



# Poly Clariti Core and Poly Clariti Edge 10.3, Poly Clariti Relay 1.2

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## What's New

This release includes the following new features and provides important field fixes.

- [Poly Clariti Workflow Lite Configuration Option](#)
- [Poly Clariti Licensing Enhancements](#)
- [FIPS-Compliant Certificates](#)
- [Microsoft Exchange Deprecation](#)
- [Poly Clariti App and Poly Clariti Roster Enhancements](#)
- [Other Changes in This Release](#)

## ***Poly Clariti Workflow Lite Configuration Option***

Poly Clariti Workflow Lite is an enhanced platform that enables ease of use with scheduling and click-to-join functionality for Microsoft Outlook meetings via the Easy Schedule add-in.

Poly Clariti Workflow Lite is now available as a configuration option when you complete first-time setup of the Poly Clariti Core and Poly Clariti Edge software.

## ***Poly Clariti Licensing Enhancements***

In this release, the system web interface and documentation provide enhanced instructions for licensing a Poly Clariti Core or Poly Clariti Edge system with Poly Lens.

## ***FIPS-Compliant Certificates***

To use the most recent FIPS-certified components, this release of Poly Clariti Core and Poly Clariti Edge software uses the Oracle Linux 8 NSS crypto JAVA provider and Oracle Linux 8 OpenSSL for all system cryptographic operations. The SafeLogic cryptographic libraries are also upgraded to 3.0.2.1 to support only the BCKFS keystore format. For details, see [Security Updates](#).

## ***Microsoft Exchange Deprecation***

This release doesn't support integration with Microsoft Exchange.

## ***Poly Clariti App and Poly Clariti Roster Enhancements***

This release provides the following enhancements to Poly Clariti App and Poly Clariti Roster:

- The Poly Clariti Roster API supports recording SVC/AVC conferences when the conference template is configured for cascade mode.
- In Poly Clariti App calls, a placeholder avatar for SVC meeting participants displays on AVC endpoints, enabling AVC participants to see when an SVC participant is video muted (pending Poly Clariti Relay 1.2.1 release).
- In Poly Clariti App calls, the names of all SVC cascaded participants display in an AVC endpoint's video stream.

## ***Other Changes in This Release***

This release includes the following enhancements:

- The **ACL Rules** page in the system web interface indicates which access control list rules are the system default rules.
- The **Active Calls** page in the system web interface displays the name of Poly RealPresence Group Series systems.

- You can disable SIP MRC signaling for RealPresence Group Series, RealPresence Desktop, and RealPresence Mobile endpoints. When disabled, a SIP AVC call can be established and the endpoints can join a Poly Clariti App conference on RealPresence Collaboration Server.
- An alert displays when the SIP stack can't be restarted and you must manually reboot Poly Clariti Core or Poly Clariti Edge.

## Release History

The following table lists the release history of Poly Clariti Core, Poly Clariti Edge, Poly Clariti Relay, and Poly RealPresence DMA.

### Release History

| Release  | API Release | System  | Release Date  | Features   |
|--|-------------|---|---------------|--|
| Poly Clariti Core and Edge 10.3<br>Clariti Relay 1.2     | 3.10.0      | Oracle Linux 8.6-1.0.6<br>OpenJDK 11.0.16.1.1-1<br>PostgreSQL 12.11-2 | December 2022 | Poly Clariti Workflow Lite configuration option<br>Poly Clariti licensing enhancements<br>FIPS-compliant certificates<br>Microsoft Exchange deprecation<br>Fixed some known issues |
| Poly Clariti Core and Edge 10.2.2.3<br>Clariti Relay 1.2 | 3.9.0       | Oracle Linux 8.5-1<br>OpenJDK 11.0.14.0.9-2<br>PostgreSQL 12.9-1      | August 2022   | Fixed some known issues  |
| Poly Clariti Core and Edge 10.2.2.2<br>Clariti Relay 1.2 | 3.9.0       | Oracle Linux 8.5-1<br>OpenJDK 11.0.14.0.9-2<br>PostgreSQL 12.9-1      | July 2022     | Fixed some known issues  |
| 10.2.2.1   | 3.9.0       | Oracle Linux 8.5-1<br>OpenJDK 11.0.14.0.9-2<br>PostgreSQL 12.9-1      | June 2022     | Includes Poly Clariti App 1.1.1  |
| 10.2.2   | 3.9.0       | Oracle Linux 8.5-1<br>OpenJDK 11.0.14.0.9-2<br>PostgreSQL 12.9-1      | June 2022     | Fixed some known issues  |
| 10.2.1   | 3.9.0       | Oracle Linux 8<br>OpenJDK 1.8.0.265<br>PostgreSQL 10.15-1             | April 2022    | Fixed some known issues  |

| Release  | API Release | System  | Release Date  | Features  |
|----------|-------------|---|---------------|---|
| 10.2     | 3.9.0       | Oracle Linux 8<br>OpenJDK 1.8.0.265<br>PostgreSQL 10.15-1 | April 2022    | New License Service<br>Poly RealPresence Clariti Renamed to Poly Clariti<br>Support for Clariti Ensemble SDK and WeMeet Server Integration<br>Conference Customizations<br>Multistream Cascading<br>Support for Oracle Linux 8 Operating System<br>Clariti Relay Features |
| 10.1.0.3 | 3.8.0       | CentOS 6.10<br>OpenJDK 1.8.0.265<br>PostgreSQL 10.15-1    | January 2022  | Maintenance release to resolve known issues.  |
| 10.1.0.2 | 3.8.0       | CentOS 6.10<br>OpenJDK 1.8.0.265<br>PostgreSQL 10.15-1    | December 2021 | Content Resolution and Line Rate Enhancements for Factory Default Conference Template<br>Poly Clariti App Upgrade Enhancements<br>Clarification – Endpoint Provisioning Status in the System Web Interface<br>Resolved some known issues                                  |
| 10.1.0.1 | 3.8.0       | CentOS 6.10<br>OpenJDK 1.8.0.265<br>PostgreSQL 10.15-1    | October 2021  | Content Resolution and Line Rate Enhancements for Factory Default Conference Template<br>Poly Clariti App Upgrade Enhancements<br>Resolved some known issues  |

| Release  | API Release | System   | Release Date | Features   |
|----------|-------------|--|--------------|--|
| 10.1     | 3.8.0       | CentOS 6.10<br>OpenJDK 1.8.0.265<br>PostgreSQL 10.15-1 | August 2021  | <p>RealPresence DMA product name change to Poly Clariti Core and Poly Clariti Edge</p> <p>Signaling support for Poly Clariti Relay (via Poly Clariti Relay Control API)</p> <p>Management of Poly Clariti Relay from Poly Clariti Core system web interface</p> <p>Content snatching, content resolution support for Poly Clariti Relay conferences</p> <p>Cascade support between Poly Collaboration Server and Poly Clariti Relay</p> <p>Signaling support for SIP MRC endpoints</p> <p>Enhancements to high availability and superclustering to support Poly EVO signaling</p> <p>Signaling support for Poly Clariti App and Poly Clariti Roster</p> <p>Poly Clariti Roster control support (roster, chat, mute/un-mute, voting, hand-raising)</p> <p>Poly Clariti App management</p> <p>Poly EVO endpoint provisioning support in Poly Clariti Edge</p> <p>Poly EVO registration sharing, Poly EVO peers for Poly Clariti Edge</p> <p>Click-to-join support for Outlook plugin</p> |
| 10.0.0.9 | 3.6.7       | CentOS 6.10<br>OpenJDK 1.8.0.265<br>PostgreSQL 10.14-1 | April 2021   | <p>Conference participant counts ACLs in log archives</p> <p>Alert history file in log archives</p>  |
| 10.0.0.8 | 3.6.7       | CentOS 6.10<br>OpenJDK 1.8.0.265<br>PostgreSQL 10.14-1 | October 2020 | <p>Online RealPresence DMA Deployment Wizard accessible in system web interface</p> <p>Factory ACLs no longer editable</p> <p>Resolved some known issues</p>   |
| 10.0.0.7 | 3.6.5       | CentOS 6.10<br>OpenJDK 1.8.0.252<br>PostgreSQL 10.13-1 | July 2020    | <p>Support for Zoom conferencing</p> <p>Enhancements to <b>Call History</b> and <b>Active Calls</b> on core systems</p>  |

| Release  | API Release | System  | Release Date  | Features  |
|----------|-------------|---|---------------|---|
| 10.0.0.6 | 3.6.5       | CentOS 6.10<br>OpenJDK 1.8.0.232<br>PostgreSQL 10.11-1  | March 2020    | SIP transport override for outbound calls<br>DNS timeout configuration<br>Alerts for unlicensed systems<br>Interface stability time for high availability systems<br>KVM distribution<br>Support for Microsoft LDAP channel binding   |
| 10.0.0.5 | 3.6.4       | CentOS 6.10<br>OpenJDK 1.8.0.232<br>PostgreSQL 10.10-1  | November 2019 | Licensed VMRs dashboard pane in system web interface<br>ACL rule to block SIP bot calls<br>Support for 5x5 layout in conference templates<br>Media relay support of unidirectional media streams<br>Call routing loop detection<br>Advanced diagnostics for troubleshooting<br>Resolved some known issues |
| 10.0.0.4 | 3.6.3       | CentOS 6.10<br>OpenJDK 1.8.0.222<br>PostgreSQL 10.9-1   | August 2019   | License sharing and direct call routing<br>Resolved some known issues   |
| 10.0.0.3 | 3.6.0       | CentOS 6.10<br>OpenJDK 1.8.0.181-3<br>PostgreSQL 10.4-1 | May 2019      | Auto dial-out cascading to cloud service-based conferences<br>Resolved some known issues  |
| 10.0.0.2 | 3.6.0       | CentOS 6.10<br>OpenJDK 1.8.0.181-3<br>PostgreSQL 10.4-1 | February 2019 | Maintenance release to resolve some known issues  |
| 10.0.0.1 | 3.6.0       | CentOS 6.10<br>OpenJDK 1.8.0_171<br>PostgreSQL 10.4     | December 2018 | Maintenance release to resolve some known issues  |

| Release | API Release | System   | Release Date  | Features  |
|---------|-------------|--|---------------|---|
| 10.0    | 3.6.0       | CentOS 6.10 OpenJDK 1.8.0_171<br>PostgreSQL 10.4 | October 2018  | Access proxy<br>Access Control Lists (ACLs)<br>Integration with multiple Polycom® ContentConnect™ systems<br>Support for ContentConnect High Availability and geo-redundancy<br>Clariti VMR licensing and local burst Edge services<br>High Availability (active-active)<br>Immersive Telepresence (ITP) layout (new)<br>Media traversal<br>MCU conference thresholds NAT<br>Registration sharing from edge to core<br>Pooled conference name synchronizing from the RealPresence Resource Manager system to RMX<br>TURN services<br>TIP version 8 support VPN tunnel |
| 9.0.1   | 3.5.2       | CentOS 6.9 OpenJDK 1.8.0_151<br>PostgreSQL 9.6.6 | January 2018  | Load balancer to support multiple Polycom ContentConnect systems<br>Security updates<br>Resolved some known issues  |
| 9.0.0.3 | 3.5.1       | CentOS 6.9 OpenJDK 1.8.0_131<br>PostgreSQL 9.6.3 | November 2017 | Maintenance release to resolve some known issues  |
| 9.0.0.2 | 3.5.0       | CentOS 6.9 OpenJDK 1.8.0_131<br>PostgreSQL 9.6.3 | August 2017   | New system web interface Multiple dial plans Enhanced High Availability<br>Peer-to-Peer to MCU Escalation<br>Two-system installation with the USB Configuration Utility<br>Network packet capture troubleshooting utility<br>Single log file downloads Enhanced network settings Revised security settings Licensing changes Revised superclustering Enhanced security features<br>Resolved some known issues   |
| 6.4.1.8 | 3.4.6       | CentOS 6.7 OpenJDK 1.8.0_77<br>PostgreSQL 9.5.2  | December 2017 | Maintenance release to resolve some known issues  |

| Release | API Release | System  | Release Date   | Features  |
|---------|-------------|---|----------------|---|
| 6.4.1.7 | 3.4.5       | CentOS 6.7 OpenJDK 1.8.0_77<br>PostgreSQL 9.5.2 | September 2017 | Maintenance release to resolve some known issues  |
| 6.4.1.6 | 3.4.4       | CentOS 6.7 OpenJDK 1.8.0_77<br>PostgreSQL 9.5.2 | July 2017      | Maintenance release to resolve some known issues  |
| 6.4.1.5 | 3.4.3       | CentOS 6.7 OpenJDK 1.8.0_77<br>PostgreSQL 9.5.2 | July 2017      | Maintenance release to resolve some known issues  |
| 6.4.1.4 | 3.4.0       | CentOS 6.7<br>OpenJDK 1.8.0<br>PostgreSQL 9.4.4 | June 2017      | Maintenance release to resolve some known issues  |
| 6.4.1.1 | 3.4.0       | CentOS 6.7<br>OpenJDK 1.8.0<br>PostgreSQL 9.4.4 | December 2016  | Maintenance release to resolve some known issues  |
| 6.4.1   | 3.4.0       | CentOS 6.7<br>OpenJDK 1.8.0<br>PostgreSQL 9.4.4 | September 2016 | Maintenance release to resolve some known issues  |
| 6.4.0.1 | 3.4.0       | CentOS 6.7<br>OpenJDK 1.8.0<br>PostgreSQL 9.4.4 | September 2016 | Maintenance release to resolve some known issues  |
| 6.4.0   | 3.4.0       | CentOS 6.7<br>OpenJDK 1.8.0<br>PostgreSQL 9.4.4 | August 2016    | Microsoft Skype for Business MCU Affinity<br>Integration with the Polycom RealPresence Collaboration Server MMCU and RDP content translator<br>Scheduled conference support for Microsoft Office 365<br>Panoramic layout support for Microsoft Skype for Business<br>Cleared SNMP traps<br>API additions and changes Resolved some known issues |
| 6.3.2.4 | 3.1.3       | CentOS 6.7<br>OpenJDK 1.8.0<br>PostgreSQL 9.4.4 |                | Maintenance release to resolve some known issues  |



| Release | API Release | System  | Release Date   | Features   |
|---------|-------------|---|----------------|--|
| 6.3.2.3 | 3.1.3       | CentOS 6.7<br>OpenJDK 1.8.0<br>PostgreSQL 9.4.4 | July 2016      | Maintenance release to resolve some known issues               |
| 6.3.2.2 | 3.1.3       | CentOS 6.6<br>OpenJDK 1.8.0<br>PostgreSQL 9.4.4 | May 2016       | Maintenance release to resolve some known issues               |
| 6.3.2.1 | 3.1.2       | CentOS 6.6<br>OpenJDK 1.8.0<br>PostgreSQL 9.4.4 | April 2016     | Maintenance release to resolve some known issues               |
| 6.3.2   | 3.1.2       | CentOS 6.6<br>OpenJDK 1.8.0<br>PostgreSQL 9.4.4 | March 2016     | Support for RealPresence Clariti<br>Resolved some known issues |
| 6.3.1.2 | 3.1.0       | CentOS 6.6<br>OpenJDK 1.8.0<br>PostgreSQL 9.4.4 | February 2016  | Maintenance release to resolve some known issues               |
| 6.3.1.1 | 3.1.0       | CentOS 6.6<br>OpenJDK 1.8.0<br>PostgreSQL 9.4.4 | February 2016  | Maintenance release to resolve some known issues               |
| 6.3.1   | 3.1.0       | CentOS 6.6<br>OpenJDK 1.8.0<br>PostgreSQL 9.4.4 | December 2015  | Maintenance release to resolve some known issues               |
| 6.3.0.2 | 2.7.3       | CentOS 6.6<br>OpenJDK 1.8.0<br>PostgreSQL 9.3   | September 2015 | Maintenance release to resolve some known issues               |
| 6.3.0.1 | 2.7.3       | CentOS 6.6<br>OpenJDK 1.8.0<br>PostgreSQL 9.3   | August 2015    | Maintenance release to resolve some known issues               |

| Release | API Release | System  | Release Date   | Features   |
|---------|-------------|---|----------------|--|
| 6.3.0   | 2.7.2       | CentOS 6.6<br>OpenJDK 1.8.0<br>PostgreSQL 9.3 | June 2015      | Enhanced CSR dialog<br>Enhanced chairperson functionality for cascaded conferences<br>External Microsoft Lync system integration<br>Lobby support for Polycom RealConnect conferences<br>Scheduled backups Signaling diagram<br>SIP 302 redirect support<br>Support for Polycom Rack Server 630 (R630)<br>VEQ support for RealConnect conferences<br>WebRTC conferencing |
| 6.2.2.2 | 2.6.3       | CentOS 6.6 Java 8u5<br>PostgreSQL 9.3         | October 2015   | Maintenance release to resolve some known issues   |
| 6.2.2.1 | 2.6.3       | CentOS 6.6 Java 8u5<br>PostgreSQL 9.3         | September 2015 | Maintenance release to resolve some known issues   |
| 6.2.2   | 2.6.3       | CentOS 6.6 Java 8u5<br>PostgreSQL 9.3         | August 2015    | Maintenance release to resolve some known issues   |

## Security Updates

To use the most recent FIPS-certified components, this release of the Poly Clariti Core and Poly Clariti Edge software uses the Oracle Linux 8 NSS crypto JAVA provider and Oracle Linux 8 OpenSSL for all system cryptographic operations, including TLS connections, hashing operations, encryption/decryption, certificate validation, certificate signing request (CSR) generation, and other operations in or out of FIPS mode. The SafeLogic cryptographic libraries are also upgraded to 3.0.2.1 to support only the BCKFS keystore format.

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**IMPORTANT:** If you configure Poly Clariti Core or Poly Clariti Edge to use FIPs-compliant cryptology, you can't upload PKCS12 (PFX) keystores on the **Certificates** page. If a Certificate Authority (CA) provides a signed certificate in a PKCS12 format keystore, you must take the Poly Clariti Core or Poly Clariti Edge out of FIPs-compliant mode to upload the PKCS12 keystore file.

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## Upload a PKCS12 (PFX) Keystore File

To install a signed certificate, create a CSR on the **Certificates** page, download the CSR, and send it to a CA for signing. If the CA provides a signed certificate in a keystore, that keystore must be in BCFKS format. If a CA provides the signed certificate in a PKCS12 (PFX) format keystore, take the Poly Clariti

Core or Poly Clariti Edge out of FIPs-compliant mode, upload the PKCS12 keystore file, then configure the system back to FIPs-compliant mode.

- 1 Go to **Admin > Server > Certificates**.
- 2 Create a certificate signing request.
- 3 Download the certificate signing request and send it to a CA for signing.
- 4 If the CA provides the signed certificate in a PKCS12 (PFX) format keystore, do the following:
  - a Go to **Admin > Server > Security Settings**.
  - b Select the **Use non-FIPS mode (change will cause system restart)** check box.
  - c Select **Update**.
- 5 Go to **Admin > Server > Certificates**.
- 6 Upload the PKCS12 keystore file.
- 7 Go to **Admin > Server > Security Settings**.
- 8 Clear the **Use non-FIPS mode (change will cause system restart)** check box.
- 9 Select **Update**.

## ***CBC Ciphers and Exchange Algorithms***

In this release of Poly Clariti Core and Poly Clariti Edge, all CBC ciphers and the following weak exchange algorithms have been disabled:

- diffie-hellman-group-exchange-sha1
- diffie-hellman-group1-sha1
- gss-gex-sha1-\*
- gss-group1-sha1-\*
- gss-group14-sha1-\*
- rsa1024-sha1

Please see the [Security Center](#) for information about known and resolved security vulnerabilities.

## **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 × 1024 (SXGA) minimum display resolution; 1680 × 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 Poly Clariti Core and Poly Clariti Edge system web interface requires a web browser that supports HTML5.

Poly Clariti App and Poly Clariti Roster require Google Chrome.

## Network Performance Requirements

The following table describes Poly Clariti Core and Poly Clariti Edge system network connections and the related network performance requirements.

### Network Performance Requirements

| Poly Clariti Core and Poly Clariti Edge System Network Connections   | Network Performance   |
|--|---|
| Between clusters of a Poly Clariti Core supercluster   | <ul style="list-style-type: none"> <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> </ul> <p><b>or</b></p> <ul style="list-style-type: none"> <li>• No packet loss if network latency is below 350 ms (one-way)</li> </ul> |
| Between two systems configured for high availability – Poly Clariti and Poly Clariti Edge  | <ul style="list-style-type: none"> <li>• 100 Mbps link</li> <li>• Less than 200 ms round-trip latency</li> </ul>  |
| Between a system and all MCUs – Poly Clariti Core and Poly Clariti Edge combination configurations   | <ul style="list-style-type: none"> <li>• Less than 200 ms round-trip latency</li> <li>• Less than 2 percent round-trip packet loss</li> </ul> <p><b>Note:</b> Since this network carries only signaling traffic (the RTP stream goes directly from the endpoint to the MCU), bandwidth is not an issue.</p>                           |
| Between a system and video endpoints – Poly Clariti Core, Poly Clariti Edge, and Poly Clariti Edge combination configurations                            | <ul style="list-style-type: none"> <li>• Less than 200 ms round-trip latency</li> <li>• Less than 6 percent round-trip packet loss</li> </ul>   |
| Between a system and Microsoft Active Directory (if integrated) – Poly Clariti Core, Poly Clariti Edge, and Poly Clariti Edge combination configurations | <ul style="list-style-type: none"> <li>• Less than 200 ms round-trip latency</li> <li>• Less than 4 percent round-trip packet loss</li> </ul>   |

# Products Tested with This Release

Poly tests Poly Clariti Core, Poly Clariti Edge, and Poly Clariti Relay with other products. The following table lists the products tested for compatibility with this release but doesn'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.

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**Note:** Poly recommends that you upgrade your Poly devices with the latest software versions, as compatibility issues may already have been addressed by software updates. To view the latest software for your product, see the [Current Intraoperability Matrix](#) at Poly Support.

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## *Poly and Polycom Devices*

### Products Tested with This Release

| Product                                  | Tested Versions                  |
|--|----------------------------------|
| Poly Clariti Core and Poly Clariti Edge  | 10.3                             |
| Poly Clariti Relay                       | 1.2.0                            |
| Poly Clariti App and Poly Clariti Roster | 1.2.0                            |
| Poly Clariti Manager                     | 10.11                            |
| RealPresence Collaboration Server (RMX)  | 8.10.0.2                         |
| Poly Studio X30                          | 3.14                             |
| Poly G7500                               | 3.14                             |
| RealPresence Group Series                | 6.2.2.8                          |
| RealPresence Desktop                     | 3.11.6 (Windows)<br>3.11.6 (Mac) |
| RealPresence Mobile                      | 3.11.7 (iOS)<br>3.11.7 (Android) |

## *Third Party Systems and Endpoints*

### Endpoints

| Product                                     | Tested Versions |
|---|-----------------|
| Cisco Unified Communications Manager (CUCM) | 12.5.1          |
| Cisco TelePresence IX5000                   | 9.1.0.4         |

| Product                 | Tested Versions |
|-------------------------|-----------------|
| Cisco TelePresence SX80 | 9.13.1          |
| Cisco TelePresence SX20 | 9.13.1          |
| Cisco TelePresence SX10 | 9.13.1          |
| Cisco DX80              | 9.13.1          |
| Cisco DX70              | 9.13.1          |
| Cisco Telepresence EX90 | 7.3.21          |

#### Hypervisor Environments for Virtual Edition

| Product                            | Tested Versions  |
|------------------------------------|--|
| VMware® vSphere®                   | 7.0.3  |
| VMware vCenter® Server             | 7.0.3  |
| Microsoft Hyper-V                  | Hyper-V host Windows version 8.0 (Windows Server 2016) |
| Kernel-based Virtual Machine (KVM) | 1.5.3  |

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

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## System Capabilities

Poly Clariti Core and Poly Clariti Edge are available in an Appliance Edition and a Virtual Edition.

If your Poly Clariti Core 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 a Polycom Rack Server R630 or R640, or a combination of two servers (see [Supported High Availability Cluster Configurations](#)). These servers come with 16 GB RAM.

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**Note:** Poly supports this version of Poly Clariti Core and Poly Clariti Edge software when installed on a Polycom Rack Server R620 (with 16 GB RAM), but recommends that you upgrade your server to a Polycom Rack Server R640. Support for the Polycom Rack Server R620 will end soon in a future software release. If you have a RealPresence Access Director R620 server, v2 or v3 (shipped from January 2013 through June 2014), you must perform a new installation of this version of Poly Clariti Edge software on the server. RealPresence Access Director R620 servers cannot be upgraded.

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# Supported High Availability Cluster Configurations

Poly Clariti Core and Poly Clariti Edge support 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

|  | <b>Polycom Rack Server 630 (R630)</b> | <b>Polycom Rack Server 640 (R640)</b> | <b>Polycom Rack Server 220 (R220)</b> | <b>Polycom Rack Server 230 (R230)</b> | <b>Poly Rack Server 240 (R240)</b> | <b>Poly Clariti Core or Poly Clariti Edge Virtual Edition</b> |
|--|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|------------------------------------|---|
| Polycom Rack Server 630 (R630)                         | Supported                             | Supported                             | Not Supported                         | Not Supported                         | Not Supported                      | Supported <sup>1</sup>  |
| Polycom Rack Server 640 (R640)                         | Supported                             | Supported                             | Not Supported                         | Not Supported                         | Not Supported                      | Supported <sup>1</sup>  |
| Polycom Rack Server 220 (R220)                         | Not Supported                         | Not Supported                         | Supported                             | Supported                             | Supported                          | Supported <sup>2</sup>  |
| Polycom Rack Server 230 (R230)                         | Not Supported                         | Not Supported                         | Supported                             | Supported                             | Supported                          | Supported <sup>2</sup>  |
| Poly Rack Server 240 (R240)                            | Not Supported                         | Not Supported                         | Supported                             | Supported                             | Supported                          | Supported <sup>2</sup>  |
| Poly Clariti Core or Poly Clariti Edge Virtual Edition | Supported <sup>1</sup>                | Supported <sup>1</sup>                | Supported <sup>2</sup>                | Supported <sup>2</sup>                | Supported <sup>2</sup>             | Supported   |

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

<sup>2</sup> The default .OVA settings for the VM must be adjusted to match the specifications of the R220, R230, and R240 servers.

## Appliance Edition

Install this release of Poly Clariti Core and Poly Clariti Edge, 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
- Poly Rack Server 240 (R240) – deployments with 200 or fewer licensed concurrent calls

## Maximum Capabilities of Servers – Poly Clariti Core

The maximum capabilities of the system differ with the server you are using. The following table lists the maximum capabilities of the Poly or Polycom Rack Servers running Poly Clariti Core.

### Maximum Capabilities of Servers – Poly Clariti Core

| Maximum Capability   | Polycom Rack Server 220/230, Poly Rack Server 240                         | Polycom Rack Server 630/640   |
|--|---|---|
| Number of sites  | 100   | 500   |
| Number of subnets  | 1000  | 5000  |
| Number of Poly Clariti Core 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<br>3600 SIP only  |
| Total point-to-point concurrent calls per cluster                        | 200   | 5000  |



| Maximum Capability   | Polycom Rack Server 220/230, Poly Rack Server 240           | Polycom Rack Server 630/640                                 |
|--|---|---|
| Total concurrent VMR calls for a supercluster <sup>1</sup>                     | 600   | 3600 H.323 only<br>10800 SIP only <sup>1</sup>              |
| Total point-to-point concurrent calls for a supercluster                       | 600   | 50000   |
| Number of participants per VMR for each Poly RealPresence Collaboration Server | 180 (includes 10 ports reserved for cascading) <sup>2</sup> | 180 (includes 10 ports reserved for cascading) <sup>2</sup> |

<sup>1</sup> To support 3600 H.323 or 10,800 SIP calls, the supercluster must contain at least three clusters.

<sup>2</sup> You must enable **Cascade for size** in the Poly Clariti Core system.

## Maximum Capabilities of Servers – Poly Clariti Edge and Poly Clariti Edge Combination

The following table lists the maximum capabilities of Poly or Polycom Rack Servers with Poly Clariti Edge and Poly Clariti Edge combination configuration.

### Maximum Capabilities of Servers – Poly Clariti Edge, Poly Clariti Edge Combination

| Maximum Capability   | Polycom Rack Server 220/230, Poly Rack Server 240 | Polycom Rack Server 630/640 |
|--|---|-----------------------------|
| Registrations  | 2000  | 5000                        |
| Concurrent calls <sup>1</sup>                                    | 200   | 1000                        |
| HTTPS tunnel calls (RealPresence Web Suite SIP guest calls only) | 200   | 200                         |
| Throughput (Mbps)  | 700   | 700                         |

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

## Maximum Capabilities of Servers – Poly Clariti Relay

The maximum number of Poly EVO/SIP MRC participants in a single conference using Poly Clariti Relay is 900.

## Trial Licenses

All new Poly Clariti Core and Poly Clariti Edge systems include a trial license for two concurrent calls. After you install purchased licenses, the trial license for two concurrent calls is no longer available.

If you deploy two appliance edition systems as an HA pair, the two systems combined include a trial license for four concurrent calls.

## Virtual Edition

The Virtual Edition is packaged for virtual-based deployment. Poly supports Poly Clariti Core, Poly Clariti Edge, Poly Clariti Relay, and Poly Clariti Workflow Lite Virtual Edition, in VMware, Microsoft Hyper-V, Microsoft Azure, Kernel-based Virtual Machine (KVM), and Amazon Web Services (AWS) environments.

Poly Clariti Core and Poly Clariti Edge support imports of Hyper-V host Windows version 8.0 (Windows Server 2016) or newer. If you use an older version, you must deploy a new virtual machine and attach the virtual hard disk included in the import package.

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

Poly Clariti Core and Poly Clariti Edge, Virtual Edition, don't include a trial license for calls.

## Host Installation Guidelines

Software packages for new Poly Clariti Core and Poly Clariti Edge, Virtual Edition, systems require 146 GB hard disk capacity for standard installations.

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

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

The following table describes the recommended VM host deployment settings for each instance of the Poly Clariti Core, Poly Clariti Edge, and Poly Clariti Relay. The table also shows the typical performance capacities of small and large deployments.

### Recommended VM Host Deployment Settings for Poly Clariti Core, Poly Clariti Edge, and Poly Clariti Relay

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

| Component   | Small Deployment   | Medium-Large Deployment  |
|-------------|--|--|
| Performance | 200 concurrent calls<br><b>Note:</b><br>AWS deployment: Use instance type <code>t2.2xlarge</code><br>Azure deployment: Use instance type <code>F8s v2</code> | Poly Clariti Core: 5000 concurrent calls <ul style="list-style-type: none"> <li>Up to 1200 H.323 calls, not to exceed 5000 total calls</li> <li>Up to 3600 SIP calls (encrypted or unencrypted), not to exceed 5000 total calls</li> <li>Up to 5000 Poly EVO calls</li> <li>Up to 5000 point-to-point calls, not to exceed 5000 total calls</li> </ul> Poly Clariti Edge and combination systems: 1000 concurrent calls<br>Poly Clariti Relay: 900 concurrent calls<br><b>Note:</b><br>AWS deployment: Use instance type <code>c4.4xlarge</code><br>Azure deployment: Use instance type <code>F16s v2</code> |

**Recommended VM Host Deployment Settings for Poly Clariti Workflow Lite**

| Component          | Small Deployment  | Medium-Large Deployment   |
|--------------------|---|---|
| Virtual Cores      | 2   | 4   |
| Min. CPU Speed     | 2.4 GHz   | 2.4 GHz   |
| Total Required GHz | 4.8 GHz   | 9.6 GHz   |
| Min. CPU Family    | Haswell   | Haswell   |
| Memory             | 8 GB  | 16 GB   |
| Storage            | 146 GB  | 146 GB  |
| Random IOPS        | 110 total   | 110 total   |
| Performance        | Up to 500 devices<br><b>Note:</b><br>AWS deployment: Use instance type <code>t2.large</code><br>Azure deployment: Use instance type <code>F2s v2</code> | Up to 1000 devices<br><b>Note:</b><br>AWS deployment: Use instance type <code>t2.xlarge</code><br>Azure deployment: Use instance type <code>F4s v2</code> |

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 Poly Clariti Core and Poly Clariti Edge system software to version 10.3 (see [Supported Upgrade Paths – Poly Clariti Core and Poly Clariti Edge](#)). You can also upgrade the RealPresence Access Director system to Poly Clariti Edge, version 10.3 (see [Supported Upgrade Paths – RealPresence Access Director System](#)).

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**CAUTION:** Once you upgrade Poly Clariti Core or Poly Clariti Edge to 10.3, you can't roll back the software to 10.1.x.

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## Download Poly Clariti Core and Poly Clariti Edge Software

Log into your [Poly Clariti Lens](#) account to download the 10.3 software for a new installation or upgrade.

- 1 In Poly Clariti Lens, go to **Manage > Licensing > Clariti**.
- 2 Select **Product Catalog**.
- 3 Select **Clariti Core Edge**.
- 4 Select the software to download and save it on a local device.
  - Use the \*.full.bin file to upgrade from 10.2.x to 10.3.
  - Use the \*.convupg.bin file to upgrade from 10.1.x to 10.2.x.

See [Poly Clariti Support](#) to download the following interim upgrade packages if needed:

- [Version 10.1.x](#)
- [Versions prior to 10.1](#)

See the *Poly Clariti Core 10.3*, *Poly Clariti Edge 10.3*, and *Poly Clariti Relay 1.2 Administrator Guide* for instructions on how to upgrade RealPresence DMA, Poly Clariti Core, Poly Clariti Edge, or RealPresence Access Director.

See the *Poly Clariti Core 10.3*, *Poly Clariti Edge 10.3*, and *Poly Clariti Relay 1.2 Getting Started Guide* for instructions on how to install and license your product.

## Upgrading Poly Clariti Core and Poly Clariti Edge

Upgrading Poly Clariti Core or Poly Clariti Edge typically takes approximately 30 to 60 minutes but can sometimes take longer. Once you start the upgrade process, don't reboot the server.

Note the following:

- The upgrade history isn't carried forward when upgrading from 10.1.x to 10.2.x. The history is carried forward when upgrading from 10.2.x to 10.3.
- RealPresence Access Director, version 4.2.x, operates with Poly Clariti Core (version 10.0 or later).
- Poly Clariti Edge (version 10.0 or later) doesn't operate with any older versions of the RealPresence DMA system.

- In a Poly Clariti environment, install or upgrade to Poly Clariti Core or Poly Clariti Edge-combination configuration, version 10.3 or later, before installing or upgrading to RealPresence Collaboration Server, version 8.9.2 or later. RealPresence Collaboration Server 8.10 or later is required for multistream cascading.
- Starting in version 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 or later. If you don't create a copy of the factory ACL prior to upgrading, you must add a new ACL with your changes after the upgrade.

If you upgrade a RealPresence DMA system from version 9.0.x to Poly Clariti Core or Poly Clariti Edge 10.3 and a RealPresence Access Director system from version 4.2.x to Poly Clariti Edge 10.3 at the same time, Poly recommends the following:

- 1 Upgrade your RealPresence DMA from version 9.0.x to version 10.0.0.8 with a core configuration. Next, upgrade version 10.0.0.8 to Poly Clariti Core 10.1. Upgrade version 10.1 to 10.3 using the file that includes `*.convupg.bin` in the name.
- 2 Upgrade your RealPresence Access Director system from version 4.2.x to RealPresence DMA version 10.0.0.8 with an edge configuration. Next, upgrade version 10.0.0.8 to Poly Clariti Edge 10.1. Upgrade version 10.1 to 10.3 using the file that includes `*.convupg.bin` in the name.

## ***Supported Upgrade Paths – Poly Clariti Core and Poly Clariti Edge***

Upgrade to version 10.3 only from Poly Clariti Core or Poly Clariti Edge version 10.1 or 10.2.x. If your RealPresence DMA is running a version prior to 10.0.0.8, you must perform interim upgrades before you can upgrade to version 10.3 of Poly Clariti Core or Poly Clariti Edge.

If you upgrade a superclustered high availability system, all nodes must be running version 10.1 or 10.2.x before upgrading one of the nodes to 10.3.

Your upgrade to version 9.0.1 or 10.0.0.x may be blocked if you are running one of the following versions of RealPresence DMA on a Polycom Rack Server 630 (R630). In this case, you must install `DELL-HW-Utility.bin` before upgrading to 9.0.1, 10.0.x, 10.1.x, 10.2.x, or 10.3. See **Software Releases Archive** at [Poly Clariti Support](#) to download the file.

- 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 to upgrade to version 10.3. Read the release notes for each version in your upgrade path to review any upgrade notes.

### Supported Upgrade Paths: Poly Clariti Core and Poly Clariti Edge to Version 10.3

| Current Version         | Intermediate Upgrade | Intermediate Upgrade                        | Intermediate Upgrade         | Final Upgrade | New License Required? |
|-------------------------|----------------------|---|------------------------------|---------------|-----------------------|
| 6.4.1.8                 |                      |   |                              | → 9.0.1       | Yes                   |
| 9.0.0                   |                      | →   | →                            | → 10.1        | Yes                   |
| 9.0.0.1                 |                      | DELL-HW                                     | 10.0.0.8                     |               |                       |
| 9.0.0.2                 |                      | Utility (only if using Polycom R630 server) | or 10.0.0.9                  |               |                       |
| 9.0.0.3                 |                      |   | →<br>10.0.0.8<br>or 10.0.0.9 | → 10.1        | Yes                   |
| 9.0.1.x                 |                      |   | →<br>10.0.0.8<br>or 10.0.0.9 | → 10.1        | Yes                   |
| 10.0.x                  |                      |   | →<br>10.0.0.8<br>or 10.0.0.9 | → 10.1        | No                    |
| 10.0.0.8<br>or 10.0.0.9 |                      |   |                              | → 10.1        | Yes                   |
| 10.1                    |                      |   |                              | → 10.3        | Yes                   |
| 10.2.x                  |                      |   |                              | → 10.3        | Yes                   |

## Upgrading RealPresence Access Director to Poly Clariti Edge

You can upgrade version 4.2.x of RealPresence Access Director to Poly Clariti Edge version 10.3. A new license is required.

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

Poly Clariti Edge or Poly Clariti Edge-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 Poly Clariti Edge or Poly Clariti Edge-combination system, make sure your external and internal firewalls allow the combined private and public port range for media traversal.

Poly Clariti Edge or Poly Clariti Edge-combination system uses the following dynamic source ports for media traversal services.

## Media Traversal Dynamic Source Ports

| Category                                     | Issue ID | Found in Release | Description   |
|--|----------|------------------|---|
| 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  |

## Supported Upgrade Paths – RealPresence Access Director System

**CAUTION:** If your system ever ran a version of RealPresence Access Director older than 4.2.x and you migrated to RealPresence DMA Edge 10.0.x or Poly Clariti Edge 10.1, you can't upgrade to version 10.3. Instead, perform a fresh install of Poly Clariti Edge 10.3 from the ISO file.

If your RealPresence Access Director has only run version 4.2.x, the following table outlines the paths to upgrade to Poly Clariti Edge version 10.3.

### Supported Upgrade Paths: RealPresence Access Director to Poly Clariti Edge Version 10.3

| Current Version | Intermediate Upgrade | Intermediate Upgrade   | Final Upgrade | New License Required? |
|-----------------|----------------------|------------------------|---------------|-----------------------|
| 4.2.x           |                      | → 10.0.0.8 or 10.0.0.9 | → 10.1        | Yes                   |
| 10.1            |                      |                        | → 10.3        | Yes                   |
| 10.2.x          |                      |                        | → 10.3        | No                    |

## Resolved Issues

This section identifies the issues resolved in this release.

### Resolved Issues

| Category             | Issue ID  | Found in Release | Description  |
|----------------------|-----------|------------------|--|
| Access Control Lists | EN-220098 | 10.1.0.3         | An ACL variable becomes garbled, allowing SIP scanners to reach the registration service and consume licenses. |
| Alerts               | EN-220858 | 10.1             | Some media relay alerts don't display correctly in Clariti Core/Edge.  |

| Category                 | Issue ID  | Found in Release   | Description  |
|--------------------------|-----------|--------------------|--|
| Alerts                   | EN-211424 | 10.1               | After a reboot of Clariti Core and Clariti Relay, Clariti Core displays an incorrect alert for the connection status with Clariti Relay.   |
| Audio/Video              | EN-220548 | 10.2               | Participants don't receive video or audio when joining a VMR call.   |
| Call History             | EN-209422 | 10.0.0.9           | When making dial-out calls from the RMX from an active VMR, RealPresence DMA call history displays two entries for the participant.  |
| Call Recording           | EN-214734 | 10.1               | In a Clariti App-only call, recording isn't possible as Clariti Core/Edge doesn't initiate a cascade to an RMX.  |
| Call Routing             | EN-218809 | 10.1.0.3           | Calls land in the RMX EQ instead of the VMR.   |
| Call Routing             | EN-201557 | 10.0               | An external H.323 call coming from RealPresence DMA edge fails when RealPresence DMA core tries to forward the call directly to the Internet.  |
| Cascading                | EN-224663 | 10.1               | Poly Clariti Core/Edge unmutes the cascade link in a conference running on RMX.  |
| Certificates             | EN-224784 | 10.2               | In Amazon Web Services environment, installing a new pfx certificate to replace expired certificate fails.   |
| Cisco WebEx              | EN-214657 | 10.0               | An H.323 call to a WebEx meeting fails as RealPresence DMA core doesn't remove the partdial-string from the RMX cascade dial string when sending the call to WebEx.  |
| Cisco WebEx              | EN-212776 | 10.0.0.8, 10.0.0.9 | Calls to Cisco Unified Communications Manager through RealPresence DMA edge are dropped with SIP message 481 Call leg/Transaction does not exist.  |
| Conference Notifications | EN-218592 | 9.0, 10.0, 10.1    | Clariti Core/Edge sends conference notifications to the wrong URL.   |
| Conference Passcodes     | EN-233785 | 10.2.2.3           | In a Clariti Relay call with a conference passcode and Clariti App participants, a RealPresence Desktop client dialed in on SIP with dial string VMR#passcode can see only the Clariti App active speaker. |
| Gateway Mode Calls       | EN-226827 | 10.2.1             | In Clariti Core gateway mode conference, after clearing Content Token Owner, Clariti App fails to share content.   |
| High Availability (HA)   | EN-236814 | 10.3               | A fresh configuration of HA doesn't work after upgrading from 10.2 to 10.3.  |
| HA                       | EN-231817 | 10.2.2             | The primary node in Clariti Core/Edge high availability pair is unreachable on 8443/5060 TCP and endpoint registrations to working secondary node fail.  |



| Category                          | Issue ID  | Found in Release                       | Description   |
|-----------------------------------|-----------|--|---|
| HA                                | EN-227998 | 10.0.0.9                               | Existing H.323 calls on secondary RealPresence DMA are terminated whenever primary RealPresence DMA comes online.   |
| HA                                | EN-219546 | 10.1                                   | When a Clariti App call in Chrome is interrupted by a Clariti Core/Edge supercluster failover, participants can't dial in again until the failed node has function restored.  |
| HA                                | EN-217425 | 10.1.0.1                               | Clariti Edge active/passive high availability systems fail over due to issue in rppMonitor program.   |
| HA                                | EN-215703 | 10.1.0.1                               | Clariti Edge high availability failure in the rppmonitor tool.  |
| HA                                | EN-196934 | 10.0.0.6                               | RealPresence DMA core systems in high availability active-passive configuration fail over due to native system memory leak.   |
| HA                                | EN-196150 | 10.0.0.6                               | Calls fail after rebooting RealPresence DMA high availability active-passive nodes at the same time. Both nodes briefly come up as active and other nodes in the supercluster are given the wrong active node name. |
| Poly Clariti App and Roster       | EN-228821 | Clariti Core 10.2.2, Clariti App 1.1.0 | In Clariti Core calls in Clariti App, call control buttons are missing during the conference.   |
| Poly Clariti App and Roster       | EN-218416 | 10.2                                   | Clariti App custom images must be reloaded after Clariti Core/Edge upgrade.   |
| Poly Content Connect              | EN-221624 | 10.2                                   | Disabling Poly ContentConnect doesn't work in Poly Clariti Core/Edge.   |
| Poly Content Connect              | EN-222027 | 10.2                                   | Poly Content Connect system status information doesn't get updated in Poly Clariti Core/Edge.   |
| Poly EVO Signaling                | EN-218583 | 10.1                                   | Clariti Core/Edge system web interface fails if Poly EVO signaling port is changed to 1024-65535.   |
| Registrations                     | EN-219545 | 10.1                                   | An endpoint registration is dropped during a call when a failed Clariti Core/Edge node in a supercluster has function restored.   |
| RealPresence Collaboration Server | EN-228007 | 10.0.0.7, RPCS 8.9.1.3                 | After an RMX system crashes, RealPresence DMA rejects all SIP calls with SIP 403 forbidden error: RMX is in Clariti Mode and the authentication token received does not match with the local token.                 |
| Session Border Controllers        | EN-218070 | 10.0.0.9                               | A mutual TLS connection to a session border controller works correctly if RealPresence DMA initiates the connection, but fails if the session border controller initiates the connection.                           |

| Category             | Issue ID  | Found in Release | Description   |
|----------------------|-----------|------------------|---|
| Security Settings    | EN-202105 | 10.0             | A default security setting for RealPresence DMA edge in an Amazon Web Services deployment enables root access but disables SSH, causing an error when updating other security settings. |
| SIP                  | EN-217661 | 10.0.0.8         | RealPresence DMA Edge dials out SIPS TLS instead of SIP TLS, causing failed connections from SIP endpoints.   |
| Sites                | EN-218464 | 10.0.0.8         | Call in Clariti Edge drops when the Edge site ALG field points to its own IP address.   |
| Sites                | EN-217758 | 10.1.0.3         | Clariti Core/Edge reports an incorrect site in call history if the RMX management IP address isn't included in the site topology.   |
| Supercluster Calls   | EN-221833 | 10.0.0.9         | RealPresence DMA supercluster calls fail or get disconnected.   |
| System Performance   | EN-218223 | 10.1.0.3         | Clariti Core/Edge database replication fails in a supercluster environment with 3 million Active Directory user accounts.   |
| System Performance   | EN-217958 | 10.0.0.9         | A RealPresence DMA runs out of memory when a large number of concurrent API subscriptions are created.  |
| System Performance   | EN-216428 | 10.0.0.9         | The audit database becomes excessively large when one user has a large number of VMRs.  |
| System Web Interface | EN-209659 | 10.1             | Clariti Core intermittently doesn't display the complete RMX version on the Integrations > MCUs page in the system web interface.   |
| System Web Interface | EN-201240 | 10.0.0.8         | The sort function for columns in the RealPresence DMA Alerts pop-up window on the dashboard doesn't work.   |
| Upgrades             | EN-219310 | 10.1.0.3         | Upgrading Clariti Edge from 10.0.0.9 to 10.1.0.3 fails.   |
| Zoom                 | EN-220332 | 10.0.0.7         | Outbound call to Zoom from Trio using RealPresence DMA Edge fails.  |

## Known Issues

This section identifies the known issues in this release.

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**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-227980 | 10.3              | No alert displays when an ACL policy is configured, but the Clariti Core/Edge system can't build the policy.  |  |
| Access Control Lists      | EN-227694 | 10.3              | After upgrading, the order of two ACL rules in an ACL policy is switched, causing SIP/H.323 registrations to fail.  |  |
| Access Control Lists      | EN-226907 | 10.3              | After upgrading, some ACL rules are missing.  |  |
| Alerts                    | EN-223001 | 10.3              | License alert 3218 is generated every half hour and older alerts aren't deleted.  |  |
| Alerts                    | EN-231479 | 10.3              | Alert 5001 reports too often.   |  |
| Alerts                    | EN-221508 | 10.3              | After upgrading, registration sharing alert 7010 displays.  |  |
| API                       | EN-215997 | 10.2              | After sending a REST request to delete an MCU pool order from Poly Clariti Core or Clariti Edge, a 408 time-out error displays, but the pool order is deleted.                          |  |
| Appliance Edition Servers | EN-228574 | 10.3              | The desktop management interface (DMI) table values are missing for some Dell PowerEdge servers.  |  |
| AWS                       | EN-206727 | 10.1              | A Poly RMX trying to register to a Poly Clariti Edge combination system in AWS is rejected with the message "Reject registration, there was a problem running the registration policy." |  |
| Azure                     | EN-220164 | Clariti Relay 1.1 | A Poly Clariti Media Relay newly installed in an Azure environment fails to connect to Poly Clariti Core if the FQDN includes an invalid character in the hostname.                     | <p>When deploying Clariti Relay 1.1 in an Azure environment, if Clariti Relay doesn't connect to Clariti Core, use the thinshell to change the hostname in the FQDN to meet these requirements:</p> <ul style="list-style-type: none"> <li>• Must contain only valid characters: digits 0-9, upper and lowercase letters a-z, the dash "-" character</li> <li>• Must be 2-24 characters in length</li> </ul> |

| Category                  | Issue ID  | Found in Release | Description  | Workaround                          |
|---------------------------|-----------|------------------|--|-------------------------------------|
| Backup and Restore        | EN-208699 | 10.1             | Poly Clariti Core doesn't back up and restore the system ephemeral ports.  |                                     |
| Back Up and Restore       | EN-228571 | 10.3             | When restoring a backup on Clariti Core/Edge, if the option to restore IP network, certificate and security is unchecked, the network service mappings are still restored. |                                     |
| Call Detail Records (CDR) | EN-208834 | 10.1             | The userDataA and userDataC fields of the CDR report are empty for the VMR calls that dialed out to a participant.   |                                     |
| Call Detail Records       | EN-208670 | 10.1             | The userData fields (userData A, B and C) in the CDR report are empty for the Poly EVO and SIP MRC calls that land on Poly Clariti Relay.                                  |                                     |
| Call History              | EN-226657 | 10.3             | The Call History page displays an error in alpha numeric characters in multiple lines.   |                                     |
| Call Server Settings      | EN-228572 | 10.3             | The Destination Clariti Core hostname (SIP/H.323) field used for license and registration sharing doesn't include a last-resort DNS lookup to work with a DNS alias.       |                                     |
| Certificates              | EN-217017 | 10.1             | Proximo doesn't start if an ECDSA certificate is uploaded to the Poly Clariti Core or Clariti Edge.  | Do not upload an ECDSA certificate. |
| Certificates              | EN-224784 | 10.2             | Installing a new PFX file to replace an expired certificate fails.   |                                     |
| Certificates              | EN-218542 | 10.2             | Poly Clariti Core fails to generate a certificate signing request on Poly Clariti Relay if the extension type <code>email</code> is added as a SAN value.                  |                                     |
| Certificates              | EN-231804 | 10.3             | A user can't upload and install a certificate for both client and server ECU.  |                                     |
| Certificates              | EN-228575 | 10.3             | Clariti Core/Edge allows installation of SHA1 certificates and generation of certificate signing requests that request SHA1 as the signature algorithm.                    |                                     |
| Conference                | EN-202466 | 10.1             | Point-to-point unregistered calls fail and the signaling diagrams don't include all the relevant messages.   |                                     |

| Category               | Issue ID  | Found in Release | Description  | Workaround |
|------------------------|-----------|------------------|--|------------|
| Conference             | EN-199381 | 10.1             | Poly Clariti Core or Clariti Edge sends a notification to all endpoints that each participant's role is moderator.                               |            |
| Conference Management  | EN-213472 | 10.1             | A user that calls into a VMR with a conference passcode configured as an alias is prompted to enter a chairperson passcode.                      |            |
| Conference Management  | EN-214544 | 10.2             | When editing a conference template, system default values display instead of values saved in the database.                                       |            |
| Console                | EN-217172 | 10.2             | The console configuration save prompt doesn't display as needed.   |            |
| Console                | EN-217069 | 10.2             | The console configuration doesn't display the correct default gateway after rebooting.   |            |
| DHCP                   | EN-217167 | 10.2             | The DHCP overrides file is being used when the system is not configured for DHCP.  |            |
| DNS                    | EN-216748 | 10.2             | On a supercluster, DNS lookups occur once or more per second for the other nodes of the supercluster.  |            |
| Gateway Devices        | EN-228573 | 10.3             | Clariti Core/Edge systems don't use link status to determine which NIC to set as the default gateway device.                                     |            |
| Heap                   | EN-216567 | 10.1.0.2         | Active Alert : Server is operating in an impaired state due to Application error : Detected Full Garbage Collection pause longer than 5 seconds. |            |
| High Availability (HA) | EN-217714 | 10.2             | The <code>config-proximo.xml</code> file is cleared when configuring Poly Clariti Edge HA.   |            |
| HA                     | EN-217425 | 10.1.0.1         | The rppMonitor aborts.   |            |
| HA                     | EN-221794 | 10.2             | An HA peer can't be configured when more than one HA interface is configured.  |            |
| HA                     | EN-228896 | 10.3             | When multiple PTR DNS records point to a virtual address, Clariti Edge systems can't be configured for high availability.                        |            |
| Licensing              | EN-232004 | 10.3             | An unknown error displays on the Licensing page.   |            |

| Category                    | Issue ID  | Found in Release  | Description   | Workaround  |
|-----------------------------|-----------|-------------------|---|---|
| Login Sessions              | EN-234400 | 10.3              | The Login Sessions page in the system web interface displays incorrect values in the Age column.  |   |
| Network                     | EN-217201 | 10.2              | 802.1x authentication in Poly Clariti Core and Clariti Edge doesn't work.   |   |
| Password                    | EN-221924 | Clariti Relay 1.2 | Root and svcremoteuser password change fails when the console settings are off and error <b>Failed to change password</b> displays.                                       | Configure Clariti Relay passwords before disabling the console or enabling FIPS mode. |
| Poly Clariti App and Roster | EN-209256 | Clariti App 1.1   | Hand raises in a call aren't synchronized and an incorrect count of hand raises displays.   |   |
| Poly Clariti App and Roster | EN-213620 | Clariti App 1.1   | If a poll initiator drops out of a VMR and rejoins, no one, including the poll initiator, can end the poll.   |   |
| Poly Clariti App and Roster | EN-216651 | 10.2              | When a Poly Clariti App user raises his or her hand in a conference, then disconnects and dials back into the conference, the hand raise icon is still highlighted.       |   |
| Poly Clariti App and Roster | EN-213619 | 10.1              | Polls count Poly Clariti Roster participants in the overall count of participants, but participants don't see the polls and can't submit answers.                         |   |
| Poly Clariti App and Roster | EN-234074 | 10.3              | A chairperson in a Clariti App call has muted audio and video after rejoining a Mute Lock conference.   |   |
| Poly Clariti Relay          | EN-231491 | 10.3              | When adding a Clariti Relay without an IP address, an unclear error message displays.   |   |
| Port Range Settings         | EN-234447 | 10.3              | Port range settings take 1-2 minutes to display after the pop-up window opens.  |   |
| Skype for Business          | EN-216970 | 10.2              | <b>Cannot connect to domain controller</b> alert displays when <b>Create Poly conference contacts</b> is enabled in <b>Presence Publishing for Skype</b> .                |   |
| Registration Sharing        | EN-220362 | 10.3              | Registrations are shared on Clariti Core from Clariti Edge even after the Clariti Edge's certificate is revoked and Skip Validation for inbound connections is unchecked. |   |

| Category             | Issue ID  | Found in Release | Description  | Workaround |
|----------------------|-----------|------------------|--|------------|
| Role Permissions     | EN-228570 | 10.3             | In Clariti Edge, the auditor and provisioner roles lack permissions to access the default Access Proxy Usage dashboard pane.   |            |
| SIP Calls            | EN-220711 | 10.3             | A SIP call fails with incorrect call info status when mutual authentication is enabled in SIP settings and Skip validation of certificates for inbound connections or Allow port level configuration for mutual TLS authentication is unchecked. |            |
| Supercluster         | EN-231359 | 10.3             | When a node invites a different node to join a supercluster, the inviting node gets server internal error messages until the invited system restarts.  |            |
| System Web Interface | EN-217745 | 10.2             | The edit ACL rule function in the Poly Clariti Edge system web interface doesn't allow creation of an un-nested third condition.   |            |
| System Web Interface | EN-217557 | 10.2             | System allows two invalid chairperson configurations to be saved.  |            |
| System Web Interface | EN-217328 | 10.2             | Active calls page removes a call from the page even though the call is still active.   |            |
| System Web Interface | EN-217212 | 10.2             | In Poly Clariti Edge <b>SIP Settings</b> , the values for UDP/TCP are offset to the left by one, starting with <b>Certificate Authentication</b> .   |            |
| System Web Interface | EN-214313 | 10.0.0.5         | Quarantining unregistered MCUs doesn't work consistently but the system web interface doesn't display feedback messages or errors to users.  |            |
| System Web Interface | EN-222526 | 10.3             | The system web interface is missing two requirements for changing root and svcremoteuser passwords.  |            |
| Upgrade              | EN-218416 | 10.2             | After upgrading Poly Clariti Core or Clariti Edge, Clariti App custom images must be reloaded.   |            |
| Upgrade              | EN-217555 | 10.2             | Unknown Alert 9999 shows up after upgrading Poly Clariti Core or Clariti Edge to 10.2.0.0-465233.  |            |

| Category      | Issue ID  | Found in Release  | Description   | Workaround |
|---------------|-----------|-------------------|---|------------|
| Upgrade       | EN-217552 | 10.2              | Unable to upgrade Poly Clariti Core or Clariti Edge when they are in non-FIPs mode.   |            |
| Upgrade       | EN-228577 | 10.3              | 10.3 doesn't prevent downgrading using the 10.2 upgrade bin.  |            |
| Users         | EN-217135 | 10.1              | The rppuser initial configuration contains a null/empty conference room configuration.  |            |
| Video Layout  | EN-225631 | Clariti Relay 1.2 | A black or frozen video cell for the active speaker displays for 2-3 seconds when a Group Series endpoint joins a conference with a Poly Clariti App participant as the active speaker.   |            |
| Workflow Lite | EN-234254 | 10.3              | No error message displays in the Easy Scheduling Outlook plugin screen when a user enters incorrect conference template details in the Easy Schedule configuration.   |            |
| Workflow Lite | EN-234136 | 10.3              | In Add/Edit Environment window, Easy Schedule settings, the Meeting Passcode and Chairperson Passcode checkboxes and numbers don't function correctly.  |            |
| Workflow Lite | EN-233858 | 10.3              | Chairperson required to start meeting checkbox field is always visible in the body of Easy Scheduling Outlook invitations, even when the checkbox isn't selected in the Easy Scheduling settings.   |            |
| Workflow Lite | EN-233836 | 10.3              | An incorrect error message displays when a user tries to create a meeting in the past.  |            |
| Workflow Lite | EN-233808 | 10.3              | In Add/Edit Environment window, Easy Schedule settings, if the Meeting Passcode and Chairperson Passcode checkboxes are checked but no passcode ranges are given, the Outlook plugin doesn't generate meeting and chairperson passcodes and both fields are editable. |            |
| Workflow Lite | EN-233757 | 10.3              | If a message is present in the body of Easy Scheduling Outlook invitations and a user uses the plugin, the text in the message body shifts into one line.   |            |
| Workflow Lite | EN-233647 | 10.3              | In Add/Edit Environment window, Easy Schedule settings, no default values are available for font color and font size in meeting title options.  |            |



| Category      | Issue ID  | Found in Release | Description  | Workaround |
|---------------|-----------|------------------|--|------------|
| Workflow Lite | EN-232971 | 10.3             | When Meeting Passcode, Chairperson Passcode, and VMR Range checkboxes are unchecked but passcode and VMR ranges are entered, passcodes and VMRs are still generated based on the entered values. |            |
| Workflow Lite | EN-234331 | 10.3             | The Poly Clariti Core/Edge tab in the Add/Edit New Environment window is missing the Max Concurrent Session field.   |            |
| Workflow Lite | EN-232129 | 10.3             | in the Add/Edit New Environment window, the user interface doesn't indicate the required fields.   |            |
| Workflow Lite | EN-233543 | 10.3             | The language of the Outlook plugin and body text of invitations display in English even when a user's default Outlook language is different.   |            |
| Workflow Lite | EN-233518 | 10.3             | A QR image for Exchange calendars doesn't display in the body of meeting invitations.  |            |
| Workflow Lite | EN-233646 | 10.3             | The size of text boxes and drop-down selection boxes are mismatched.   |            |

# System Constraints and Limitations

This section identifies the limitations and constraints when using this product.

## Constraints

The following features are unsupported in this release:

- Any dialout (API and UI) of Poly EVO and SIP MRC calls
- Any dialout (API and UI) of SIP and H.323 endpoints from a conference initiated on a Poly Clariti Relay MCU.
- Point-to-point (direct dialing) Poly EVO calls
- Cascade between Poly Clariti Relay MCUs
- Cascade between Poly Clariti Relay to Poly RealConnect Teams Gateway
- Poly EVO/SIP MRC calls to Zoom or any other VaaS provider
- Bandwidth Limitation/Class of Service for Poly EVO and SIP MRC calls
- IVR (DTMF) for Poly EVO and SIP MRC calls
- ACLs for Poly EVO
- IPV6, NIC bonding, 802.1x with Clariti Relay MCU
- VPN tunnel configuration for Poly EVO and SIP MRC calls
- Multiple standalone Poly Clariti Core/Combination systems connecting to the same Poly Clariti Relay MCU

## Limitations

### Interoperability Limitations

| Category           | Description   | Workaround   |
|--------------------|---|--|
| Poly Clariti Relay | Under certain heavy load conditions on Clariti Relay MCUs, higher call failure rate is sometimes experienced. Poly Clariti Core will continue to send calls to the Clariti Relay MCU with the call failures (typically, call disconnects aren't caused by reaching capacity limit). | <ul style="list-style-type: none"><li>• In Poly Clariti Core, go to <b>Monitoring &gt; Active Calls or Reports &gt; Call History</b>.</li><li>• Search for failed calls to find the Poly Clariti Relay MCU that's experiencing call failures.</li><li>• Reboot the Poly Clariti Relay MCU.</li></ul> |

| Category  | Description   | Workaround  |
|---|---|---|
| Poly Clariti Core and Poly Clariti Edge           | 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.   | <p>Possible solutions:</p> <ul style="list-style-type: none"> <li>• Use total bandwidth limits for sites and site links in Poly Clariti Core and Poly Clariti Edge instead of bandwidth limits per-call.</li> <li>• Reconfigure endpoints/VaaS service bandwidth limits to values like the bandwidth values set in Poly Clariti Core and Poly Clariti Edge.</li> <li>• Re-evaluate the use of bandwidth limitations in the network and in Poly Clariti Core and Poly Clariti Edge.</li> </ul> |
| Poly RealPresence Group Series                    | When a RealPresence Group Series system is registered to Poly Clariti Core and Poly Clariti Edge and hosts an encrypted conference, Cisco C-series endpoints that are registered to Poly Clariti Core and Poly Clariti Edge and dial into 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.  |
| Poly RealPresence Group Series                    | When a RealPresence Group Series meeting participant connects through SIP MRC to a Clariti conference hosted on Poly Clariti Relay, the participant sees a black screen when a Poly Clariti App or Poly Clariti Roster meeting participant shares content. RealPresence Group Series doesn't decode 1080p content received from Poly Clariti Relay if the Advanced Video 1080P license isn't activated. | Enable the Advanced Video 1080P license for RealPresence Group Series.  |
| Polycom HDX endpoints                             | A Polycom HDX endpoint using Poly Clariti Core or Poly Clariti Edge as its SIP registrar can't complete a point-to-point call to a Microsoft Lync or Skype for Business client.   | In the Poly Clariti Core and Poly Clariti Edge systems, edit the Microsoft external SIP peer on the <b>External SIP Peers</b> page and enable the <b>Postliminary</b> feature.  |
| Polycom HDX endpoints                             | You can use Polycom HDX endpoints with a Lync Server, but they don't support Skype for Business video conferencing.   |   |
| Polycom HDX endpoints, Poly Trio                  | Poly Clariti Core and Poly Clariti Edge don't support H.264 high profile (HP) for SIP to and from H.323 calls.  |   |
| Sony, Radvision, Avaya, and Polycom VVX endpoints | In Poly Clariti Core and Poly Clariti Edge, the <b>Terminate calls based on failed responses to IRQs</b> call server setting is enabled by default, causing some Sony, Radvision, Avaya, and Polycom VVX endpoints to disconnect during conferences.  | In Poly Clariti Core, disable the <b>Terminate calls based on failed responses to IRQs</b> call server setting.   |

| Category  | Description  | Workaround   |
|---|--|--|
| Various endpoints   | <p>Poly Clariti Core and Poly Clariti Edge 6.4 or later don't support certificates with an RSA key size less than 1024 bits in length.</p> <p>Manufacturers of some endpoints have not yet enhanced their software to support more secure encryption. As a result, TLS connections made from Poly Clariti Core and Poly Clariti Edge to some endpoints no longer work.</p> |  |
| Cisco SX endpoints  | <p>When Cisco SX devices running CE 8.X software are registered to Poly Clariti Core or Poly Clariti Edge using SIP/TLS, SSL handshake failures between the Cisco SX and Poly Clariti Core or Poly Clariti Edge during establishment of SIP/TLS connections can result in call failures.</p>   | <p>Add a certificate to the Cisco SX device and enable the certificate for use with SIP.</p> <p>See the <i>Cisco SX CE 8.X Administrator Guide</i> for additional details.</p> |
| Microsoft Skype for Business and Polycom RealPresence Desktop | <p>When Microsoft Skype for Business and Polycom RealPresence Desktop are connected in a point-to-point call, the call doesn't include video media.</p> <p>When Microsoft Skype for Business and Polycom RealPresence Desktop are connected in a VMR call, the call does include video.</p>  | <p>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.</p>       |
| Microsoft Skype for Business and virtual entry queues         | <p>On Poly Clariti Core and Poly Clariti Edge, virtual entry queues (VEQs) don't support direct dialing from Skype for Business clients into the RealPresence Platform.</p>  |  |
| Microsoft Skype for Business and presence publishing          | <p>After editing a VMR in Poly Clariti Core, Skype for Business clients experience a delay in updating presence information.</p>   |  |

## Get Help

For more information about installing, configuring, and administering Poly products or services, go to [Poly Support](#).

## Related Poly and Partner Resources

See the following sites for information related to this product.

- [Poly Support](#) is the entry point to online product, service, and solution support information. Find product-specific information such as Knowledge Base articles, Support Videos, Guide & Manuals, and Software Releases on the Products page, download software for desktop and mobile platforms from Downloads & Apps, and access additional services.
- The [Poly Documentation Library](#) 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 [Poly Community](#) 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 [Poly Partner Network](#) is a program where resellers, distributors, solutions providers, and unified communications providers deliver high-value business solutions that meet critical customer needs, making it easy for you to communicate face-to-face using the applications and devices you use every day.
- [Poly Services](#) help your business succeed and get the most out of your investment through the benefits of collaboration. Enhance collaboration for your employees by accessing Poly service solutions, including Support Services, Managed Services, Professional Services, and Training Services.
- With [Poly+](#) you get exclusive premium features, insights and management tools necessary to keep employee devices up, running, and ready for action.
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