

Release Notes

Polycom® Distributed Media Application™ 7000 System, Version 2.3 (Patched)



POLYCOM®

Polycom® announces the release of its Polycom® Distributed Media Application™ (DMA™) 7000 System, version 2.3.0_P3. This document provides the latest information about this release.

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Polycom Inc.
4750 Willow Road
Pleasanton, CA 94588 U.S.A.

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Introducing the Polycom DMA™ 7000 System

The Polycom DMA 7000 system is a centralized application for efficiently managing and distributing multipoint conferences throughout the network. It:

- ❑ Provides a highly reliable and scalable multipoint conferencing solution that distributes voice and video calls across multiple media servers (MCUs), creating a single seamless resource pool. The system essentially behaves like a single large MCU, which greatly simplifies video conferencing resource management and improves efficiency.
- ❑ Integrates with your enterprise directory, automating the task of provisioning users for video conferencing. Combined with its advanced resource management, this makes ad hoc video conferencing on a large scale feasible and efficient, reducing or eliminating the need for conference scheduling.
- ❑ Supports up to 64 MCUs and 1200 concurrent calls. MCUs can be added on the fly without impacting end users and without requiring re-provisioning.
- ❑ Can be configured as a two-node cluster, with both servers able to accept and process calls. In this configuration, the system is highly reliable, with no single point of failure.

Use of this software constitutes acceptance of the terms and conditions of the Polycom DMA 7000 system end-user license agreement on page 11.

Version 2.3.0_P3 is a rollup of the base version 2.3 release and subsequent patch releases to address specific issues, as described below. It replaces the base version 2.3 release and the version 2.3.0_P1 and 2.3.0_P2 patch releases.

What's New in the Version 2.3.0_P3 Release

Resolved Issues

This patch release fixes the following issues:

- ❑ Signaling: If the system is configured to require client certificates, the virtual signaling address may not be available. (DMA-4038)
- ❑ Cascading: If a cascaded conference has two or more spokes (cascade links), meaning that at least three MCUs are connected, the Polycom DMA system may fail to terminate the cascade links when the conference ends. (DMA-4092)
- ❑ Routing: Deleting a route with a Via value specified from the Routing Configuration dialog box fails to remove it from the routing table (raw routing configuration). (DMA-4112)
- ❑ Upgrade: When a version 2.0.0 or 2.2.0 system is upgraded to version 2.3.0, the chairperson and conference passcodes may be set to invalid values ("TRUE" or "FALSE"), rendering the conference rooms (VMRs) inaccessible. (DMA-4193, DMA-4801)
- ❑ Swap space: Under some circumstances, when the system is rebooted, the swap space disappears, preventing the system from starting. (DMA-4550)
- ❑ Password security: When logging is in debug mode, user passwords can appear in the logs. (DMA-4595)
- ❑ SIP failover: When an RMX MCU becomes unavailable, the system may fail to move existing conferences (VMRs) to another MCU. (DMA-4711)
- ❑ Data loss: When a version 2.3.0 system is upgraded to version 2.3.0 P1 or P2, direct dial virtual entry queues (VEQs) may be lost.

Functionality Affected

This patch release changes Polycom DMA v2.3.0 system functionality in the following ways:

- ❑ The virtual signaling address remains available if client certificates are required.
- ❑ The system terminates cascade links about 15 seconds after the conference ends.
- ❑ Deleting any route from the Routing Configuration dialog box now removes it from the routing table.
- ❑ If the system is rolled back to v2.0.0 or v2.2.0 and then upgraded to v2.3.0 again, chairperson and conference passcode fields retain their existing values.
- ❑ Upon starting, the system checks its swap space and recreates it if necessary.
- ❑ Passwords are no longer written to the logs.
- ❑ The system moves SIP conferences to another MCU when the MCU hosting them becomes unavailable.
- ❑ If the system is rolled back to v2.3.0 (base version) and then upgraded to v2.3.0 P3, direct dial VEQs are preserved.

Prerequisites/Configuration Considerations

Systems must have Polycom DMA 7000 v2.0.0 (any patch level), v2.2.0 (any patch level), or v2.3.0 (any patch level) installed. No other prerequisites exist.

Installation Notes

To update a Polycom DMA system with a new software patch, complete the following tasks:

1. Download the software upgrade file to your PC.
2. Perform the software upgrade by following the upgrade steps described in the “Upgrading the Software” topic of the online help or *Polycom DMA 7000 System Operations Guide*.
3. Verify the upgrade.

Rollback Considerations

To roll back this patch, follow the rollback steps described in the “Upgrading the Software” topic of the online help or *Polycom DMA 7000 System Operations Guide*.

Known Issues

This patch release has no new known issues. Please see page 10 for known issues reported with the v2.3.0 base release.

What’s New in the Version 2.3.0_P2 Release

Resolved Issues

This patch release fixes the following issues:

- ❑ Dashboard data: When a browser session was left logged into the Polycom DMA system dashboard overnight with auto refresh turned on, one of the nodes died. (DMA-3821)
- ❑ Shared number dialing: SIP calls failed if the Polycom RMX MCU was configured for TLS and hosted both the IVR session and the VMR session. (DMA-3947)
- ❑ Insufficient memory: Under some circumstances, the system’s Java process ran out of memory. (DMA-3967)

- ❑ VEQ numbers: The system did not accept virtual entry queue numbers with leading zeros. (DMA-3968)

Functionality Affected

This patch release changes Polycom DMA v2.3.0 system functionality in the following ways:

- ❑ The way in which dashboard data is collected has been changed.
- ❑ The system properly checks MCUs for SIP transport type support.
- ❑ More memory is allocated to the Java process.
- ❑ VEQ numbers with leading zeros are accepted.

What's New in the Version 2.3.0_P1 Release

Resolved Issues

This patch release fixes the following issues:

- ❑ Insufficient swap space: When a Polycom DMA v2.0 system is upgraded to v2.2.0 or v2.3.0, the upgrade fails to increase the swap space to the 10 GB required. (DMA-3879)
- ❑ User data loss issue: When a Polycom DMA v2.2.0 system is upgraded to v2.3.0, local users with failed logins are lost. (DMA-3885)

Functionality Affected

This patch release changes Polycom DMA v2.3.0 system functionality in the following ways:

- ❑ The system's swap space is increased to 10 GB.
- ❑ If the system is rolled back to v2.2.0 and then upgraded to v2.3.0 again, all users are correctly preserved.



Note: If you upgraded to v2.3.0 without losing any user data, there's no need to roll back to v2.2.0 before installing this patch.

What's New in the Version 2.3.0 Base Release

The Polycom DMA system version 2.3 includes the following new features. For more information on these new features, see the *Polycom DMA System Operations Guide* and the online help.

- ❑ Shared number dialing

The new shared number dialing feature enables you to publicize one or more shared access numbers that can be used to reach multiple conferences, or virtual meeting rooms (VMRs). Callers to a shared access number are prompted for the VMR number to which they want to connect.

Shared number dialing requires SIP signaling and is supported only by v7.1 or later Polycom RMX MCUs.

- ❑ Support for Microsoft® Lync™ Server 2010

This release adds support for Lync Server 2010 to its existing support for Office Communications Server 2007, enabling a unified communications solution that supports presence-based, real-time instant messaging (IM), voice, video, and data collaboration.

- ❑ Support for IPv6 addressing

This release supports both IPv4 and IPv6 addressing. You can enable either or both, either in the USB Configuration Utility during system installation or in the Network page of the management interface.

- ❑ Support for split management and signaling networks

This release enables you to use separate network interfaces for management traffic (management interface access) and signaling traffic. You can configure the system for split or combined management and signaling traffic either in the USB Configuration Utility during system installation or in the Network page of the management interface.

- ❑ Routing rules

To help support the enhanced networking functionality, this release enables you to create and delete network routing rules and view the underlying rules of the operating system.

- ❑ Improved Polycom CMA integration

The system no longer needs to restart, terminating all calls and conferences, when it joins or leaves a Polycom CMA system.

In addition, you can now install an upgrade or restore from a backup without first leaving the Polycom CMA system with which the system is integrated. The integration status of the system after restoring from a backup depends on the integration status at the time that the backup was made.

- ❑ Configuration menu changes

The Conference Setup submenu has been replaced by User Experience, which contains Conference Templates, User Experience Settings, Calendaring Service, and Shared Number Dialing.

The User Experience Settings page replaces Conference Settings and includes its settings plus Dialing prefix, which has been relocated from the Signaling page.

System Requirements

- ❑ For best reliability, deploy the Polycom DMA 7000 system into a good-quality IP network with low latency and very little packet loss.
- ❑ In systems with enterprise directory integration, the network between the DMA 7000 and the enterprise directory should have less than 200 ms round-trip latency and less than 4% round-trip packet loss.
- ❑ The network between the Polycom DMA system and all MCUs should have less than 200 ms round-trip latency and less than 2% round-trip packet loss. Since this network carries only signaling traffic (the RTP stream goes directly from the endpoint to the MCU), bandwidth is not an issue.
- ❑ The network between the Polycom DMA system and video endpoints should have less than 200 ms round-trip latency and less than 6% round-trip packet loss.
- ❑ Browser minimum requirements: Microsoft Internet Explorer® 7.0, Mozilla Firefox® 3.0

Installation and Upgrade Notes

Installation of new Polycom DMA 7000 systems is managed through Polycom Project Management. For more information, please contact your Polycom representative.

See the *Deploying Visual Communications Administration Guide* for detailed installation requirements and information.

Polycom DMA systems running versions 2.0 (with or without service packs) or 2.2 (with or without service packs) can be upgraded to version 2.3. This upgrade requires a new license key after the upgrade.

See the *Polycom DMA System Operations Guide* and online help for upgrading and licensing procedures.

Polycom Solution Support

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 mandatory for Polycom Conferencing for Microsoft Outlook and Microsoft Office Communications Server integrations. For additional information, please see http://www.polycom.com/services/professional_services/index.html or contact your local Polycom representative.

Interoperability

Integration with Polycom RMX™ 1500/2000/4000 MCUs

To support the Polycom DMA system's **High security** setting, configure the Polycom RMX MCUs being added to the system to accept encrypted (HTTPS) management connections.

The Polycom DMA system uses conference templates to define the conferencing experience associated with a conference room or enterprise group. Conference templates can be free-standing or linked to an RMX conference profile. If you link templates to RMX profiles, make sure the profiles exist and are defined the same on all the Polycom RMX MCUs that the Polycom DMA system uses.

Refer to the *Polycom DMA 7000 System Operations Guide* or online help for more information on setting up MCUs for the Polycom DMA system. Refer to the *Polycom RMX Administrator's Guide* for more information on enabling encrypted connections and creating RMX profiles.



Note: The Automatic Password Generation feature, introduced in RMX version 7.0.2, is not compatible with the Polycom DMA system. On Polycom RMX MCUs to be used with the Polycom DMA system, disable this feature by setting the system flags `NUMERIC_CONF_PASS_DEFAULT_LEN` and `NUMERIC_CHAIR_PASS_DEFAULT_LEN` both to 0 (zero).

Registration with Polycom CMA™ System Gatekeeper

If the Polycom DMA system is going to use a Polycom CMA system as gatekeeper, the registration process varies depending on the Polycom CMA system's configuration:

- ❑ If the Polycom CMA system has been configured to allow the registration of "All Endpoints," no additional steps are needed. Once you configure the Polycom DMA system's gatekeeper settings, it automatically registers itself with the Polycom CMA gatekeeper.
- ❑ If the Polycom CMA system has been configured to allow the registration of "Predefined Endpoints Only," the Polycom DMA system must be manually added to the Polycom CMA system:
 1. Add an MCU Service entry for the Polycom DMA system with the following settings:
 - Type is MCU
 - Enable and Available For New Groups are checked
 - Service Prefix is the E.164 alias (dialing prefix) to be used for the Polycom DMA system (we recommend setting description to the same value)
 2. Add the server or servers in the Polycom DMA system to the Polycom CMA system's list of managed devices. Configure each entry as follows:
 - IP Address is the server's physical IP address (not the system's virtual IP address)
 - Device Type is GW/MCU (in a CMA 4.1 or newer system, device type is DMA)
 - Click Find Device to retrieve information from the server
 - Set Alias Type to E.164, Alias Value to the alias (dialing prefix) to be used for the Polycom DMA system, and click Add Alias

For more information about adding MCU services and devices, please refer to the *Polycom CMA System Operations Guide*.



Note: The Polycom DMA system can register with a Polycom CMA system gatekeeper running v4.0 or newer software. But it can only integrate with and obtain site topology data from a v5.0 or newer Polycom CMA system.

Device Version Requirements

Polycom has successfully tested the Polycom DMA system with the version numbers shown of the following devices.

Device	Version
Polycom PathNavigator	7.00.12
Polycom RMX2000/4000/GW	6.0.1.12/7.0.2/7.1
Polycom RMX1000	2.1.1
Polycom MGC 50+ (as gateway)	9.0.4.3
Polycom CMAD	5.1.0.060
Polycom CMA5000	5.3.0/5.4.0
Polycom HDX	3.0.0/2.6.1
Polycom VVX1500	3.3.1
Polycom VSX	9.0.6
Polycom FX	6.0.5
Polycom iPower 9000	6.2.0.1208
Polycom PVX	8.0.16

Device	Version
Polycom VS	7.5.4
Polycom QDX4000	4.0.1
Polycom DST B5	2.0
Polycom DST K60	2.0.1
Polycom SoundPoint 601/650 SIP	3.3.1098
Cisco 3745 GK	12.4 (1c)
Cisco Unified CM	8.0.2.4000-1
Radvision ECS GK	5.6.2.10
Tandberg GK	N6.1
Tandberg 6000 B &E	E5.3 NTSC
Tandberg MXP 6000/1700/1500/1000/880/150/Edge75	F9.0/F9.0.1
Tandberg C20	TC4.0.0.235115
Tandberg EX90	TC4.0.0.235115
Lifesize Team Room	LS_RM_4.7.11(4)
Lifesize Room 200	LS_RM2_4.7.11(4)
Lifesize Express	LS_EX_4.7.11(4)
Sony PCS1	3.42
Sony PC-G50	2.72
Sony PC-XG80	2.14.00
Sony TL50	2.42
Aethra VegaStar Gold	6.0.0.49
Aethra X3	12.01.0019
Aethra X7	12.01.0007



Note: *The Polycom CMA 5000 is the only gatekeeper that supports the maximum capacity of the Polycom DMA 7000 system (1200 concurrent calls). The use of other gatekeepers limits the Polycom DMA system capacity to the scale supported by the gatekeeper.*

Open Source Software

The Polycom DMA system uses several open source software packages, including the CentOS operating system. The packages containing the source code and the licenses for this software are included on the Polycom DMA system software DVD in the /SRPMS directory.

The following table lists the open source software packages used in the Polycom DMA system, the applicable license for each, and the internet address where you can find it.

Software Name	License	Legal Contract Web Link
commons-configuration	Apache License, Version 2.0	http://www.apache.org/licenses/LICENSE-2.0
commons-digester	Apache License, Version 2.0	http://www.apache.org/licenses/LICENSE-2.0
commons-httpclient	Apache License, Version 2.0	http://www.apache.org/licenses/LICENSE-2.0
commons-jexl	Apache License, Version 2.0	http://www.apache.org/licenses/LICENSE-2.0
commons-jxpath	Apache License, Version 2.0	http://www.apache.org/licenses/LICENSE-2.0
commons-lang	Apache License, Version 2.0	http://www.apache.org/licenses/LICENSE-2.0
commons-logging	Apache License, Version 2.0	http://www.apache.org/licenses/LICENSE-2.0
commons-pool	Apache License, Version 2.0	http://www.apache.org/licenses/LICENSE-2.0
dom4j	BSD-style	http://www.dom4j.org/license.html
drools	Apache License, Version 2.0	http://www.apache.org/licenses/LICENSE-2.0
Hibernate Annotations	LGPLv2.1	http://www.gnu.org/licenses/old-licenses/lgpl-2.1.html
Hibernate Core	LGPLv2.1	http://www.gnu.org/licenses/old-licenses/lgpl-2.1.html
jamon	BSD-style	http://jamonapi.sourceforge.net/#JAMonLicense
Java JRE	Sun Microsystems, Binary Code license (BCL)	http://www.java.com/en/download/license.jsp
JBOSS AS	LGPLv2.1	http://www.gnu.org/licenses/old-licenses/lgpl-2.1.html
libxml2	MIT License	http://www.opensource.org/licenses/mit-license.html
Log4j	Apache License, Version 2.0	http://www.apache.org/licenses/LICENSE-2.0
Mysql	Commercial License	http://www.mysql.com/about/legal/licensing
Xerces2	Apache License, Version 2.0	http://www.apache.org/licenses/LICENSE-2.0

Version 2.3 (Base Release) Resolved Issues

The following table lists the issues resolved in the Polycom DMA 7000 system v2.3 release.

Issue ID	Found in Version	Description
DMA-3142	2.3	If the system's network configuration is changed to IPv6 addressing only, but no IPv6 address is specified, the system becomes unreachable.
DMA-3454	2.2	Failure to specify NTP servers may lead to a time disparity on the two servers of a two-node cluster. This may cause replication problems.

Version 2.3 (Base Release) Known Issues

The following table lists the known issues in this Polycom DMA 7000 system v2.3 release.

Issue ID	Found in Version	Description	Workaround
DMA-1527	2.0	When the DMA system is using a Radvision ECS GK set for routed mode, endpoints are displayed twice on the RMX's EMA.	Configure the Radvision ECS GK to use direct mode routing.
DMA-1534	2.0	Only one DMA node registers with the Tandberg and Cisco GKs.	None.
DMA-1691	2.0	Calls from Tandberg 6000 E and 6000 B endpoints are unable to join a DMA meeting.	None.
DMA-1877	2.2	When a call from a VSX endpoint fails over to a Codian MCU that hasn't been appropriately configured, the call has no audio.	On the Codian MCU, go to Settings > Conferences > Advanced Settings and enable all audio codecs from and to the MCU.
DMA-2411	2.2	Calls from endpoints registered to a Tandberg VCS GK don't include the IP address of the endpoint, so the DMA system can't determine the site to which the endpoint belongs. For cascaded conferences, the call ends up either in the hub conference or, if the VCS GK is in a defined site, in a spoke conference near the VCS GK.	Place the IP address of the VCS GK into a site near the bridges to be used for spokes.
DMA-2717	2.2	If a spoke MCU with a cascade link to the hub MCU is registered with an unavailable GK, callers on the two MCUs are isolated from each other. There is no indication of the problem in either the user interface or the logs.	Possible workarounds for this situation are: 1) Disable cascading for the conference while the GK is unavailable. 2) Register the MCU to a different GK. 3) Busy out the MCU while its GK is unavailable, causing the DMA system to choose another MCU for the spoke conference.
DMA 3745	2.3	If, after a system reboot, an upgrade is started before the second node of a two-node cluster has finished rebooting, the second node isn't upgraded, and the two nodes are on different versions of the software.	As cautioned in the Operations Guide, perform upgrade, rollback, or system reconfiguration operations only when both nodes are up and active.
DMA-3750	2.3	In a two-node cluster, under certain adverse system and/or network conditions on either node, the virtual address may move between nodes when it shouldn't. This could result in the disconnection of currently active SIP calls.	The system automatically recovers, so dialing back in a short time (1 - 10 seconds) after disconnection will work.
DMA-3802	2.3	During a bridge failover in a Microsoft Lync environment, calls from Lync clients may not automatically reconnect, and other SIP calls may take several seconds longer than usual to reconnect.	None.
DMA-3822	2.3	If Auto adjust for Daylight Saving Time is turned off, the system changes the selected geographic time zone into a generic GMT offset. But it does so incorrectly, failing to reverse the sign of the offset as required for the Posix-standard generic GMT offsets.	Select the time zone of a specific geographic location (such as America/Denver), and always leave Auto adjust for Daylight Saving Time selected.

Where to Get the Latest Product Information

To view the latest Polycom product documentation, visit the Support section of the Polycom website at www.polycom.com/support.

End User License Agreement for the Polycom DMA 7000 Software

Welcome to Polycom® Distributed Media Application™ (DMA™) 7000 (Software Version 2.3)

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