

# Polycom RealPresence Distributed Media Application (DMA)

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### What's New in This Release

The Polycom RealPresence Distributed Media Application (DMA) system 10.0.0.8 includes the following new features:

- Access to the RealPresence DMA Deployment Wizard in the System Web Interface
- Default Factory ACLs

# Access to the RealPresence DMA Deployment Wizard in the System Web Interface

In this version, you can access the online DMA Deployment Wizard from the RealPresence DMA system web interface.

The wizard streamlines configuration of a RealPresence DMA edge or combination server. When you run the wizard, it asks questions about your network and unified communications environment, then saves the information and produces a file you can download, then upload onto the server.

You can access the online wizard and upload the file it creates from the system web interface of a RealPresence DMA edge or combination system.

- 1 Go to Integrations > DMA Deployment Wizard.
- 2 Complete the wizard and download the backup file.

The backup file the wizard creates is available for 12 hours. When you download the file, you must use the same browser and local client that you used to complete the wizard.

- 3 Go to Admin > Backup and Restore.
- 4 Select Upload and choose the backup file you downloaded.
- 5 Select Restore Selected.
- 6 Choose the backup components to restore and select OK.
  Restoring the file applies the settings you configured in the wizard.

### **Default Factory ACLs**

Starting with 10.0.0.8, you can't edit a default factory access control list (ACL). If you revised a factory ACL prior to version 10.0.0.8 and want to keep the changes, you must copy the factory ACL to a new ACL before you upgrade to 10.0.0.8. If you don't create a copy of the factory ACL prior to upgrading, you need to add a new ACL with your changes after the upgrade.

# **Security Updates**

This release includes the following security updates.

#### **Security Updates**

Description	CVE Number(s)
Updated bind version	CVE-2020-8616 CVE-2020-8617
Added content security policy header to API response messages	N/A
Added X-Xss protection header to API response messages	N/A

Description	CVE Number(s)
Fixed weak SSH ciphers	N/A
Increased size of SSH DSA host key	N/A

Please see the <u>Security Center</u> for the security advisories, bulletins, and related acknowledgments and recognition.

# **Release History**

The following table lists the release history of the RealPresence DMA system.

#### **Release History**

Release	API Release	System	Release Date	Features
10.0.0.8	3.6.7	CentOS 6.10 OpenJDK 1.8.0.265 PostgreSQL 10.14-1	October 2020	Online RealPresence DMA Deployment Wizard accessible in system web interface Factory ACLs no longer editable Bug fixes
10.0.0.7	3.6.5	CentOS 6.10 OpenJDK 1.8.0.252 PostgreSQL 10.13-1	July 2020	Support for Zoom conferencing Enhancements to Call History and Active Calls on core systems
10.0.0.6	3.6.5	CentOS 6.10 OpenJDK 1.8.0.232 PostgreSQL 10.11-1	March 2020	SIP transport override for outbound calls  DNS timeout configuration  Alerts for unlicensed systems  Interface stability time for high availability systems  KVM distribution  Support for Microsoft LDAP channel binding

Release	API Release	System	Release Date	Features
10.0.0.5	3.6.4	CentOS 6.10 OpenJDK 1.8.0.232	November 2019	Licensed VMRs dashboard pane in system web interface
		PostgreSQL 10.10-1		ACL rule to block SIP bot calls
				Support for 5x5 layout in conference templates
				Media relay support of unidirectional media streams
				Call routing loop detection
				Advanced diagnostics for troubleshooting Bug fixes
10.0.0.4	3.6.3	CentOS 6.10	August 2019	License sharing and
	0.0.0	OpenJDK 1.8.0.222	, tagaot = 0.10	direct call routing
		PostgreSQL 10.9-1		Bug fixes
10.0.0.3	3.6.0	CentOS 6.10	May 2019	Auto dial-out cascading to
		OpenJDK 1.8.0.181-3		cloud service-based conferences
		PostgreSQL 10.4-1		Bug fixes
10.0.0.2	3.6.0	CentOS 6.10	February 2019	Maintenance release to
		OpenJDK 1.8.0.181-3		fix issues
		PostgreSQL 10.4-1		
10.0.0.1	3.6.0	CentOS 6.10	December 2018	Maintenance release to
		OpenJDK 1.8.0_171		fix issues
		PostgreSQL 10.4		

Release	API Release	System	Release Date	Features
10.0	3.6.0	CentOS 6.10 OpenJDK 1.8.0_171 PostgreSQL 10.4	October 2018	Access proxy Access Control Lists (ACLs) Integration with multiple Polycom® ContentConnect™ systems Support for ContentConnect High Availability and geo- redundancy Clariti VMR licensing and local burst Edge services High Availability (active- active) Immersive Telepresence (ITP) layout (new) Media traversal MCU conference thresholds NAT Registration sharing from edge to core Pooled conference name synchronizing from the RealPresence Resource Manager system to RMX TURN services TIP version 8 support VPN tunnel
9.0.1	3.5.2	CentOS 6.9 OpenJDK 1.8.0_151 PostgreSQL 9.6.6	January 2018	Load balancer to support multiple Polycom ContentConnect systems Security updates Bug fixes
9.0.0.3	3.5.1	CentOS 6.9 OpenJDK 1.8.0_131 PostgreSQL 9.6.3	November 2017	Maintenance release to fix issues

Release	API Release	System	Release Date	Features
9.0.0.2	3.5.0	CentOS 6.9 OpenJDK 1.8.0_131 PostgreSQL 9.6.3	August 2017	New system web interface Multiple dial plans Enhanced High Availability Peer-to-Peer to MCU Escalation Two-system installation with the USB Configuration Utility Network packet capture troubleshooting utility Single log file downloads Enhanced network settings Revised security settings Licensing changes Revised superclustering Enhanced security features Bug fixes
6.4.1.8	3.4.6	CentOS 6.7 OpenJDK 1.8.0_77 PostgreSQL 9.5.2	December 2017	Maintenance release to fix issues
6.4.1.7	3.4.5	CentOS 6.7 OpenJDK 1.8.0_77 PostgreSQL 9.5.2	September 2017	Maintenance release to fix issues
6.4.1.6	3.4.4	CentOS 6.7 OpenJDK 1.8.0_77 PostgreSQL 9.5.2	July 2017	Maintenance release to fix issues
6.4.1.5	3.4.3	CentOS 6.7 OpenJDK 1.8.0_77 PostgreSQL 9.5.2	July 2017	Maintenance release to fix issues
6.4.1.4	3.4.0	CentOS 6.7 OpenJDK 1.8.0 PostgreSQL 9.4.4	June 2017	Maintenance release to fix issues
6.4.1.1	3.4.0	CentOS 6.7 OpenJDK 1.8.0 PostgreSQL 9.4.4	December 2016	Maintenance release to fix issues

Release	API Release	System	Release Date	Features
6.4.1	3.4.0	CentOS 6.7 OpenJDK 1.8.0 PostgreSQL 9.4.4	September 2016	Maintenance release to fix issues
6.4.0.1	3.4.0	CentOS 6.7 OpenJDK 1.8.0 PostgreSQL 9.4.4	September 2016	Maintenance release to fix issues
6.4.0	3.4.0	CentOS 6.7 OpenJDK 1.8.0	August 2016	Microsoft Skype for Business MCU Affinity
		PostgreSQL 9.4.4		Integration with the Polycom RealPresence Collaboration Server MMCU and RDP content translator
				Scheduled conference support for Microsoft Office 365
				Panoramic layout support for Microsoft Skype for Business
				Cleared SNMP traps API additions and
				changes
				Resolved some known issues
6.3.2.4	3.1.3	CentOS 6.7 OpenJDK 1.8.0 PostgreSQL 9.4.4		Maintenance release to fix issues
6.3.2.3	3.1.3	CentOS 6.7	July 2016	Maintenance release to
		OpenJDK 1.8.0		fix issues
		PostgreSQL 9.4.4		
6.3.2.2	3.1.3	CentOS 6.6	May 2016	Maintenance release to
		OpenJDK 1.8.0		fix issues
		PostgreSQL 9.4.4		
6.3.2.1	3.1.2	CentOS 6.6	April 2016	Maintenance release to
		OpenJDK 1.8.0		fix issues
		PostgreSQL 9.4.4		
6.3.2	3.1.2	CentOS 6.6 OpenJDK 1.8.0	March 2016	Support for RealPresence Clariti
		PostgreSQL 9.4.4		Resolved some known issues

Release	API Release	System	Release Date	Features
6.3.1.2	3.1.0	CentOS 6.6 OpenJDK 1.8.0 PostgreSQL 9.4.4	February 2016	Maintenance release to fix issues
6.3.1.1	3.1.0	CentOS 6.6 OpenJDK 1.8.0 PostgreSQL 9.4.4	February 2016	Maintenance release to fix issues
6.3.1	3.1.0	CentOS 6.6 OpenJDK 1.8.0 PostgreSQL 9.4.4	December 2015	Maintenance release to fix issues
6.3.0.2	2.7.3	CentOS 6.6 OpenJDK 1.8.0 PostgreSQL 9.3	September 2015	Maintenance release to fix issues
6.3.0.1	2.7.3	CentOS 6.6 OpenJDK 1.8.0 PostgreSQL 9.3	August 2015	Maintenance release to fix issues
6.3.0	2.7.2	CentOS 6.6 OpenJDK 1.8.0 PostgreSQL 9.3	June 2015	Enhanced CSR dialog Enhanced chairperson functionality for cascaded conferences External Microsoft Lync system integration Lobby support for Polycom RealConnect conferences Scheduled backups Signaling diagram
				SIP 302 redirect support Support for Polycom Rack Server 630 (R630) VEQ support for RealConnect conferences WebRTC conferencing
6.2.2.2	2.6.3	CentOS 6.6 Java 8u5 PostgreSQL 9.3	October 2015	Maintenance release to fix issues
6.2.2.1	2.6.3	CentOS 6.6 Java 8u5 PostgreSQL 9.3	September 2015	Maintenance release to fix issues

Release	API Release	System	Release Date	Features
6.2.2	2.6.3	CentOS 6.6 Java 8u5 PostgreSQL 9.3	August 2015	Maintenance release to fix issues

### **Products Tested with This Release**

Poly tests the RealPresence DMA system with other products. The following tables list the products tested for compatibility with this release but don't include a complete inventory of compatible equipment.

Poly strives to support any system that is standards-compliant and investigates reports of Poly systems that don't interoperate with other standards-compliant vendor systems.

N	ote	1

Poly recommends that you upgrade your Poly devices with the latest software versions, as compatibility issues may already have been addressed by software updates. See the <u>Current Polycom Interoperability Matrix</u> to match product and software versions.

### Poly and Polycom Devices

Poly tested the following Poly and Polycom devices with this release.

#### **Border Controllers**

Product	Tested Versions
Polycom RealPresence Access Director	4.2.x

#### Call Processors / Gatekeepers / SIP Servers

Product	Tested Versions
Polycom RealPresence DMA, Appliance Edition	10.0.0.8
Polycom RealPresence DMA, Virtual Edition	10.0.0.8
Polycom RealPresence WebSuite MEA	2.2.1
Polycom RealPresence WebSuite WSP	2.2.1
Polycom Work Flow Server (OTD)	1.6.1

#### **Endpoints**

Product	Tested Versions
Poly G7500	3.0.2

Product	Tested Versions
Poly Studio X50	3.0.2
Poly Studio X30	3.0.2
Poly Trio 8500	5.9.0
Poly Trio 8800	5.9.0
Polycom CX5500	1.3.4
Polycom RealPresence Centro	6.1.8, 6.2.0
Polycom RealPresence Immersive Studio	6.1.8, 6.2.0
Polycom RealPresence Immersive Studio Flex	6.1.8
Polycom Touch Control for RealPresence Group Series	2.1.8
Polycom RealPresence Touch	2.1.8
Polycom Debut	1.3.2
Polycom RealPresence Group Series	6.1.8, 6.2.0
Polycom RealPresence Desktop for Mac	3.9.0
Polycom RealPresence Desktop for Windows	3.9.0
Polycom RealPresence Mobile for Android	3.9.0
Polycom RealPresence Mobile for Apple iOS	3.9.0
Polycom UC Software for VVX phones	5.8.0

#### **Management Systems**

Product	Tested Versions
Polycom RealPresence Resource Manager, Appliance Edition	10.9
Polycom RealPresence Resource Manager, Virtual Edition	10.9

#### MCUs

Product	Tested Versions
Polycom RealPresence Collaboration Server 1800	8.7.5, 8.8.0, 8.8.1, 8.9.0
Polycom RealPresence Collaboration Server 2000	8.7.5, 8.8.0, 8.8.1, 8.9.0
Polycom RealPresence Collaboration Server 4000	8.7.5, 8.8.0, 8.8.1, 8.9.0
Polycom RealPresence Collaboration Server, Virtual Edition	8.7.5, 8.8.0, 8.8.1, 8.9.0

#### **Recorders / Content Servers**

Product	Tested Versions
Polycom Content Connect	1.6.2
Polycom Pano	1.1.1
Polycom Content App	1.1.0
Polycom RealPresence MediaSuite	2.8.2

# Third-Party Devices

Poly tested the following third-party devices with this release.

#### Call Processors / Gatekeepers / SIP Servers

Product	Tested Versions
Cisco TelePresence Video Communication Server	8.8.1
Cisco Unified Communications Manager	12.0(1)
Microsoft Exchange 2016	15.1(Build-1466.3)
Microsoft Skype for Business 2015 (SfB) Server	6.0.9319.516

#### **Endpoints**

Product	Tested Versions
Avaya Scopia XT5000	08.03.07.0051 V8_3_7_51
Cisco DX70 / DX650	SIP10.2.5 & CE9.2.4
Cisco DX80	CE9.2.4
Cisco MX300 G2	CE9.2.4
Cisco TelePresence 500-32	6.1.13
Cisco TelePresence C40	TC7.3.14
Cisco TelePresence C60	TC7.3.14
Cisco TelePresence C90	TC7.3.14
Cisco TelePresence EX60	TC7.3.14
Cisco TelePresence EX90	TC7.3.12
Cisco TelePresence IX5000	8.3.1.1
Cisco TelePresence SX10	CE9.2.4

Product	Tested Versions
Cisco TelePresence SX20	CE9.2.4
Cisco TelePresence SX80	CE9.3.0
Cisco TelePresence TX1310	6.1.13
Cisco TelePresence TX9000	6.1.13
LifeSize Express 220	LS_EX2_5.0.9(2)
LifeSize Icon 600	LS_RM3_2.9.0 (1982)
Microsoft Lync Mac Client	16.17.65
Microsoft Skype for Business (SfB) 2016 Client	16.0.10228.20080
Microsoft SfB Client (Android-Phone)	6.21.0
Microsoft SfB Mobile Client (iOS-Phone)	6.21.1
Microsoft SfB Client (Android-Tablet)	6.21.0
Microsoft SfB Mobile Client (iOS-Tablet)	6.21.1
Microsoft Teams	1.3.00.4461

#### **Hypervisor Environments for Virtual Edition**

Product	Tested Versions
VMware® vSphere®	6.5, 6.7
VMware vCenter® Server	6.5, 6.7
Microsoft Hyper-V	Microsoft Windows Server 2016, Datacenter edition
Kernel-based Virtual Machine (KVM)	1.5.3

Note: Poly supports mixed hypervisor environments but hasn't tested all configurations and combinations.

### VaaS Providers

Poly tested videoconferencing with the following Video as a Service (VaaS) providers with this release.

#### **VaaS Providers**

Product	
Microsoft Teams	

Product	
Zoom	

# **Compatible Products**

The following table lists third-party products that use standard, open protocols and Poly expects these products to be compatible with this release. The list isn't exhaustive but includes many products tested with previous versions of the RealPresence DMA system.

#### **Border Controllers**

Product		
Sonus SBC		

#### Call Processors / Gatekeepers / SIP Servers

Product
Avaya Aura CM
Avaya Aura SM
Broadsoft Server
Cisco 3241 ISDN Gateway
Radvision Scopia P10 ISDN Gateway
Radvision ECS Gatekeeper
Microsoft Lync 2013 Server
Microsoft Skype for Business 2019 (SfB) Server
Unify OpenScape Branch
Unify OpenScape SBC
Unify OpenScape Voice Server

#### **Endpoints**

Product
Avaya 10XX
Avaya 1X Communicator
Avaya ADVD
Avaya Flare Desktop

Product
Avaya Flare Mobile (iOS)
Avaya Scopia XT7000
Avaya Voice Phone
Broadsoft BTBC_Android (Mobile)
Broadsoft BTBC_Android (Tablet)
Broadsoft BTBC_iOS (Mobile)
Broadsoft BTBC_iOS (Tablet)
Broadsoft BTBC_PC
Cisco TelePresence 1300
Cisco TelePresence 150 MXP
Cisco TelePresence 1700 MXP
Cisco TelePresence 3010
Cisco TelePresence 500-37
Huawei TE30
Huawei TE40
IBM SameTime
TCSPI Adapter
LifeSize Team 220
Microsoft CX500/CX600
Microsoft Lync 2010 Client
Microsoft Lync 2015 Client
Microsoft Skype for Business 2019 (SfB) Client
Radvision Scopia XT1000
Sony PCS-XG100
Sony PCS-XG80
Unify OpenScape UC
Unify OpenScape UC Client
Unify OpenStage 60/80

#### **MCUs**

Product
Cisco 5310 MCU
Cisco TelePresence MCU 4505
Cisco TelePresence Server

## **System Requirements**

Your client system and network performance must meet the following requirements before you install or upgrade to this release.

### Hardware Requirements

Poly determined the following hardware requirements based on test scenarios. Your system's actual performance may vary based on software or hardware configurations.

To access the system web interface, use a client system running Microsoft Windows with the following hardware:

- 1280 x 1024 (SXGA) minimum display resolution; 1680 x 1050 (WSXGA+) or greater recommended
- USB and Ethernet ports
- DVD-RW drive or an external DVD burner (Appliance Edition only)

### Software Requirements

The client system used to access the system web interface requires a web browser that supports HTML5. Microsoft Internet Explorer must be version 11 or later.

### Network Performance Requirements

The following table describes RealPresence DMA system network connections and the related network performance requirements.

#### **Network Performance Requirements**

RealPresence DMA System Network Connections	Network Performance
Between clusters of a RealPresence DMA supercluster – core configuration	<ul> <li>Bandwidth above 10 Mbps, regardless of packet loss or latency</li> <li>Less than 1% packet loss if network latency is 300 ms or less (one-way)</li> <li>or</li> <li>No packet loss if network latency is below 350 ms (one-way)</li> </ul>
Between two RealPresence DMA systems configured for High Availability – edge and core configurations	<ul><li>100 Mbps link</li><li>Less than 200 ms round-trip latency</li></ul>
Between a RealPresence DMA system and all MCUs – core and combination system configurations	<ul> <li>Less than 200 ms round-trip latency</li> <li>Less than 2 percent round-trip packet loss</li> <li>Note: Since this network carries only signaling traffic (the RTP stream goes directly from the endpoint to the MCU), bandwidth is not an issue.</li> </ul>
Between a RealPresence DMA system and video endpoints – core, edge, and combination system configurations	<ul> <li>Less than 200 ms round-trip latency</li> <li>Less than 6 percent round-trip packet loss</li> </ul>
Between a RealPresence DMA system and Microsoft Active Directory (if integrated) – core, edge, and combination system configurations	<ul> <li>Less than 200 ms round-trip latency</li> <li>Less than 4 percent round-trip packet loss</li> </ul>

# **System Capabilities**

The RealPresence DMA system is available in an Appliance Edition and a Virtual Edition.

If your RealPresence DMA system is licensed for more than 200 concurrent calls, the server you use must have 16 GB of RAM.

- If you use the Virtual Edition, you need to create a new virtual machine (VM) with the required 16 GB of RAM and at least 146 GB of hard disk space.
- If you use the Appliance Edition, you must use an R630 or R640 server, or a combination of two servers (see <u>Supported High Availability Cluster Configurations</u>). These servers come with 16 GB RAM.

### Supported High Availability Cluster Configurations

The RealPresence DMA system supports two-system clusters configured for High Availability (HA) only with certain server and virtual instance combinations. The following table details the combinations of server models and Virtual Edition instances that can be configured for HA.

#### **Supported Two-System Combinations for High Availability Configuration**

	Polycom Rack Server 630 (R630)	Polycom Rack Server 640 (R640)	Polycom Rack Server 220 (R220)	Polycom Rack Server 230 (R230)	RealPresence DMA Virtual Edition
Polycom Rack Server 630 (R630)	Supported	Supported	Not Supported	Not Supported	Supported <sup>1</sup>
Polycom Rack Server 640 (R640)	Supported	Supported	Not Supported	Not Supported	Supported <sup>1</sup>
Polycom Rack Server 220 (R220)	Not Supported	Not Supported	Supported	Supported	Supported <sup>2</sup>
Polycom Rack Server 230 (R230)	Not Supported	Not Supported	Supported	Supported	Supported <sup>2</sup>
RealPresence DMA Virtual Edition	Supported <sup>1</sup>	Supported <sup>1</sup>	Supported <sup>2</sup>	Supported <sup>2</sup>	Supported

<sup>&</sup>lt;sup>1</sup> The default .OVA settings for the VM match the specifications of the R630 and R640 servers.

### Appliance Edition

You can install this version of the RealPresence DMA system, Appliance Edition, on the following Polycom servers:

- Polycom Rack Server 630 (R630)
- Polycom Rack Server 640 (R640)
- Polycom Rack Server 220 (R220) deployments with 200 or fewer licensed concurrent calls
- Polycom Rack Server 230 (R230) deployments with 200 or fewer licensed concurrent calls

### **Maximum Capabilities of Servers - Core Configuration**

The maximum capabilities of the system differ with the server you are using. The following table lists the maximum capabilities of Polycom Rack Servers running a core configuration of the RealPresence DMA system software.

#### Maximum Capabilities for Polycom Rack Servers 220/230 and 630/640 - Core Configuration

Maximum Capability	Polycom Rack Server 220/230	Polycom Rack Server 630/640
Number of sites	100	500
Number of subnets	1000	5000

<sup>&</sup>lt;sup>2</sup> The default .OVA settings for the VM must be adjusted to match the specifications of the R220 and R230 servers.

Maximum Capability	Polycom Rack Server 220/230	Polycom Rack Server 630/640
Number of RealPresence DMA clusters in a supercluster	3	10
Number of clusters enabled for conference rooms	3	3
Number of MCUs enabled for conference rooms	5	64
Number of concurrent SIP<->H.323 gateway calls	200	500
Size of Active Directory supported	1,000,000 users and 1,000,000 groups (up to 10,000 groups maybe imported)	1,000,000 users and 1,000,000 groups (up to 10,000 groups maybe imported)
Number of contacts registered to a Skype for Business server per cluster	25000	25000
Number of network usage data points retained per cluster	8,000,000	8,000,000
Concurrent registrations per cluster	1600	15000
Total concurrent conference room (VMR) calls per cluster	200	1200 H.323 only 3600 SIP only
Total point-to-point concurrent calls per cluster	200	5000
Total concurrent conference room (VMR) calls for a supercluster <sup>1</sup>	600	3600 H.323 only 10800 SIP only <sup>1</sup>
Total point-to-point concurrent calls for a supercluster	600	50000

 $<sup>^{\</sup>rm 1}$  To support 3600 H.323 or 10800 SIP calls, the supercluster must contain at least three clusters.

### Maximum Capabilities of Servers - Edge/Combination Configuration

The following table lists the maximum capabilities of Polycom Rack servers with an edge or combination configuration of the RealPresence DMA system software.

#### Maximum Capabilities for Polycom Rack Servers 220/230 and 630/640 - Edge/Combination Configuration

Maximum Capability	Polycom Rack Server 220/230	Polycom Rack Server 630/640	
Registrations	2000	5000	
Concurrent calls <sup>1</sup>	200	1000	

Maximum Capability	Polycom Rack Server 220/230	Polycom Rack Server 630/640
HTTPS tunnel calls (RealPresence Web Suite SIP guest calls only)	200	200
Throughput (Mbps)	700	700

<sup>&</sup>lt;sup>1</sup> In a VPN tunnel configuration, the maximum concurrent call capacities are reduced.

#### **Trial Licenses**

All new RealPresence DMA systems, Appliance Edition, include a trial license for five concurrent calls. After you install purchased licenses, the trial license for five concurrent calls is no longer available.

If you deploy two RealPresence DMA systems, Appliance Edition, as an HA pair, the two systems combined include a trial license for five concurrent calls.

#### Virtual Edition

This version is available in an edition packaged for virtual-based deployment. Polycom supports the RealPresence DMA system, Virtual Edition, in VMware, Microsoft Hyper-V, Microsoft Azure, Kernel-based Virtual Machine (KVM), and Amazon Web Services (AWS) environments.

Polycom supports mixed environments but hasn't tested all configurations and combinations.

New RealPresence DMA systems, Virtual Edition, don't include a trial license for calls.

#### **Host Installation Guidelines**

The RealPresence DMA system, Virtual Edition, software package requires 146 GB hard disk capacity for standard installations.

Note:	The only benefit to having greater hard disk capacity is the ability to store more log files.

If you deploy two systems as a high availability pair, one of which is a virtual instance and the other is a Polycom server, the profile of the VM should be consistent with the server's profile.

The following table describes the recommended VM host deployment settings for each instance of the RealPresence DMA system, Virtual Edition. It also shows the typical performance capacities of that deployment.

#### **Recommended VM Host Deployment Settings**

Component	Recommended Small Deployment Settings	Recommended Medium-Large Deployment Settings	
Virtual Cores	6	12	
Min. CPU Speed	2.4 GHz	2.4 GHz	

Component	Recommended Small Deployment Settings	Recommended Medium-Large Deployment Settings		
Total Required GHz	14.4 GHz	28.8 GHz		
Min. CPU Family	Haswell	Haswell		
Memory	16 GB	16 GB		
Storage	146 GB	146 GB		
Random IOPS	110 total	210 total		
Performance	200 concurrent calls	RealPresence DMA core system: 5000 concurrent calls		
		<ul> <li>Up to 1200 H.323 calls, not to exceed 5000 total calls</li> </ul>		
		<ul> <li>Up to 3600 SIP calls (encrypted or unencrypted), not to exceed 5000 total calls</li> </ul>		
		<ul> <li>Up to 5000 point-to-point calls, not to exceed 5000 total calls</li> </ul>		
		RealPresence DMA edge and combination systems: 1000 concurrent calls		

Because of differences in hardware and VM environments, the performance information is provided for guidance purposes only and does not represent a guarantee of any kind by Poly.

### **Installation and Upgrade Notes**

You can upgrade previous versions of the RealPresence DMA system software to version 10.0.0.8 (see <u>Supported Upgrade Paths – RealPresence DMA System</u>). You can also upgrade the RealPresence Access Director system to version 10.0.0.8 of the RealPresence DMA system (see <u>Supported Upgrade Paths – RealPresence Access Director System</u>).

When you log into the <u>Poly Online Support Center</u>, you can download the 10.0.0.8 upgrade package and any interim upgrade packages you need for both the Appliance Edition and Virtual Edition.

Note:	Starting in 10.0.0.8, you can't edit a default factory access control list (ACL). If you revised a
	factory ACL prior to version 10.0.0.8 and want to keep the changes, you must copy the factory
	ACL to a new ACL before you upgrade to 10.0.0.8. If you don't create a copy of the factory ACL
	prior to upgrading, you need to add a new ACL with your changes after the upgrade.

See the *Polycom RealPresence DMA System Administrator Guide* for instructions on how to upgrade the RealPresence DMA system or RealPresence Access Director system.

See the *Polycom RealPresence DMA System Getting Started Guide* for instructions on how to install and license your product.

# Supported Upgrade Paths – RealPresence DMA System

You can upgrade to version 10.0.0.8 of the RealPresence DMA system only from version 9.0.x or 10.0.x.

If your RealPresence DMA system is running a version prior to 9.0.x, you must perform interim upgrades before you can upgrade to version 10.0.0.8.

Do not perform a new installation of version 10.0.0.8 and then restore a backup of a non-supported version. You must upgrade a non-supported version to one of the supported versions before upgrading to 10.0.0.8.

#### Note:

If you have a system running version 6.4.x that has two default territories and is integrated with a RealPresence Resource Manager system, you must delete one of the territories before you upgrade to version 10.0.x. If you upgrade without deleting one of the default territories, the system displays an error when you attempt to change some user settings. To resolve the error, remove your integration with the RealPresence Resource Manager system, then reintegrate.

Your upgrade to version 9.0.1 or 10.0.0.8 may be blocked if you are running one of the following versions of the RealPresence DMA system on a Polycom Rack Server 630 (R630). In this case, you must upload and install DELL-HW-Utility.bin before upgrading to 9.0.1 or 10.0.0.8.

- 6.4.1.3
- 6.4.1.4
- 6.4.1.5
- 6.4.1.6
- 6.4.1.7
- 9.0.0
- 9.0.0.1
- 9.0.0.2

The following table outlines the supported paths you can use to upgrade to this version. Read the release notes for each version in your upgrade path to review any upgrade notes.

#### Supported Upgrade Paths: RealPresence DMA System to RealPresence DMA System, Version 10.0.x

Current Version		Intermediate Upgrade		Intermediate Upgrade		Intermediate Upgrade		Final Upgrade	New License Required?
5.0.x 5.1.x 5.2.0	<b>→</b>	5.2.1	<b>→</b>	6.2.2.2	<b>→</b>	6.4.1.1	<b>→</b>	9.0.1	Yes
5.2.1 5.2.2.x 6.0.x	<b>→</b>	6.2.2.2			→	6.4.1.1	<b>→</b>	9.0.1	Yes
6.1.x 6.2.x 6.3.x					→	6.4.1.1	<b>→</b>	9.0.1	Yes

Current Version	Intermediate Upgrade	Intermediate Upgrade	Intermediate Upgrade		Final Upgrade	New License Required?
6.4.0.x				$\rightarrow$	9.0.1	Yes
6.4.1						
6.4.1.1						
6.4.1.2						
6.4.1.3			DELL-HW	$\rightarrow$	9.0.1	Yes
6.4.1.4			Utility (only if			
6.4.1.5			using			
6.4.1.6			Polycom			
6.4.1.7			R630			
			server)			
6.4.1.8				$\rightarrow$	9.0.1	Yes
9.0.0		<del>-</del>	→ DELL-HW	$\rightarrow$	10.0.0.8	Yes
9.0.0.1			Utility (only if			
9.0.0.2			using			
			Polycom			
			R630			
			server)			
9.0.0.3				$\rightarrow$	10.0.0.8	Yes
9.0.1.x				$\rightarrow$	10.0.0.8	Yes
10.0.x				$\rightarrow$	10.0.0.8	No

# Supported Upgrade Paths – RealPresence Access Director System

The following table outlines the supported path you can use to upgrade the RealPresence Access Director system to this version of the RealPresence DMA system.

Supported Upgrade Paths: RealPresence Access Director System to RealPresence DMA System, Version 10.0.x

Current Version		Intermed iate Upgrade		Final Upgrade	New License Require d?
4.1.x or earlier	$\rightarrow$	4.2.x	→	10.0.0.8	Yes

### Upgrading the RealPresence DMA System

Upgrading the RealPresence DMA system typically takes approximately 30 to 60 minutes but can sometimes take longer. Once you start the upgrade process, don't reboot the server.

If you upgrade a RealPresence DMA system from version 9.0.x to 10.0.x and a RealPresence Access Director system from version 4.2.x to 10.0.x at the same time, Poly recommends the following:

- First, upgrade your RealPresence DMA system from version 9.0.x to version 10.0.x. The 10.0.x system automatically includes a core configuration.
- Next, upgrade your RealPresence Access Director system from version 4.2.x to version 10.0.x The 10.0.x system automatically includes an edge configuration.

#### Note the following:

- A RealPresence Access Director system, version 4.2.x, operates with a RealPresence DMA coreconfigured system (version 10.0.x or later).
- A RealPresence DMA edge-configured system (version 10.0 or later) doesn't operate with any older versions of the RealPresence DMA system.

If your RealPresence DMA system is integrated with a RealPresence Collaboration Server, upgrade the RealPresence DMA system to version 10.0.x before upgrading the RealPresence Collaboration Server to version 8.8 or later.

# Upgrading the RealPresence Access Director System to the RealPresence DMA System

You can upgrade version 4.2.x of the RealPresence Access Director system to version 10.0.x of the RealPresence DMA system. A new license is required.

Upgrading a RealPresence Access Director system to a RealPresence DMA system is a major upgrade. You must make configuration changes after upgrading to ensure that the RealPresence DMA edge system functions like your RealPresence Access Director system did.

A RealPresence DMA edge or combination system configured with a single NIC uses the combined range of private and public dynamic ports for media relay. Before you upgrade a RealPresence Access Director system with a single-NIC configuration to a RealPresence DMA edge or combination system, make sure your external and internal firewalls allow the combined private and public port range for media traversal.

The RealPresence DMA system uses the following dynamic source ports for media traversal services.

#### **Media Traversal Dynamic Source Ports**

Service	First Port	Last Port	Interfaces
Private media traversal dynamic source ports	40002	50998	The network interfaces on the private side with media traversal services assigned
Public media traversal dynamic source ports	23002	33998	The network interfaces on the public side with media traversal services assigned

# **Resolved Issues**

The following table lists the issues resolved in this release.

#### **Resolved Issues**

Category	Issue ID	Found in Release	Description
Access Control Lists (ACLs)	EN-182989	10.0.0.7	RealPresence DMA default Factory ACLs can be edited.
			In RealPresence DMA 10.0.0.8 and later, you can't edit a Factory ACL. If you revised a Factory ACL prior to version 10.0.0.8 and want to keep the changes, you must copy the Factory ACL to a new ACL before you upgrade to 10.0.0.8. If you don't create a copy of the Factory ACL prior to upgrading, you need to add a new ACL with your changes after the upgrade.
ACLs	EN-185069	10.0.0.7	A RealPresence DMA edge system fails to import a JSON file with custom access control lists and the <b>ACL Rules</b> page in the system web interface is blank.
ACL Denials	EN-179080	10.0.0.6	A RealPresence DMA edge system's <b>ACL Denials</b> report displays an incorrect SIP port.
ACL Rules	EN-183890	10.0.0.7	When an access control list rule on a RealPresence DMA edge system blocks an H.323 call, the edge system still sends a location request (LRQ) message to the core system.
Call Detail Records (CDRs)	EN-181039	10.0.0.6	A RealPresence DMA system can't export CDR data when another system is exporting CDR data at the same time.
Call History	EN-181383	10.0.0.5	After a call between an unregistered endpoint and an endpoint registered to a RealPresence DMA core system (routed mode) ends, the Call History doesn't display the call end event.
Conference Templates	EN-180714	10.0.0.6	The RealPresence DMA system doesn't save a conference template with SVC only as the Conference mode and H.264 HD as the Content protocol.
Dial-Out Participants	EN-183045	10.0.0.6	In the RealPresence DMA system, new dial-out participants can't be added to an existing RealPresence Resource Manager-scheduled pooled conference.
Endpoint Registration	EN-179709	10.0	A RealPresence DMA system collects a RealPresence Mobile endpoint's private IP address when the endpoint registers instead of its public IP address.

Category	Issue ID	Found in Release	Description
Hunt Groups	EN-159726	10.0	When the RealPresence DMA system deletes an inactive device registration according to a registration policy, you can't access the <b>Hunt Groups</b> page in the system web interface if the device belonged to a hunt group.
Installation	EN-175023	10.0.0.5	After deploying a RealPresence DMA OVA file, the system won't start if you select <b>Exit</b> in the thin shell client instead of <b>Reboot</b> .
Logs	EN-148417	10.0.0.3	Unable to roll logs or download active logs on a RealPresence DMA system.
Logs	EN-184747	10.0.0.6	After downloading logs from a RealPresence DMA system, logs no longer display in the system web interface.
Media Traversal Services	EN-182179	10.0.0.6	A RealPresence DMA edge system doesn't relay media if you select the <b>Relay Media</b> option in a dial rule.
Microsoft Skype for Business Calls	EN-182798	10.0.0.3	The RealPresence DMA system terminates a Skype for Business call if the Conference Auto Attendant (CAA) waits more than one minute in the call lobby.
Microsoft Skype for Business Calls	EN-183979	10.0.0.4	The RealPresence DMA system doesn't support a Skype for Business content-only attempt to join a VMR.
RealPresence Access Director Upgrade	EN-180829	10.0	After upgrading a RealPresence Access Director system to a RealPresence DMA edge system, the access control list (ACL) rule that includes the request.source-ip condition doesn't work.
Registration Sharing Settings	EN-185823	10.0.0.7	When the registration sharing settings on a RealPresence DMA edge system specify the DNS embedded name, the core system fails to validate a license reservation for a point-to-point hairpin call on the edge system.
SIP Calls	EN-180824	10.0	External SIP calls fail when the Diffie Hillman key size is set to 2048 and the RealPresence DMA core system returns a 503 Service Unavailable error.
SIP Calls	EN-181444	10.0.0.7	RealPresence DMA doesn't attempt to use an originating endpoint's transport protocols for SIP calls dialing by IP address if the dial rule (Resolve to external address or Resolve to IP address) uses Auto Detect as the SIP transport override option. RealPresence DMA instead attempts to connect using TLS.
SIP Calls	EN-182417	10.0.0.7	SIP calls may fail when routed through site topology if the dial rule ( <b>Resolve to external address</b> or <b>Resolve to IP address</b> ) uses the <b>Auto Detect</b> or <b>Try All</b> SIP transport override option for a protocol other than TLS.

Category	Issue ID	Found in Release	Description
SIP Ports	EN-185813	10.0.0.7	When SIP is disabled, the RealPresence DMA system displays an incorrect port conflict alert that's based on the default SIP port range and not the configured SIP port range.
Supercluster	EN-181998	10.0.0.6	A RealPresence DMA backup system in a supercluster doesn't update its embedded DNS records when it recovers from a total network outage, causing both the primary and backup system to accept device registrations.
System Web Interface	EN-180337	10.0.0.5	The system web interface of a backup RealPresence DMA in a supercluster is slow to respond.
System Web Interface	EN-181991	10.0.0.7	When you install the RealPresence DMA system on a Dell PowerEdge R640, the <b>Cluster Information</b> pane on the system web interface dashboard incorrectly displays PowerEdge R240 as the <b>Hardware model</b> .
System Web Interface	EN-182877	10.0.0.6	When managing user conference rooms in the RealPresence DMA system web interface, if you select <b>Search</b> without entering a <b>Room ID</b> , the system displays error code 406.
System Web Interface	EN-185805	10.0.0.7	The <b>Users</b> page in the RealPresence DMA system web interface doesn't display the results of preselected filters unless you select the search button.
Time Settings	EN-182816	10.0.0.7	When the time set in the RealPresence DMA system and the Polycom Licensing Center doesn't match, the RealPresence DMA system web interface displays 0 licensed calls.
TURN Services	EN-181360	10.0.0.6	In high availability mode, the RealPresence DMA edge system doesn't listen for TURN services on the virtual IP address.
TURN Services	EN-185955	10.0.0.7	A RealPresence DMA edge system doesn't tag TURN traffic with the expected QoS values.

# **Known Issues**

The following table lists the known issues in this release.

IMPORTANT:	These release notes do not provide a complete listing of all known issues for the software. Issues not expected to significantly impact customers with standard voice and video conferencing environments may not be included. In addition, the information in these release notes is provided as-is at the time of release and is subject to change without notice.
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#### **Known Issues**

Category	Issue ID	Found in Release	Description	Workaround
Access Control Lists	EN-128836	10.0.x	When using Internet Explorer to access the system web interface, a RealPresence DMA edge system doesn't save the custom variable values that can be added to ACL Variables.	
API	EN-130890	9.0.1	The RealPresence DMA system has replication delays caused by excessive API updates from the workflow server.	
Backup and Restore	EN-109539	9.0.1	The backup-restore.sh file fails to restore a configuration backup if the filename contains special characters such as parentheses. The system web interface doesn't prevent the file upload.	
Backup and Restore	EN-156465	10.0	The RealPresence DMA proximo service doesn't load if you restore a backup from another RealPresence DMA system without restoring the IP configuration.	
Call Detail Records (CDRs)	EN-104927	9.0.1	A CDR exported from the RealPresence DMA system contains no data.	
CDRs	EN-179316	9.0.1.5	Exported CDRs are missing call and conference history.	
Call Event Details	EN-125424	10.0.0.2, 10.0.0.3	During RealConnect calls with the Polycom ContentConnect system, the RealPresence DMA system's call event details show the PCC IP address with the name of the RealPresence Collaboration server instead of the name of the PCC system.	
Conference Template	EN-107775	9.0.1	An error occurs when setting the line rate in <b>Conference Templates</b> back to 1920 Kbps: The customized content rate value '1920' is not valid for specified line rate value '1920' and H239 settings value 'HIREGRAPHICS.'	

Category	Issue ID	Found in Release	Description	Workaround
DNS	EN-112724	9.0.1.1	RealPresence DMA delays 5 to 10 seconds to respond to an inbound SIP INVITE if the primary DNS server doesn't respond. The RealPresence DMA system doesn't display an alert or include an error in the logs to indicate the primary DNS is unresponsive.	
High Availability	EN-158408	10.0	High Availability can't be enabled from a RealPresence DMA edge system.	
License Sharing	EN-181174	10.0.0.6	When a WAN-to-WAN call connects, a RealPresence DMA edge system displays an alert that it has reached its call license limit, even when license sharing with a core system is configured.	
Licensing	EN-183169	10.0.0.7	After upgrading, a RealPresence DMA edge system displays a licensing alert and doesn't permit calls or VMRs, even though licensing is configured on the core system.	
Logs	EN-187933	10.0.0.7	In an environment that supports WebRTC calls, when RealPresence DMA rolls the logs every 12 hours, it doesn't filter out WebRTC media traffic and generates large archive files.	
Microsoft Lync Integration	EN-158321	10.0	The RealPresence DMA system can't allocate MS Lync Conference Auto Attendant (CAA) contacts and CAA calls fail.	
Network Settings	EN-130185	10.0	The RealPresence DMA system's network settings can't be changed after allocating the management service to a bonded interface.	
Network Usage	EN-164650	10.0	You can't open a network usage file exported from the system web interface (networkUsageExport.zip)	
Network Usage	EN-170805	10.0.0.5	Network usage reports include cluster names but not site names and display inconsistent values for <b>Bitrate limit</b> , <b>Bandwidth limit</b> , <b>Bandwidth usage</b> , and <b>Bandwidth usage</b> percent.	

Category	Issue ID	Found in Release	Description	W	orkaround
RealPresence Access Director to RealPresence DMA Upgrade	EN-150437	10.0.0.4	A RealPresence Access Director upgrade to a RealPresence DMA edge system generates a port conflict detected alert. Restoring the defaults changes the ports to a different range and resolves the alert, but H.323 calls fail since the range changed and the firewall wasn't configured for the change.		
RealPresence Collaboration Server	EN-91544	9.0.1	When you set a RealPresence Collaboration Server's Microsoft AVMCU cascade link to auto- reconnect, the cascade link auto- reconnects even when there are no participants in the conference and a new Skype for Business client can't join the conference.		
Registration Policy Script	EN-181151	10.0.0.7	An illegal argument exception occurs when you attempt to debug a registration policy script before you save the registration policy.	1.	In the system web interface, go to Service Config > Access Control > Registration Policies.
				2.	Select Add. Enter a Registration policy compliance script.
				4. 5.	Select <b>OK</b> . Select the registration policy, then select <b>Edit</b> .
				6.	Select <b>Debug</b> this <b>Script</b> .
Sites	EN-147536	10.0.0.3	Direct VMR calls from Microsoft Skype for Business clients fail from sites that don't have a site link to the internet site.		
System Web Interface	EN-178546	10.0	After performing a restart from the system web interface, the interface is unavailable.		

Category	Issue ID	Found in Release	Description	Workaround
System Web Interface	EN-179452	10.0	The system web interface doesn't allow use of the \ character in the <b>Username</b> field within the remote FTP backup configuration menu.	
VMR	EN-155765	10.0	The RealPresence DMA system routes calls originally destined for a VMR to the RealPresence Collaboration Server's default entry queue.	
VMR	EN-186258	10.0.0.7	All RealPresence DMA clusters in a supercluster have high CPU usage and VMR calls fail until the clusters are rebooted.	
Zoom Calls	EN-186889	10.0.0.7	Calls from a RealPresence DMA edge system to a Zoom conference fail.	

# **System Constraints and Limitations**

The following table lists limitations of the RealPresence DMA system or other products that may cause interoperability issues.

#### **Interoperability Limitations**

Product	Description	Workaround
Polycom RealPresence DMA	SIP calls to any SIP endpoint or Video as a Service (VaaS) don't connect if the far-end endpoint requests an increase in bandwidth.	Use total bandwidth limits for sites and site links in the RealPresence DMA system instead of bandwidth limits percall.      Reconfigure endpoints/VaaS service bandwidth limits to values like the bandwidth values set in the RealPresence DMA system.      Re-evaluate the use of bandwidth limitations in the network and in the RealPresence DMA system.
Polycom RealPresence Group Series	When a RealPresence Group Series system is registered to a RealPresence DMA system and hosts an encrypted conference, Cisco C-series endpoints that are registered to the RealPresence DMA system and dial in to the conference can't complete the SSL handshake with the RealPresence Group Series system's MCU.	Dial out from the RealPresence Group Series system to the Cisco endpoints.

Product	Description	Workaround
Polycom HDX endpoints	A Polycom HDX endpoint using the RealPresence DMA system as its SIP registrar is unable to complete a point- to-point call to a Microsoft Lync or Skype for Business client.	In the RealPresence DMA system, edit the Microsoft external SIP peer on the External SIP Peers page and enable the Postliminary feature.
Polycom HDX endpoints	You can use Polycom HDX endpoints with Lync Server, but they don't support Skype for Business video conferencing.	
Polycom HDX endpoints, Poly Trio	RealPresence DMA systems don't support H.264 high profile (HP) for SIP to and from H.323 calls.	
Sony, Radvision, Avaya, and Polycom VVX endpoints	In the RealPresence DMA system, the Terminate calls based on failed responses to IRQs call server setting is enabled by default, causing some Sony, Radvision, Avaya, and Polycom VVX endpoints to disconnect during conferences.	In the RealPresence DMA system, disable the Terminate calls based on failed responses to IRQs call server setting.
Various endpoints	The RealPresence DMA system 6.4 or later doesn't support certificates with an RSA key size less than 1024 bits in length. Manufacturers of some endpoints have not yet enhanced their software to support more secure encryption. As a result, TLS connections made from the RealPresence DMA system to some endpoints no longer work.	
Cisco SX endpoints	When Cisco SX devices running CE 8.X software are registered to the RealPresence DMA system using SIP/TLS, SSL handshake failures between the Cisco SX and RealPresence DMA system during establishment of SIP/TLS connections can result in call failures.	Add a certificate to the Cisco SX device and enable the certificate for use with SIP.  See the Cisco SX CE 8.X Administrator Guide for additional details.
Microsoft Skype for Business and Polycom RealPresence Desktop	When Microsoft Skype for Business and Polycom RealPresence Desktop are connected in a point-to-point call, the call doesn't include video media.  When Microsoft Skype for Business and Polycom RealPresence Desktop are connected in a VMR call, the call does include video.	As an alternative to a point-to-point call, if Skype for Business joins a VMR or RealConnect conference with RealPresence Desktop, the conference includes video.

Product	Description	Workaround
Microsoft Skype for Business and Polycom RealPresence DMA virtual entry queues	On RealPresence DMA systems, virtual entry queues (VEQs) don't support direct dialing from Skype for Business clients into the RealPresence Platform.	
Microsoft Skype for Business and Polycom RealPresence DMA presence publishing	After editing a VMR in the RealPresence DMA system, Skype for Business clients experience a delay in updating presence information.	

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For more information about installing, configuring, and administering Poly products or services, go to the <u>Poly</u> site, click **Support**, and choose the option best suited to your needs.

### Related Poly and Partner Resources

See the following sites for information related to this product.

- The <u>Poly Online Support Center</u> is the entry point to online product, service, and solution support information including Licensing & Product Registration, Self-Service, Account Management, Product-Related Legal Notices, and Documents & Software downloads.
- The <u>Polycom Documentation Library</u> provides support documentation for active products, services, and solutions. The documentation displays in responsive HTML5 format so that you can easily access and view installation, configuration, or administration content from any online device.
- The <u>Polycom Community</u> provides access to the latest developer and support information. Create
  an account to access Poly support personnel and participate in developer and support forums. You
  can find the latest information on hardware, software, and partner solutions topics, share ideas, and
  solve problems with your colleagues.
- The <u>Polycom Partner Network</u> are industry leaders who natively integrate the Poly standards-based RealPresence Platform with their customers' current UC infrastructures, making it easy for you to communicate face-to-face with the applications and devices you use every day.
- The <u>Polycom Collaboration Services</u> help your business succeed and get the most out of your investment through the benefits of collaboration.

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