



RELEASE NOTES

Software Version 4.2.2 | December 2015 | 3725-78700-001G

Polycom[®] RealPresence[®] Access Director[™] System



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What's New in Release 4.2.2

The Polycom RealPresence Access Director system version 4.2.2 is a maintenance release. It provides the features and functionality of previous releases and fixes some known issues.

Release History

This following table shows the release history of the RealPresence Access Director system:

Release History

<i>Release</i>	<i>System</i>	<i>Release Date</i>	<i>Features</i>
4.2.2	CentOS 6.7 PostgreSQL 9.3.6 OpenJDK 1.7.0.79-2.5.5.1	December 2015	<ul style="list-style-type: none"> Resolved some known issues
4.2.1.1	CentOS 6.7 PostgreSQL 9.3.6 OpenJDK 1.7.0.79-2.5.5.1	September 2015	<ul style="list-style-type: none"> Resolved some known issues
4.2.1	CentOS 6.7 PostgreSQL 9.3.6 OpenJDK 1.7.0.79-2.5.5.1	August 2015	<ul style="list-style-type: none"> Support for SHA-256 SSL certificates Security updates Resolved some known issues
4.2	CentOS 6.6 PostgreSQL 9.3.6 OpenJDK 1.7.0.79-2.5.5.1	June 2015	<ul style="list-style-type: none"> High Availability deployment option STUN and TURN service to support WebRTC video conferencing Support for Hyper-V virtual environments Operating system upgraded to CentOS 6.6 Replaced Oracle JDK with OpenJDK
4.1	CentOS 6.4 Postgres 9.2 Java 7u21	December 2014	<ul style="list-style-type: none"> Basic Access Control Lists Enhanced integration with the RealPresence Platform Director System Support for higher data rate transfer from RealPresence Content Sharing Suite systems Integration with an F5 load balancer
4.0.1	CentOS 6.4 Postgres 9.2 Java 7u21	August 2014	<ul style="list-style-type: none"> Resolved some known issues

<i>Release</i>	<i>System</i>	<i>Release Date</i>	<i>Features</i>
4.0.0	CentOS 6.4 Postgres 9.2 Java 7u21	June 2014	<ul style="list-style-type: none"> • Operating system upgraded to CentOS 6.4 • Deploy and manage licenses using Polycom RealPresence Platform Director (Virtual Edition only) • Single interface and port for access proxy services and HTTP tunnel proxy • Firewall port mapping not required for two-system tunnel deployment • Support for BFCP/TCP content sharing through HTTP tunnel proxy • HTTP tunnel proxy auto-discovery • REST API (Virtual Edition) to support integration with the RealPresence Platform Director • License key to enable encryption of the tunnel in a two-system deployment • Other system enhancements
3.1.1	CentOS 5.7 Postgres 9.1 Java 7u21	April 2014	<ul style="list-style-type: none"> • Support for Tandberg endpoints
3.1.0	CentOS 5.7 Postgres 9.1 Java 7u21	January 2014	<ul style="list-style-type: none"> • SIP open business-to-business (B2B) calling, enabling calls to and from external SIP endpoints that are not registered or are not members of a federated enterprise or division • HTTP tunnel reverse proxy that provides firewall traversal for Polycom[®] integration with RealPresence Platform Director[®] CloudAXIS[™] suite clients making SIP guest calls to video conferences • Increased flexibility of access proxy services to support multiple reverse proxy configurations • License key to enable strong encryption of the tunnel between the tunnel server and tunnel client in a two-box tunnel deployment. • Support for the LDAP v3 extension StartTLS • Support for Polycom[®] CMA[®] Desktop Systems

<i>Release</i>	<i>System</i>	<i>Release Date</i>	<i>Features</i>
3.0.0	CentOS 5.7 Postgres 9.1 Java 7u21	August 2013	<ul style="list-style-type: none"> • Support for split interfaces for SIP and H.323 signaling traffic • Tunnel deployment of two RealPresence Access Director Systems • Support of H.460 endpoints • Support of default destination alias for H.323 guest users • Access control lists • Call history and registration history • Port ranges • TCP reverse proxy for Polycom® RealPresence® CloudAXIS™ Suite clients • Interoperability with Cisco VCS Expressway™ • Enhanced security features
2.1.1	CentOS 5.7 Postgres 9.1 Java 6u30	June 2013	<ul style="list-style-type: none"> • Resolved some known issues
2.1.0	CentOS 5.7 Postgres 9.1 Java 6u30	March 2013	<ul style="list-style-type: none"> • Support for SNMP v2c and v3 for monitoring system status • Static route configuration • H.323 guest policy to limit destinations for inbound H.323 calls from the Internet • Support of both SVC and AVC endpoints for calls between federated enterprises
2.0.4	CentOS 5.7 Postgres 9.1 Java 6u30	January 2013	<ul style="list-style-type: none"> • Support for additional Polycom® RealPresence® products, including Content Sharing Suite, Collaboration Server 800s, Virtual Edition, and Group Series 300/500 • User interface updates • SIP and H.323 call disposition descriptions
2.0.3	CentOS 5.7 Postgres 9.1 Java 6u30	December 2012	<ul style="list-style-type: none"> • SIP Back-to-Back User Agent (B2BUA) • H.323 signaling proxy for guest users and enterprise-to-enterprise federated calling • Media relay, including RTP and SRTP passthrough and SVC support for SIP remote users • Access proxy for management, presence, and directory traffic • DMZ deployment • Support for managed endpoints (Polycom HDX systems, RealPresence Mobile, RealPresence Desktop)

Hardware Requirements

You need a client system running Microsoft® Windows® to install the RealPresence Access Director system and configure the initial settings. The client system requires a minimum display resolution of 1280x1024 (SXGA). Polycom recommends a resolution of 1680x1050 (WSXGA+).

Software Requirements

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

Software Requirements

<i>Product</i>	<i>Versions</i>
Browsers supported:	
Microsoft Internet Explorer®	8 or higher
Google Chrome™	Current version
Mozilla® Firefox®	Current version
Java™	7
Adobe® Flash® Player	11 or higher

Products Tested with this Release

RealPresence Access Director systems are tested extensively with a wide range of products. The following list is not a complete inventory of compatible equipment. It indicates the products that have been tested for compatibility with version 4.2.0.

Polycom supports mixed Hyper-V/VMware environments, but has not tested all configurations and combinations.



WebRTC video conferencing

WebRTC video conferencing requires RealPresence Web Suite with a RealPresence Web Suite Pro license. Do not enable any WebRTC features unless your video conferencing environment includes RealPresence Web Suite Pro. For complete documentation, please see the RealPresence Web Suite Administrator Guide.



Supported products

You are encouraged to upgrade all your Polycom systems with the latest software before contacting Polycom support to ensure that potential issues have not already been addressed by vendor software updates. Go to [Polycom Support Service Policies](#) to find the current [Polycom Interoperability Matrix](#).

Products Tested with this Release

<i>Product</i>	<i>Tested Versions</i>
NAT, Firewall, Session Border Controllers	
Polycom RealPresence Access Director	4.2.2
Management Systems	
Polycom RealPresence Resource Manager	8.3.0, 8.4.0
Microsoft Active Directory	Microsoft Windows Server 2012 R2
Web Browser-Based Solutions	
Polycom RealPresence Web Suite	2.0
Gatekeepers, Gateways, and MCUs	
Polycom RealPresence Distributed Media Application (DMA) 7000	6.3
Polycom RealPresence Collaboration Server	8.6
Polycom RMX 1500/2000/4000 (MPMx)	8.5.x

<i>Product</i>	<i>Tested Versions</i>
Endpoints	
Polycom RealPresence Group Series 500/700; 310; 550	4.3.0-230160
Polycom HDX 7000	3.1.3, 3.1.4
Polycom RealPresence Desktop	3.4
Polycom RealPresence Mobile	3.4
RealPresence Platform Virtual Edition Infrastructure	
Polycom RealPresence Platform Director	2.0
<ul style="list-style-type: none"> VMware vCenter Server 	5.5
Hypervisor Environments for Virtual Edition	
VMware	5.5
Microsoft Hyper-V	Microsoft Windows Server 2012 R2 with the Hyper-V role enabled

System Capabilities and Constraints

The RealPresence Access Director system is available as an Appliance Edition or Virtual Edition.

The RealPresence Access Director, Appliance Edition, system software can be installed on the following Polycom servers:

- Polycom Rack Server 220 (R220)
- Polycom Rack Server 620 (R620)
- Polycom Rack Server 630 (R630)

Appliance Edition

When installed on a Polycom R630, R620, or R220 server, the RealPresence Access Director system supports the maximum capabilities listed in the following table.

<i>Capability</i>	<i>R220</i>	<i>R620</i>	<i>R630</i>
Registrations	2000	5000	5000
Concurrent calls	200	1000*	1000*
HTTPS tunnel calls (Polycom® RealPresence® CloudAXIS™ Suite and Polycom® RealPresence® Web Suite SIP guest calls only)	50	50	50
Throughput (Mbps)	700	700	700

* Maximum concurrent call numbers will depend on the overall deployment model, network quality, codecs used, total throughput of all calls, and available bandwidth.

Virtual Edition

The RealPresence Access Director, Virtual Edition, is available for Virtual Machine (VM)-based deployment in VMware environments and Microsoft Hyper-V environments.

Polycom supports mixed Hyper-V/VMware environments, but has not tested all configurations and combinations.

Host Installation Guidelines

The following table describes the minimum VM host requirements for each instance of the RealPresence Access Director, Virtual Edition. The table also shows the typical performance capabilities of the minimum host requirements.

RealPresence Access Director Minimum Deployment Settings in a Virtual Environment Using a 2.9 GHz Server

<i>Component</i>	<i>Minimum Deployment Profile</i>	<i>Maximum Deployment Profile</i>
Virtual Cores*	2	8
CPU	3.5GHz	2GHz
Memory	8 GB	12GB
Storage	146GB	146GB
Number of concurrent calls**	200	1000
Throughput capacity (Mbps)	700	700

* CPU Affinity & HT Sharing should be set to "None"

** Maximum concurrent call numbers will depend on the overall deployment model, network quality, codecs used, total throughput of all calls, and available bandwidth.

CPU Affinity

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

Interoperability Constraints

The following table lists known issues of other products that may cause interoperability issues with the RealPresence Access Director system.

Interoperability Issues

<i>Product</i>	<i>Description</i>
Cisco VCS Expressway	A Cisco VCS Expressway call from an endpoint in an enterprise using Cisco VCS Control plus VCS Expressway to an endpoint in an enterprise using the RealPresence Access Director system and a RealPresence DMA system fails if SIP authentication is enabled in the RealPresence DMA system. Cisco VCS Expressway currently does not support SIP enterprise-to-enterprise calls.
Huawei H.460-enabled endpoint	Video latency occurs in H.323 calls from an external Huawei H.460-enabled endpoint to an internal Polycom RealPresence Group Series endpoint.
Sony H.460-enabled endpoint	Video latency occurs in H.323 calls from an external Sony H.460-enabled endpoint to an internal Polycom RealPresence Group Series endpoint.
LifeSize H.460-enabled endpoint	Video latency occurs in H.323 calls from an external LifeSize H.460-enabled endpoint to an internal Polycom RealPresence Group Series endpoint.
Google Chrome Browser	When using the Google Chrome browser to download a file, such as a log or an upgrade file, Chrome displays an error stating that the file could not be downloaded. The error message is incorrect and the file should download successfully.
Cisco PIX 515E firewall, version 7.1(2)	Rapid network outages may cause the Address Resolution Protocol (ARP) table in the firewall to have an incorrect MAC address for a RealPresence Access Director system configured for High Availability. This situation causes signaling for registrations and calls to that system to fail. Cisco no longer supports this firewall model.

Installation and Upgrade Notes

Installation of new RealPresence Access Director systems is managed through Polycom Global Services. For more information, please contact your Polycom representative.

Virtual Editions of Polycom RealPresence Platform products such as the RealPresence Access Director system require the Polycom® RealPresence® Platform Director™ system to manage licensing of your products. Additionally, if your RealPresence Platform Director system is installed in a VMware® vCenter Server® environment with the required capacity, you can use the RealPresence Platform Director system to install the RealPresence Access Director system software. You can also use your virtual environment tools to install product instances.

The RealPresence Platform Director system is included with all Virtual Edition products and is available for download at **Documents and Downloads** at [Polycom Support](http://support.polycom.com).



Get the latest product information from Polycom Support

To confirm that you have the latest software release and product documentation, visit the Support page of the Polycom web site at <http://support.polycom.com>.

You can upgrade both the Appliance Edition and Virtual Edition of the RealPresence Access Director system to version 4.2.2 from the system's web user interface. If you are upgrading the RealPresence Access Director, Appliance Edition, the version 4.2.2 upgrade does not require a new license activation key code.

RealPresence Access Director systems running version 4.1.x or 4.2.x of the software can be upgraded to version 4.2.2. **If you try to upload a version 4.2.2 upgrade package to a system running a software version older than 4.1.x, the upload will not succeed.**

If you are upgrading a VMware OVA instance from version 4.2.x to 4.2.2, eth0 will map incorrectly to network interface 4. However, when upgrading a VMware instance from version 4.1.x to 4.2.2 or installing the version 4.2.2 VMware OVA package for the first time, eth0 maps correctly to network interface 1.



High Availability configuration and network adapter mapping

If you had installed RealPresence Access Director system 4.2 OVA, your ethernet interface and network adapter mapping might not be sequential due to a known issue in VMware and CentOS. For High Availability configurations in a VMware virtual environment, please make sure that both virtual machines have identical sequential ethernet interface to network adapter mapping. If not, you can fix the problem by installing RealPresence Access Director 4.2.1 or higher OVA.

If your system is not currently running version 4.1.x or 4.2.x, you must perform intermediate upgrades before upgrading to version 4.2.2. Polycom supports the upgrade paths listed in the following table and recommends that you read all relevant Release Notes before upgrading to an intermediate version.

Upgrade Paths

<i>Current Version</i>	<i>Intermediate Upgrade</i>	<i>Final Version</i>
Prior to version 2.1.x	2.1.x	3.0
3.0		3.1.x
3.1.x	4.0	4.0.1
	<p>Note: This version of the RealPresence Access Director System, Virtual Edition, cannot be upgraded from version 3.1.x and instead requires a new installation and data migration.</p>	
4.0.x		4.1
4.1.x		4.2.2
4.2.x		4.2.2



Downloading the upgrade file from a Google Chrome browser

If you use Google Chrome to download the version 4.2.2 upgrade file, Chrome may display an error stating that the file could not be downloaded. *The error message is incorrect* and the upgrade file should download successfully.

Consider the following information if you upgrade from a system running version 4.2.0:

- When you start the upgrade, you will not be logged out of the web user interface immediately. It takes time for the upgrade process to unpack the upgrade file.
- Your browser will lose connectivity to the server during the upgrade and may display an “Unexpected Exception Happened” error. Ignore this error.

Note that the entire upgrade process from version 4.1.x or 4.2.x to version 4.2.2 can take approximately 45 minutes and require multiple reboots. After you start the upgrade, allow the process to finish. *Do not start an additional upgrade.*

To upgrade to version 4.2.2 of the RealPresence Access Director system:

- 1 Go to **Maintenance > Backup and Restore** and create a new backup of your current system.
- 2 Download the backup file to your local system.
- 3 From the [Polycom Support](#) site, download the appropriate version 4.2.2 upgrade file and save it on your local system:
 - a *.bin file if upgrading from version 4.1.x
 - b *.upg file if upgrading from 4.2.x

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- 4 Follow the instructions in the *Polycom RealPresence Access Director System Administrator Guide* or the online help to upgrade the system to version 4.2.2.
 - 5 After the upgrade is complete, clear the cache of your browser to ensure that the RealPresence Access Director web user interface displays all updated components.
 - 6 From your browser, log into the system's web interface with the following credentials:
 - User ID: **admin**
 - Password: **Polycom12#\$**
 - 7 Go to **Maintenance > Software Upgrade**.
 - 8 Review the **System Version** field and **Operation History** table to confirm the upgrade was successful.
 - 9 Go to **Admin > Network Settings** and modify your network settings as needed for your environment. *The upgrade will not maintain all network settings.*

Known Issues

The following table lists known issues of the RealPresence Access Director system.

Known Issues

<i>Category</i>	<i>Issue No.</i>	<i>Found in Release</i>	<i>Description</i>	<i>Workaround</i>
Documentation	EDGE-1676	4.2.0	The RealPresence Access Director System Administrator Guide gives instructions on migrating application and system configuration data from a backup file after upgrading to a new version of the system software. Migrating data from a backup file is no longer supported.	
Certificates	EDGE-1517	4.2.0	An error results when uploading some certificate files due to unsupported characters in the file name.	
Certificates	EDGE-1659	4.2.0	After creating a new SHA-256 Certificate Signing Request (CSR), when you view the CSR by clicking Create a Certificate Signing Request and selecting Use Existing , the system displays a SHA-1 encoded request instead of a SHA-256 request.	<ul style="list-style-type: none"> Go to Admin > Certificates. Click Create a Certificate Signing Request. If a SHA-256 CSR already exists on your system, select Generate New in the Confirm Action window to create a new SHA-256 CSR.
Certificates	EDGE-1660	4.2.1	When viewing the details for a SHA-256 certificate in the RealPresence Access Director system web user interface, the complete SHA-256 details do not display.	
High Availability	EDGE-1600	4.2.0	High Availability settings cannot be configured if two or more network interfaces for the RealPresence Access Director system are not configured consecutively.	Configure network settings on consecutive network interface cards before enabling High Availability. For example, configure network settings for eth0 and eth1 instead of eth0 and eth3, then configure HA settings.

<i>Category</i>	<i>Issue No.</i>	<i>Found in Release</i>	<i>Description</i>	<i>Workaround</i>
High Availability	EDGE-1658	4.2.0	In some situations after a failover occurs in a High Availability configuration, the RealPresence Access Director system that owns the resources of both systems does not automatically release the resources of the peer system when it requests them.	<p>If resources are not released back to a peer system within a few minutes after it requests them, complete these steps:</p> <ul style="list-style-type: none"> From the web user interface of the system that owns the resources, go to Diagnostics > High Availability Status. Click Release Peer Resources to force the release of the peer system's resources.
High Availability	EDGE-1732		In certain High Availability network designs, outbound SIP calls are placed on the physical address instead of the virtual address, causing them to fail if the physical address is not publicly addressable.	When configuring a High Availability system, if your media services are on a different Network Interface Card than signaling services, then you will need to make sure the physical address associated with the external signaling service is publicly addressable.
Network Settings Access Proxy Settings	EDGE-1581	4.1.0	After configuring network settings and access proxy settings during a new RealPresence Access Director system installation or upgrade to a new version, some settings are not saved when the system is rebooted.	<ul style="list-style-type: none"> Go to Admin > Network Settings > Configure Network Settings. Ensure that the Primary DNS field contains the IP address of the DNS server for your network. The field should not include any other characters.
SIP Federation	EDGE-1512	4.1.0	Calls to a SIP federation fail if a domain name is configured as the Company Address in the federation settings.	<ul style="list-style-type: none"> Go to Configuration > Federation Settings. Select the SIP federation and click Edit. Change the Company Address from a domain name to an IP address. Click OK.

<i>Category</i>	<i>Issue No.</i>	<i>Found in Release</i>	<i>Description</i>	<i>Workaround</i>
SIP Open Calls	EDGE-1360	4.0.1	When a SIP endpoint makes an open call through a RealPresence Access Director system to a second endpoint with a RealPresence Access Director system, the call connects. If the call lasts more than five minutes and the second (callee) endpoint hangs up, the first endpoint does not release the call.	

Resolved Issues

The following table lists the issues resolved in version 4.2.2 of the RealPresence Access Director system.

Resolved Issues

Category	Issue Number	Found in Release	Description
Advanced Access Control List Rules	EDGE-1672	4.2.0	In some configurations, the Advanced Access Control List rules used to block the H.323 dialbots did not function correctly.
User Interface	EDGE-1713	4.2.2	On a RealPresence Access Director, Virtual Edition system running version 4.x with more than one Network Interface Card configured, the web management interface could be accessed on all configured NICs.
System Memory	EDGE-1697	4.2.1	In certain cases, a virtual machine configured with only 4GB swap space ran out of memory and rebooted.
TIP Protocol Support	EDGE-1508	4.2.0	The RealPresence Access Director did not support the TIP protocol.
WebSocket	EDGE-1707	4.2.1	The RealPresence Web Suite system WebSocket sessions were disconnected randomly when the server was accessed from the RealPresence Access Director system.
LDAP	EDGE-1715	4.2.2	The RealPresence Access Director system stops proxying LDAP connections to RealPresence Resource Manager system intermittently.
			NOTE: This fix has implications to the provisioning profile defined in RealPresence Resource Manager. Previously, the RealPresence Access Director system was using the Provisioning Polling Interval to determine when an endpoint was no longer active. This has been changed to use the Heartbeat Posting Interval instead which aligns with how the RealPresence Resource Manager system determines whether an endpoint is active or not. Please refer to the RealPresence Resource Manager system documentation for more information on how these fields are used in Dynamic Provisioning.
Performance	EDGE-1724	4.2.2	The system leaked memory when using the Access Proxy feature.
Certificates	EDGE-1723	4.1.1 and 4.2.2	There was a problem generating a certificate signing request on the RealPresence Access Director system using the special character '/' in the Organizational Unit (OU) field.
Upgrades	EDGE-1689	4.1 and 4.2.1	The RealPresence Access Director system configuration settings were lost after upgrading the system from version 4.1 to version 4.2.1.

<i>Category</i>	<i>Issue Number</i>	<i>Found in Release</i>	<i>Description</i>
Access Control Lists	EDGE-1726	4.2.1	When specifying an Access Control List that has a VMR range, SIP calls outside that range were still allowed.
User Interface	EDGE-1719	4.2.1	The ping utility allowed you to ping IP addresses, but not hostnames in FQDNs.

Get Help

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

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

For more information on solution with this Polycom partner, see the partner site at [Polycom Global Strategic Partner Solutions](#).

The Polycom Community

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