1	Audio-only endpoints cannot create conference or activate a meeting room.	None
DTMF	MCS-1557	V2.1	When an endpoint initially connects to the RMX 1000. DTMF tones sent by the endpoint be ignored for the first 5 seconds.	None
LDAP	MCS-1558	V2.1	Presence information for Global Address Book participants imported via LDAP is not available.	
IVR	MCS-1564	V2.1	Uploading an IVR file which size is 25MB to the RMX 1000 failed.	This is normal system behavior. The maximum size of a music file supported by the RMX 1000 is 16MB, that of a ring tone is 1MB, and that of other IVR files is 500KB.
FECC	MCS-1560	V2.1	FECC is not supported when the RMX 1000 is registered with a BroadSoft SIP server.	None
FECC	MCS-1200	V2.1	FECC is not available when connecting RMX 1000 from iPower endpoints.	None
Web UI	MCS-1535	V2.1.1	After moving a Polycom HDX endpoint participant from a 720P conference to a CIF conference, the RMX 1000 displays a wrong network RX rate in the Web management interface.	None
Web UI	MCS-1540	V2.1.1	Address list entry displays incorrectly for the user logged in RMX 1000 when the address list entries amount is more than 1000.	The maximum number of address list entries supported by the RMX 1000 is 1000. To work around this issue, it is recommended you clean up the address book by exporting function.

Category	JIRA ID	Found In Release	Description	Workaround
Web UI	MCS-1531	V2.1.1	When synchronize the device time with a time server, the GMT and Local time info in the Web management interface will not change immediately after clicking the <b>Synchronize</b> button.	To refresh the time, close the RMX time page and re-open it.
Web UI	MCS-1541	V2.1.1	When use an HD endpoint to dial into an HD video switching conference, the resource report page shows the CIF video resources are used.	This is normal system behavior.
Web UI	DSTC-143	V2.1	Internet Explorer didn't show the RMX1000 maInternet Explorer didn't show the RMX1000 management interface correctly.	On Windows desktop, go to Appearance -> Effects, and check the status of the button "Show window contents while dragging".
Calling	MCS-1539	V2.1	When start a conference with <i>Only participants in the above participant list can dial in</i> option checked, if create a new participant in it and don't save to address book, the endpoint that participant uses can't dial into the RMX 1000.	To work around this issue, check the <i>Save to Address Book</i> option when creating the participant in a conference with <i>Only participants in the above participant list can dial in</i> option enabled.
Interoperability: Polycom VSX	MCS-1515	V2.1.1	When use the Polycom VSX to call in RMX1000 at a rate of 64K and using SIP protocol, it is unsuccessful.	This is normal system behavior.
Interoperability: Polycom VSX	MCS-1516	V2.1.1	When use the Polycom VSX to call in RMX1000 at a rate of 768K, it actually sends the video at the rate of 384K.	None
Interoperability: Polycom VSX	MCS-1528	V2.1.1	When move a Polycom HDX endpoint participant from a H.263/4CIF conference to a 720P conference, the video resolution the HDX endpoint receives don't upgrade to 720P but still keeps H.263/4CIF.	None
Interoperability: Polycom VSX	MCS-1518	V2.1.1	When use the Polycom VSX to call in RMX1000 at a rate of 768K, the VSX receives video at a wrong rate.	None
Interoperability: Polycom SE 200	MCS-1554	V1.1	RMX 1000 didn't work properly with the SE 200.	RMX 1000 should first be manually added to SE 200 device list. After that the RMX 1000 can register to the SE 200.

Category	JIRA ID	Found In Release	Description	Workaround
Interoperability: Polycom HDX 8006	VIDEO-81816	V2.1.1	When use the Polycom HDX 8006 to call in RMX1000 at a rate of 64K and using SIP protocol, the video format RMX 1000 receives from HDX 8006 is incorrect.	None
Interoperability: Polycom CMA Desktop	MCS-1543	V2.1.1	CMAD v5.0.0.0201 doesn't support G.719 audio encoding when connects with RMX1000 v2.1.1.	None

## Video Resource Calculation Policy

Depending on the different conferencing modes, RMX 1000 allocates video resources to endpoints complying with the following policies:

Conference Mode	Resource Calculation Policy
CIF CP	Each endpoint in the conference occupies one resource.
4CIF/4SIF CP	Each endpoint no matter what resolution it connects in the conference occupies two resources.
720P CP	It complies with a 4,0,2,2 rule. That is: <ul style="list-style-type: none"> <li>▪ The first HD endpoint joined occupies 4 video resources.</li> <li>▪ The second HD endpoint joined occupies 0 resource.</li> <li>▪ The third and subsequent HD endpoints joined, each occupies 2 resources.</li> <li>▪ Each CIF/4CIF endpoint joined occupies 2 resources.</li> </ul>
Video Switching	Each endpoint no matter what resolution it connects in the conference occupies one CIF resource.

## Related Documentation

For more information, see the *Polycom RMX 1000 System User Guide*, available at [www.polycom.com](http://www.polycom.com).

## Polycom Solution Support Services

Polycom Implementation and Maintenance services provide support for Polycom solution components only. Additional services for supported third-party Unified Communications (UC) environments integrated with Polycom solutions are available from Polycom Global Services and its certified Partners. These additional services will help customers successfully design, deploy, optimize and manage Polycom visual communications within their UC environments. Professional Services for Microsoft Integration is required for Polycom Conferencing for Microsoft Outlook and Microsoft Office

Communications Server integrations. For additional information and details please see [http://www.polycom.com/services/professional\\_services/index.html](http://www.polycom.com/services/professional_services/index.html) or contact your local Polycom representative.

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