

# Polycom® UC Software 5.9.3

## Applies to Polycom® VVX® Business Media Phones, Polycom® VVX® Business IP Phones, and Polycom® SoundStructure® VoIP Interface Phones

Polycom announces the release of Polycom® Unified Communications (UC) Software, version 5.9.3. This document provides the latest information about this release.

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## What's New

Polycom Unified Communications (UC) Software 5.9.3 is a release for OpenSIP and Skype for Business deployments. These release notes provide important information on software updates, phone features, and known issues.

### ***Important Note About Use of UC Software in Skype for Business Deployments***

Customers in Skype for Business deployments should only use software releases that Microsoft has qualified or maintenance releases built on a qualified release.

Microsoft qualification may fall behind Polycom Generally Available dates for UC Software, hence we request customers to check whether a release has been qualified before deploying new software. For all latest Microsoft qualified releases, visit the [Polycom UC Software for Skype for Business Deployments](#) page for a list of qualified releases.

### ***New Features and Enhancements***

Polycom UC Software 5.9.3 includes the following new feature and enhancements:

- [DHCP IP Address Cache](#)
- [TLS Support for BToE](#)
- [Polycom Cloud Connector](#)
- [Enhancement to Wi-Fi Settings](#)

### **DHCP IP Address Cache**

Polycom UC Software supports the Dynamic Host Configuration Protocol (DHCP) IP address cache to retain IP addresses on VVX phones. When you enable the IP address caching feature, there aren't any service interruptions even if the IP address lease time expires and the DHCP server doesn't respond.

### **TLS Support for BToE**

Polycom BToE application supports the Transport Layer Security (TLS) protocol to authenticate VVX phones with the following features:

- Polycom UC Software uses TLS protocol v1.2 to authenticate VVX phones using BToE application v4.0.0.
- The TLS protocol takes precedence over the SSH protocol.
- If TLS connection fails between the VVX phone and the Polycom BToE Connector application, then the connection falls back to SSH.

## Polycom Cloud Connector

Polycom UC Software introduces the Polycom Cloud Connector to send device analytics to Polycom Cloud Services. You must enable the `device.da.enabled` parameter to send device analytics to Polycom Cloud Services.

## Enhancement to Wi-Fi Settings

Polycom VVX phones now display Wi-Fi settings only when you connect a Wi-Fi dongle. Wi-Fi dongle doesn't support on Expansion modules USB port.

## Configuration File Enhancements

The following table lists configuration file enhancements that include new or changed parameters for the Polycom UC Software 5.9.3 release. For more information on using configuration parameters to enable or disable features, see the latest *Polycom UC Software Administrator Guide* for your release, available at [Latest Polycom UC Software Release](#).

### Configuration File Enhancements for UC Software 5.9.3

<i>Parameter</i>	<i>Permitted Values</i>	<i>Restart or Reboot</i>
<code>device.net.cachedIPAddress</code>	0 (default) – IP addresses aren't cached. 1 – If the phone doesn't receive a DHCP response, the phone uses the last assigned IP address, provided one is cached already. A DHCP discover message is retried every <code>device.net.cachedIPAddressRetryTime</code> second.	No
<code>device.net.cachedIPAddressRetryTime</code>	Specify the time in seconds to send new DHCP to discover messages when using the cached IP address. This parameter is only applicable when <code>device.net.cachedIPAddress</code> is enabled. 3600 (default) Seconds 300 – 7200 Seconds	No
<code>feature.pcc.enabled</code>	0 (default) - Disable the Polycom Cloud Connector. 1 - Enable the Polycom Cloud Connector.	Yes
<code>pcc.url</code>	Set the URL for the Polycom Cloud Connector interface. <code>https://api-global.plcm.cloud/globaldirectory</code> (default) 0 - 256	Yes

<i>Parameter</i>	<i>Permitted Values</i>	<i>Restart or Reboot</i>
<code>pcc.accountCode</code>	Enter the Polycom Cloud Connector account code to connect your device with a Polycom Cloud Services account. Null (default) 0 - 256	Yes
<code>da.organizationID</code>	Define the organization ID of the device. Null (default) 0 - 256	Yes
<code>da.roomId</code>	Define the room ID of the device. Empty (default) 0 - 256	Yes
<code>da.siteId</code>	Define the site ID of the device. Null (default) 0 - 256	Yes
<code>voIpProt.SIP.ignoreEntityHost</code>	0 (default) – Doesn't ignore the host part of the entity received in the XML body of NOTIFY for a dialog event. 1 - Ignores the host part of the entity received in the XML body of NOTIFY for a dialog event.	No
<code>voIpProt.H323.p2pURLDialingThroughGK</code>	0 (default) - VVX phones don't route the H.323 URL dialing calls through the gatekeeper. 1 - VVX phones route the H.323 URL dialing calls through the gatekeeper.	No
<code>up.offHookSpeedDialShortcut.enable</code>	1 (default) - VVX phones display the speed dial shortcut for one or two digits followed by # in the off-hook state. 0 – VVX phones don't display the speed dial shortcut for one or two digits followed by # in the off-hook state.	No
<code>feature.wifi.visibilityinmenus.enable</code>	1 (default) – Enables the Wi-Fi settings on VVX phones when the dongle is connected. 0 – Disables the Wi-Fi settings on VVX phones when the dongle is connected.	No

## Security Updates

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

# Installation

Consider the following information when installing or updating to Polycom UC Software 5.9.3:

- You must use BToE 3.8.0 or later with UC Software 5.9.3. Polycom recommends that you upgrade existing BToE and PDC desktop applications to the latest version starting with Polycom UC Software 5.9.3. If you update the BToE or PDC application without updating to UC Software 5.9.3 or vice versa, the applications don't work with Polycom phone.

For more information, see [Updating to the Latest Versions of the Polycom Better Together over Ethernet \(BToE\) and Polycom Desktop Connector \(PDC\) Desktop Applications \(EA 318\)](#).

- Before updating your VVX 1500 business media phone to UC Software 5.9.3, make sure you first update the phone to BootBlock 3.0.4.

For more information see [Upgrading the Polycom VVX 1500 Business Media Phone to UC Software 5.2.0 \(TB 695\)](#).

## Download the Distribution Files

To download UC Software 5.9.3, you can choose the combined UC Software package or the split UC Software package, both in ZIP file format. The combined version contains all files for all phone models. The split software package is smaller, downloads more quickly, and contains sip.ld files for each phone model. This enables you to choose provisioning software for your phone model and maintain software versions for each model in the same root directory.

For general use, Polycom recommends using the split resource file that corresponds to the phone models for your deployment. To match the correct UC software resource file to your phone model, see the table [Understand the Combined and Split ZIP Files](#) table. If you're provisioning your phones centrally using configuration files, download the corresponding resource file and extract the configuration files to the provisioning server. Make sure that you maintain the folder hierarchy in the ZIP file.

The current build ID for the sip.ld and resource files is **UCS 5.9.3.2489 rts35**.

## Understand the Combined and Split ZIP Files

To understand the files distributed in the combined ZIP file, refer to the following table.

### Understand the Combined and Split ZIP Files

<i>Distributed Files</i>	<i>File Purpose and Application</i>	<i>Combined</i>	<i>Split</i>
3111-40250-001.sip.ld	SIP application executable for VVX 101 business media phones.	No	Yes
3111-40450-001.sip.ld	SIP application executable for VVX 201 business media phones.	No	Yes
3111-46135-002.sip.ld	SIP application executable for VVX 300 business media phones.	No	Yes

<i>Distributed Files</i>	<i>File Purpose and Application</i>	<i>Combined</i>	<i>Split</i>
3111-48300-001.sip.ld	SIP application executable for VVX 301 business media phones.	No	Yes
3111-46161-001.sip.ld	SIP application executable for VVX 310 business media phones.	No	Yes
3111-48350-001.sip.ld	SIP application executable for VVX 311 business media phones.	No	Yes
3111-46157-002.sip.ld	SIP application executable for VVX 400 business media phones.	No	Yes
3111-48400-001.sip.ld	SIP application executable for VVX 401 business media phones.	No	Yes
3111-46162-001.sip.ld	SIP application executable for VVX 410 business media phones.	No	Yes
3111-48450-001.sip.ld	SIP application executable for VVX 411 business media phones.	No	Yes
3111-44500-001.sip.ld	SIP application executable for VVX 500 business media phones.	No	Yes
3111-48500-001.sip	SIP application executable for VVX 501 business media phones.	No	Yes
3111-44600-001.sip.ld	SIP application executable for VVX 600 business media phones.	No	Yes
3111-48600-001.sip	SIP application executable for VVX 601 business media phones.	No	Yes
2345-17960-001.sip.ld	SIP application executable for VVX 1500 business media phones.	No	Yes
3111-48810-001.sip.ld	SIP application executable for VVX 150	No	Yes
3111-48820-001.sip.ld	SIP application executable for VVX 250	No	Yes
3111-48830-001.sip.ld	SIP application executable for VVX 350	No	Yes
3111-48840-001.sip.ld	SIP application executable for VVX 450	No	Yes
3111-33215-001.sip.ld	SIP application executable for SoundStructure VoIP Interface phones.	No	Yes
3111-17823-001.dect.ld	SIP application executable for VVX D60 Wireless Handset and Base Station.	No	Yes
sip.ld	Concatenated SIP application executable.	Yes	No
dect.ver	Text file detailing build-identifications for the VVX D60 handset.	Yes	Yes

<i>Distributed Files</i>	<i>File Purpose and Application</i>	<i>Combined</i>	<i>Split</i>
sip.ver	Text file detailing build-identifications for the release.	Yes	Yes
000000000000.cfg	Master configuration template file.	Yes	Yes
000000000000-directory~.xml	Local contact directory template file. To apply for each phone, replace the (zeroes) with the MAC address of the phone and remove the ~ (tilde) from the file name.	Yes	Yes
applications.cfg	Configuration parameters for microbrowser and browser applications.	Yes	Yes
device.cfg	Configuration parameters for basic device configuration.	Yes	Yes
features.cfg	Configuration parameters for telephony features.	Yes	Yes
firewall-nat.cfg	Contains configuration parameters for telephony features.	Yes	Yes
H323.cfg	Configuration parameters for the H.323 signaling protocol.	Yes	Yes
lync.cfg	Contains Lync/Skype for Business-specific configuration parameters.	Yes	Yes
pstn.cfg	Contains parameters for Public Switched Telephone Network (PSTN) use.	Yes	Yes
reg-advanced.cfg	Contains configuration parameters for the line and call registration and advanced phone feature settings.	Yes	Yes
reg-basic.cfg	Configuration parameters for line and call registration and basic phone settings.	Yes	Yes
region.cfg	Configuration parameters for regional and localization settings such as time and date and language.	Yes	Yes
sip-basic.cfg	Configuration parameters for the VoIP server and softswitch registration.	Yes	Yes
sip-interop.cfg	Configuration parameters for the VoIP server, Softswitch registration, and interoperability configuration.	Yes	Yes
site.cfg	Configuration parameters set for each site.	Yes	Yes
video.cfg	Configuration parameters for video connectivity.	Yes	Yes
video-integration.cfg	Configuration parameters for Polycom® SoundStation® IP 7000 conference phone and Polycom® HDX® system integration.	Yes	Yes
Welcome.wav	Startup welcome sound effect.	Yes	Yes

<i>Distributed Files</i>	<i>File Purpose and Application</i>	<i>Combined</i>	<i>Split</i>
LoudRing.wav	Sample loud ringer sound effect.	Yes	Yes
Polycom-hold.wav	Sample ringer sound effect.	Yes	Yes
Warble.wav	Sample ringer sound effect.	Yes	Yes
polycomConfig.xsd	Master configuration file that contains the parameters and its values.	Yes	Yes

## Version History

This following table lists the release history of Polycom Unified Communications (UC) Software.

### Version History

<i>Release</i>	<i>Release Date</i>	<i>Features</i>
5.9.3	May 2019	This release includes the following new and enhancement features: <ul style="list-style-type: none"> <li>• DHCP IP Address Cache</li> <li>• TLS Support for BToE</li> <li>• Polycom Cloud Connector</li> <li>• Enhancement to Wi-Fi Settings</li> </ul>
5.8.4	May 2019	This release includes enhancements to Wi-Fi settings and other important security fixes.
6.0.0	April 2019	This release includes important field fixes and support for the following features: <ul style="list-style-type: none"> <li>• Guest Soft Key Customization</li> <li>• Plantronics Headset Settings</li> <li>• TLS Support for BToE</li> <li>• Improved Flexible Line Key Assignments for Static BLFs and Enhanced Feature Keys</li> <li>• Font Size Customization</li> <li>• Enhanced Feature Keys – BLF Support</li> <li>• Advanced uaCSTA</li> <li>• VVX Pagination</li> <li>• Key System Emulation</li> <li>• DHCP IP Address Cache</li> </ul>
5.9.2	March 2019	This release includes important field fixes.
5.6.5	March 2019	This release includes important field fixes.
5.8.3	January 2019	This release includes important field fixes.
5.9.1	January 2019	This release includes enhancement to VLAN ID and Wi-Fi dongle support.

<i>Release</i>	<i>Release Date</i>	<i>Features</i>
5.9.0	December 2018	<p>This release includes important field fixes and support for the following features:</p> <ul style="list-style-type: none"> <li>• Session Traversal Utilities for NAT (STUN)</li> <li>• Device Analytics Support for PDMS-SP</li> <li>• Multilevel Precedence and Preemption (MLPP) for Assured Services - Session Initiation Protocol (AS-SIP)</li> <li>• Support for H.264 Packetization Mode</li> <li>• Enhanced Busy Lamp Field (BLF)</li> <li>• Busy Lamp Field Hold Alerting</li> <li>• Busy Lamp Field (BLF) Spontaneous Call Appearance on Per BLF Basis</li> <li>• Enhanced Feature Key Macro Actions</li> <li>• Retrieve Logs from Support Information Package Page in the Web Configuration Utility</li> <li>• Simple Certificate Enrollment Protocol</li> <li>• Privacy for Call Logs and Contacts</li> <li>• Enhancement to Wireless Network Connectivity</li> <li>• Call Hold Timer</li> <li>• GZIP Encoding of SIP INFO Messages</li> <li>• Enhanced Boss-Admin for VVX phones</li> <li>• Web Sign In for Skype for Business On-Premise Deployment</li> </ul>
5.8.2	November 2018	This release includes important field fixes.
5.7.4	November 2018	This release includes important field fixes.
5.6.4	October 2018	This release includes important field fixes.
5.8.1	September 2018	<p>This release includes important field fixes and support for the following features:</p> <ul style="list-style-type: none"> <li>• Polycom EagleEye Mini Camera Support</li> <li>• Forward Error Correction</li> <li>• Simulcast Video</li> <li>• Centralized Conference Control Protocol (CCCP) Conference View Support</li> <li>• Quality of Service (QoS) for Skype for Business Video Calls</li> <li>• Toggling Between Audio-only or Audio-Video Calls</li> </ul>
5.7.3	September 2018	This release includes important field fixes.
5.6.3	June 2018	<p>This release includes important field fixes and enhancement to include the following new directives to upload and download the certificate and CSV files:</p> <ul style="list-style-type: none"> <li>• CERTIFICATE_DIRECTORY</li> <li>• FLK_DIRECTORY</li> </ul>

<i>Release</i>	<i>Release Date</i>	<i>Features</i>
5.8.0	June 2018	<p>This release includes support for the following features:</p> <ul style="list-style-type: none"> <li>● Introducing Polycom VVX business IP phones</li> <li>● OpenSIP Enhancements <ul style="list-style-type: none"> <li>➢ Enhanced IPv4 ICMP Management</li> <li>➢ Wireless Network Connectivity</li> <li>➢ Support for REST API</li> <li>➢ Uploading Logs to a USB Flash Drive</li> <li>➢ uaCSTA Lines</li> <li>➢ Enhancements to Check Sync Event</li> <li>➢ Early Media Call Handling Support</li> <li>➢ Voice Quality Monitoring Support for the OPUS Codec</li> <li>➢ BroadSoft Aggregated Self-Presence</li> </ul> </li> <li>● Skype for Business Enhancements <ul style="list-style-type: none"> <li>➢ Hybrid Line Registration</li> <li>➢ Support for PSTN Gateway on Failover</li> <li>➢ Reverse Name Lookup</li> </ul> </li> </ul>
5.7.2	May 2018	This release includes important field fixes.
5.6.2	April 2018	This release includes important field fixes.
5.7.1	March 2018	This release includes important field fixes and enhancement for Direct Inward Dialing number on VVX business media phones.
5.5.4	January 2018	This release includes important field fixes.
5.7.0	December 2017	<p>This release includes support for the following features:</p> <p><b>Open SIP Enhancements</b></p> <p>This release introduced support for BroadSoft User Interface theme, Executive-Assistant Enhancements, Custom BroadSoft Executive-Assistant Enhanced Feature Keys, Client-Side Sorting for Open LDAP servers, Securely Store LDAP Credentials on VVX phones, Voice over Secure IP. Hide the MAC Address, Enhanced E.911, DNS Cache Override, Assured Services - Session Initiation Protocol (AS-SIP), Custom URL Location for Installing LDAP server certificates, Emergency Instant Messages - GENBAND, Default Off-Hook Phone screen, Enhanced Feature Keys Enhancements, Bluetooth Support for VVX business media phones, Reset Phone without Admin Password, Prevent Call Park on Busy Orbits, View Phone Memory Usage Alert.</p> <p><b>Skype for Business Enhancements</b></p> <p>This release introduced support for Direct Inward Dialing Number on VVX Platforms, Web Proxy Auto-Discovery (WPAD), Skype for Business SILK Audio Codec, Hot Desking, Common Area Phone User, BToE Widget, Enhancements to Manual Pairing of Phone using BToE.</p>
5.6.1	December 2017	This release includes important field fixes.

<i>Release</i>	<i>Release Date</i>	<i>Features</i>
5.6.0	July 2017	<p>This release includes support for the following features:</p> <p><b>OpenSIP Enhancements</b></p> <p>This release introduced support for FIPS 140-2 Compliance Support, Two-Way Active Measurement Protocol support, Caller ID Display from the SIP Invite, BroadSoft Server-Based Call Waiting, Call Line Identification, BroadSoft Server-Based Redial, Remote Party Disconnect Alert Tone, Support for Siren 7 Audio Codec.</p> <p>The BroadSoft Directory now includes the following new directories:</p> <ul style="list-style-type: none"> <li>• Group and Group Common Directory</li> <li>• Enterprise Common Directory</li> <li>• Personal Directory</li> </ul> <p><b>Skype for Business Enhancements</b></p> <p>This release introduced support for Dial Plan Normalization, Multiple Emergency Number Dial Plan, Skype for Business User Interface Enhancements, Skype for Business Conference Enhancements, Device Lock Enhancements, Profile Picture on Device Lock Screen, Secure Single Sign-On with Third-Party Supporting Solutions, Safe Transfer for Boss-Admin Enhancements, and Busy Options for Incoming Calls.</p> <p><b>VVX D60 Enhancements</b></p> <p>This release introduced support for FLK Support in VVX Business Media Phone with VVX D60, Maximum Number of Handset Registrations, VVX D60 Base Station Pairing Permissions, Mac Address Pairing with VVX D60 Base Station, Continuous Attempt to Re-pair with a VVX D60 Base Station, and VVX D60 Call Handoff.</p>
5.5.3	September 2017	This release includes important field fixes.
5.5.2	May 2017	<p>This release includes the following features and field fixes:</p> <ul style="list-style-type: none"> <li>• Enterprise Directory Default Search</li> <li>• Registration Line Address in Status Bar</li> <li>• BroadWorks Anywhere EFK for Soft keys</li> <li>• Hide Contact Directory and Favorites</li> <li>• Personal Directory</li> <li>• BSFT Server-Based Call Logs</li> <li>• New Call Forwarding Icons</li> <li>• Updated Don't Disturb Icon</li> <li>• Expanded Support for USB Headsets</li> <li>• Support Added for CDP in VVX D60 Base Station</li> <li>• ALLOW Header in 18x Provisional Responses</li> <li>• Improved BToE device lock</li> </ul>
5.5.1	September 2016	This release adds enhancements for the distribution list, QoE, device lock, Polycom BToE manual pairing, user log upload, updated UI for VVX 500 and 600, unified contact store, web sign-in for online deployments.

<i>Release</i>	<i>Release Date</i>	<i>Features</i>
5.5.0	June 2016	This release introduced support for BroadSoft Executive Assistant and Flexible Seating, TR-069, the 3GPP Technical Specification, the IPV6 protocol, Off-hook Call Status control, ability to lock the web configuration utility after failed login attempts, and user interface enhancements.
5.4.3	February 2016	This release introduced the Polycom VVX D60 Wireless Handset and VVX D60 Base Station.
5.4.1	December 2015	This release includes support for the following features: <ul style="list-style-type: none"> <li>• Introduced the Polycom VVX 301/311, 401/411, 501, and 601 business media phones</li> <li>• Flexible line key customization for Skype for Business (EFLK)</li> <li>• Master Key Identifiers (MKI)</li> <li>• Shared Line appearance on Lync</li> <li>• BToE for Windows 10</li> <li>• Smart Search for Lync ABS</li> <li>• Support for simplified Chinese font on VVX 101</li> </ul>
5.4.0A	September 2015	This release includes support for the following features: <ul style="list-style-type: none"> <li>• Microsoft Office 365 and Skype for Business Online</li> <li>• Office365 and Skype for Business Provisioning and Manageability</li> <li>• Time and Date Initial Setup</li> </ul>
5.4.0	May 2015	Added support for Alcatel-Lucent CTS features including: <ul style="list-style-type: none"> <li>• Advanced Conference</li> <li>• Shared Call Appearance with Bridge In</li> <li>• Visitor Desk Phone</li> <li>• This release also includes support for the following features: <ul style="list-style-type: none"> <li>• Barge In on Busy Lamp Field Lines</li> <li>• DTMF Relay</li> <li>• SIP Instance</li> <li>• Comfort Noise</li> <li>• Opus Codec</li> <li>• DNS Server Address Override</li> <li>• Global Directory Synchronization</li> <li>• Basic Menu Lock</li> </ul> </li> <li>• Additional features including user interface improvements and resolved known issues.</li> </ul>
5.3.0	March 2015	Includes support for several Lync, BroadSoft, and OpenSIP features.

# Language Support

The VVX phone user interface includes native support for the following languages:

- Arabic, UAE
- Chinese, Traditional
- Chinese, Simplified
- Danish, Denmark
- Dutch, Netherlands
- English, Canada
- English, United Kingdom
- English, United States
- French, Canada
- French, France
- German, Germany
- Italian, Italy
- Japanese, Japan
- Korean, Korea
- Norwegian, Norway
- Polish, Poland
- Portuguese, Brazil
- Russian, Russia
- Slovenian, Slovenia
- Spanish, Spain
- Swedish, Sweden

## Resolved Issues

The following table lists the resolved issues in UC Software 5.9.3.

### Resolved Issues in UC Software 5.9.3

<i>Category</i>	<i>Issue No.</i>	<i>Description</i>
Audio	EN-130973	VVX phones experience a one-way audio issue after a call transfer when you set the parameter <code>voIpProt.SIP.allowTransferOnProceeding</code> to 2.
Audio	EN-126223	Failed consultative call audio transfers to the speaker instead of headset or handset even if you disable handsfree mode.

<i>Category</i>	<i>Issue No.</i>	<i>Description</i>
Audio	EN-123326	There's an audio delay on the VVX phone when you perform a consultative call transfer.
Calling	EN-129003	You cannot answer incoming calls on VVX phones using the speaker, headset, or handset if you enable the Call Alert feature on a BLF monitored line.
Calling	EN-122145	VVX phones are unable to make H.323 URL calls to an external number.
Calling	EN-121474	VVX phones fail to dial the number immediately when dialed one or two digits followed by #.
Calling	EN-113951	You cannot make outgoing calls from a VVX business media phone when the monitored BLF alerts and <code>reg.1.callsPerLineKey</code> parameter is set to 1.
Calling	EN-133622	VVX phones reboot while processing the error response for conference calls.
Calling	EN-136762	VVX phone trims the remote number extension while using the BLF key for pickup calls.
Device Management	EN-115124	When you pair a D60 handset to a VVX phone and receive a call through Automatic Call Distribution (ACD), the first call rings on both the VVX phone and the D60 handset but the second call rings only on the VVX phone.
General	EN-132676	Polycom VVX 601 business media phones reboot while processing Presence state.
General	EN-128391 EN-126330	VVX phones lose dial plan information during inband refresh.
General	EN-128257	Busy Lamp Field (BLF) line calls don't work if the entity URI received in BLF NOTIFY isn't same as the REGISTRAR server configured.
General	EN-134063	VVX phones don't send BLF Subscribe after failover.
General	EN-137361	VVX phone application responses may become sluggish due to a memory leak.
General	EN-132896	When the 2nd BLF NOTIFY message is received, VVX phone dials an incorrect number using the legacy pickup method.
Hardware	EN-133730	VVX 500 and 600 series business media phones fails to disable the Wi-Fi settings even if you detach Wi-Fi dongle.
Network	EN-129938	VVX phones can't receive an IP address if the voice and data Virtual Local Area Networks (VLANs) are configured as equal to VLAN IDs.

<i>Category</i>	<i>Issue No.</i>	<i>Description</i>
Network	EN-123349	VVX phones stop sending the Buddy Watch's subscribe after the phone fails to connect to a new proxy server.
Network	EN-130443	VVX phones use the parameter <code>device.snmp.serverName</code> even though the parameter <code>tcpIpApp.snmp.address.overrideDHCP</code> is enabled along with parameter <code>tcpIpApp.snmp.address</code> .
Network	EN-124142	VVX phone is signed in but doesn't receive calls for 10-15 mins when there is a network interruption.
Network	EN-132893	Sometimes VVX phones fail to receive the Location Information Server (LIS) from the server.
Security	EN-132606	Fixed security vulnerabilities.
Security	EN-131056	When SHA 1 cipher is configured with TLS v1.2, TLS-DSK authentication fails.
User Interface	EN-94424	When you change the BroadSoft directory to Enterprise directory strings, the corresponding translation of the Enterprise directory updates the support languages on the VVX D60 handset.

## Known Issues

This section lists the known issues and suggested workarounds for this release and previous releases.



These release notes do not provide a complete listing of all known issues that are included in 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.

### Known Issues

<i>Category</i>	<i>Issue ID</i>	<i>Release</i>	<i>Description</i>	<i>Workaround</i>
Audio	EN-113674	5.9.0	When you place a call from a VVX D60 handset to a remote phone, there may be choppy audio.	No workaround.
Calling	EN-59245	5.6.1	When you place an outgoing call from the call log, the VVX D60 handset always takes the default line (1st line).	No workaround.
Calling	EN-123763	5.9.1	During a call, VVX phone sends DTMF in dynamic payload127 When a call is initiated from a VVX phone, the phone sends DTMF in dynamic payload 127, even if the far end phone doesn't have DTMF payload support.	No workaround.

<i>Category</i>	<i>Issue ID</i>	<i>Release</i>	<i>Description</i>	<i>Workaround</i>
Calling	EN-131113	5.5.1	Upon dialing to an anonymous user from the call list, phone sends the acknowledgement with spaces in the SIP request-URI causing network congestion.	No workaround.
Device Management	EN-116169	5.9.1	VVX phones fail to pair with the VVX D60 base station after changing the VLAN.	Disconnect and reconnect the Ethernet cable on the VVX D60 base station.
Device Management	EN-131735	5.8.1	Device Transfer type changes to consultative transfer when a Guest user signs-into a VVX phone.	No workaround.
Device Management	EN-131002	5.8.1	Sometimes, VVX phone fails to complete the consultative transfer.	No workaround.
General	EN-108973	5.9.0	When you execute a packet capture command from the cloud, libPcap occasionally doesn't start the packet capture.	Resend the start packet capture command.
General	EN-122349	5.9.1	When a VVX phone receives a call from a saved contact, the contact name doesn't display.	No workaround.
General	EN-133994	5.8.0	VVX phones crash after receiving SDP attribute as "a=recvonly" in the initial OFFER.	No workaround.
Network	EN-117315	5.9.1	VVX 101 business media phones initiate the DHCPv6 process twice (releases the IP and gets it again) in IPv6 mode when you change the switch port setting from a voice VLAN that isn't running DHCP to a valid data VLAN.	No workaround.
Network	EN-124786	5.8.1	VVX phones fail to add Session Description Protocol (SDP) while generating the Session Refresh INVITES.	No workaround.
Video	EN-135204	5.8.1 6.0.0	VVX phones fails to publish video capabilities in Presence status.	No workaround.

# Updates to Previous Software Releases

This section describes the new features and enhancements to previous UC Software releases.

## *What's New in Polycom UC Software 5.9.2*

Polycom Unified Communications (UC) Software 5.9.2 is a release for OpenSIP and Skype for Business deployments. These release notes provide important information on software updates, phone features, and known issues.

## New Features and Enhancements

Polycom UC Software 5.9.2 includes the following enhancement.

### *Enhancement to OpenSSL Upgrade*

OpenSSL is upgraded from version 1.0.2j to version 1.0.2q for Polycom VVX phones.

### *Configuration File Enhancements*

The following table lists configuration file enhancements that include new or changed parameters for the Polycom UC Software 5.9.2 release. For more information on using configuration parameters to enable or disable features, see the latest *Polycom UC Software Administrator Guide* for your release, available at [Latest Polycom UC Software Release](#).

#### Configuration File Enhancements for UC Software 5.9.2

Parameter	Permitted Values	Restart or Reboot
<code>video.codecPref.XH264UC</code>	Sets the Microsoft H.264 UC video codec preference priority. 0 (default) 0 - 7	No
<code>video.codecPref.XUlpFecUC</code>	Sets the forward error correction (FEC) codec priority. 0 (default) 0 - 7	No

## Resolved Issues

The following table lists the resolved issues in UC Software 5.9.2.

### Resolved Issues in UC Software 5.9.2

<i>Category</i>	<i>Issue No.</i>	<i>Description</i>
Application	EN-125282	Polycom Skype for Business phone doesn't refresh the access token as per the expiry value that the exchange server receives.
Application	EN-124638	VVX 500 and 600 series business media phones don't display the <b>Favorites</b> option in the <b>Directories</b> menu when you enable the BroadSoft directory.
Application	EN-120423	DUT doesn't update presence information properly.
Application	EN-112876	VVX phones lose assigned keys after restarting.
Application	EN-110172	VVX phones don't display application endpoint status correctly when you add it as a favorite contact.
Application	EN-110042	VVX 500 and 600 series business media crashed while receiving a call from Redcom soft client with H264 along with video resolution configured to Auto mode.
Audio	EN-120425	Response group calls drop when phones receive an early reinvite from the response group server.
Audio	EN-123326	There's an audio delay on the VVX phone when you perform a consultative transfer.
Audio	EN-98474	When VVX phones are in BToE playback mode, the audio streamed to the far end is choppy.
Audio	EN-124862	During MOH in Silk negotiated call misalignment of host and DSP version cause static noise and one-way audio.
Calling	EN-115626	When you initiate a call when paired with Skype for Business in BToE mode, a termination changes delays on DUT.
Calling	EN-119506	VVX phones don't update missed call entries in the database list.
Calling	EN-117876	VVX phone is logging the hunt group incoming call as a missed call while answering and ending the call by other VVX phone sharing the same registered lines.
Calling	EN-122620	During an active call, when the phone hits the idle timeout threshold, the phone display dims for 2 seconds and then brightens again.

<i>Category</i>	<i>Issue No.</i>	<i>Description</i>
Calling	EN-128889	VVX business media phone stores voicemail URI as a default dial string, due to which the subsequent calls made using short press are stored in the voicemail without ringing on the far end.
Conference Management	EN-123340	Calls drop when the policy on the server sets <code>AllowIPAudio</code> to false.
Configuration	EN-120429	The <b>Directory</b> softkey displays in a Skype for Business profile even though the profile doesn't support it.
Configuration	EN-113385	All VVX phones accept the <code>up.accessibilityFeatures</code> parameter, but the parameter only applies to VVX 1500 business media phones.
Call Management	EN-114345	VVX 150 business IP phones don't disable the <b>Transfer</b> and <b>Hold</b> softkey during an active call when you set the parameter <code>softkey.feature.basicCallManagement.redundant</code> to 0.
Call Management	EN-123815	Call forward soft key displays even if the <code>feature.forward.enable</code> parameter is set to 0.
General	EN-124307	When VVX phones receive forwarded calls from an external number, the phones display the last four digits of the forwarding number received in the <b>Via</b> field.
General	EN-115808	Web Proxy Auto-Discovery (WPAD) fails to extract a domain from a specific URL.
General	EN-113522	The Field Help and parameter name are missing in the software upgrade section of WEB UI for VVX business media phones.
General	EN-117611	VVX phones change to the default language after a guest user signs in.
General	EN-114672	When refreshing the registration, VVX phones become unregistered when they try to directly query SRV instead of NAPTR due to a transport parameter in the contact header of the 200OK message.
General	EN-122406	After you complete a consultative transfer, VVX phones display the number "10" when you press the star (*) key when the phone is in an idle state.
General	EN-124590	VVX phone doesn't allow to change the hook switch mode to Plantronics from regular mode upon software upgrade to UCS 5.9.0 or onwards.

<i>Category</i>	<i>Issue No.</i>	<i>Description</i>
General	EN-120233	VVX phones display SIP uri instead of call queue name while receiving a call from Skype for Business call queue.
General	EN-119699	Users are intermittently signed out from VVX business media phone registered to Skype for Business server when using Web Configuration Utility to sign-in.
Logs	EN-123961	Fixed security vulnerabilities.
Messages	EN-117332	VVX phones restrict the dial number URI length to 64 characters.
Network	EN-120743	VVX phones fail to charge devices using the rear USB port.
Network	EN-120428	VVX phones have a network speed of 10 Mbit instead of 1Gbps for a PC port.
Network	EN-105978	VVX phones fail to receive the Location Information Server (LIS) from the server.
Network	EN-120000	VVX business media phones don't handle authentication error code correctly.
Network	EN-114075	VVX phones fail to make an outgoing call and receive a 488 error when you configure only SVC codec for the INVITE request.
Network	EN-126173	VVX phones failover and send two SUBSCRIBE messages for BLF after receiving the 503 response for the INVITE message.
Network	EN-123868	VVX phones don't send DNS refresh queries and REGISTER messages after a few failovers due to an improper DNS resolution sequence.
Network	EN-102890	Metaswitch registration lines go unregistered due to DNS resolution failure.
Network	EN-113273	VVX phones display the call log date as of February 7, 2036, while Sntp server responds with the value 0x00000000 or 0xFFFFFFFF.
Peripherals	EN-116813	VVX phones using USB headsets drop an outgoing call when they receive a simultaneous call and the other phone with simultaneous ringing answers the simultaneous call.
Provisioning	EN-120427	Server settings override local parameter values because of in-band provisioning.
Reports	EN-120165	Polycom devices registered with Skype for Business publish different QoE server results than those reported on the QoE site.

<i>Category</i>	<i>Issue No.</i>	<i>Description</i>
Reports	EN-117331	Polycom devices registered with Skype for Business sometimes report inaccurate QoE statistics.
Software Updates	EN-122718	Upgrading the VVX D60 handset software fails when you assign the base station with a xxx.xxx.xxx.xxx IP address.

## ***What's New in Polycom UC Software 5.9.1***

Polycom UC Software 5.9.1 includes the following enhancements:

- [Enhancement to VLAN ID](#)
- [Wi-Fi Dongle Support](#)

### **Enhancement to VLAN ID**

After installing a new software package on VVX phones and changing the Virtual Local Area Networks (VLANs), the following are behavioral changes in VVX phones:

#### ***Updater***

The phone doesn't reboot and starts the DHCP sequence on new VLAN to get the new IP address.

#### ***Application***

- The phone doesn't restart and triggers the DHCP sequence on discovering a valid VLAN ID from an invalid VLAN ID to get the new IP address.
- Phone restarts and triggers the DHCP sequence on discovering any VLAN ID from an invalid VLAN ID to get the new IP address.

### **Wi-Fi Dongle Support**

Polycom VVX phones now support Edimax USB Wi-Fi Dongle (EW-8711UTC) along with the Polycom Wi-Fi wireless network adapter.

### **Configuration File Enhancements**

The following table lists configuration file enhancements that include new or changed parameters for the Polycom UC Software 5.9.1 release. For more information on using configuration parameters to enable or disable features, see the latest *Polycom UC Software Administrator Guide* for your release, available on [Latest Polycom UC Software Release](#).

### Configuration File Enhancements for UC Software 5.9.1

Parameter	Permitted Values	Restart or Reboot
<code>video.profile.H264.packetizationMode0.payloadType</code>	Specifies the RTP payload format type for H264/90000 packetization Mode 0 MIME type. 109 (default) 96 to 127	Yes
<code>video.profile.H264.payloadType</code>	Specifies the RTP payload format type for H264/90000 Mode 1 MIME type. 99 (default) 96 to 127	Yes

## Resolved Issues

The following table lists the resolved issues in UC Software 5.9.1.

### Resolved Issues in UC Software 5.9.1

Category	Issue No.	Description
General	EN-111322	Rest API management returns an incorrect value for the variable <code>packetsExpected</code> .
Network	EN-113463	VVX phones fail to get the IP address on correct VLAN after a network switch reboot.
Reports	EN-116609 EN-116846	Incorrect packet loss and Mean Opinion Score (MOS) is reported during SIP publish.

## What's New in Polycom UC Software 5.9.0

Polycom Unified Communications (UC) Software 5.9.0 is a release for Open SIP and Skype for Business deployments. These release notes provide important information on software updates, phone features, and known issues.

## Future Feature Releases for VVX Business Media Phones

With the end of the sale of some models of VVX business media phones, the following phone models will no longer receive new features:

- VVX 300/310

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- VVX 400/410
  - VVX 500
  - VVX 600
  - VVX 1500

As a result, UC Software 5.9.0 will be the last release to contain significant feature development for these models. Future major feature releases will not include images to support these models. In line with the Polycom End of Life policy, Polycom will continue to provide bug fixes in maintenance and patch releases on the UC Software 5.9.x stream. For details, see the [Polycom End of Life Policy](#).

The following VVX phone models will continue to receive feature releases:

- VVX 101/201
- VVX 150
- VVX 250
- VVX 301/311
- VVX 350
- VVX 401/411
- VVX 450
- VVX 501
- VVX 601

Plantronics headsets are compatible with VVX phones. To know compatibility list, refer [Plantronics Compatibility Guide](#).

Polycom UC Software 5.9.0 includes the following new features and enhancements:

- [Session Traversal Utilities for NAT \(STUN\)](#)
- [Device Analytics Support for PDMS-SP](#)
- [Multilevel Precedence and Preemption \(MLPP\) for Assured Services - Session Initiation Protocol \(AS-SIP\) On Shared Lines](#)
- [Support for H.264 Packetization Mode 1 and H.264 Constrained Baseline Profile](#)
- [Enhanced Busy Lamp Field \(BLF\)](#)
- [Busy Lamp Field Hold Alerting](#)
- [Busy Lamp Field\(BLF\) Spontaneous Call Appearance on Per BLF Basis](#)
- [Enhanced Feature Key Macro Actions](#)
- [Retrieve Logs from Support Information Package Page in the Web Configuration Utility](#)
- [Simple Certificate Enrollment Protocol](#)
- [Privacy for Call Logs and Contacts](#)
- [Enhancement to Wireless Network Connectivity](#)
- [Call Hold Timer](#)
- [GZIP Encoding of SIP INFO Messages](#)
- [Enhanced Boss-Admin for VVX Phones](#)

- [Web Sign In for Skype for Business On-Premise Deployment](#)

## Session Traversal Utilities for NAT (STUN)

Polycom UC Software supports Session Traversal Utilities for NAT (STUN), a network protocol used in NAT traversal for real-time IP communications, such as voice, video, and messaging. STUN service is provided using UDP. STUN using TCP or TLS is not available.

You can configure the phone to act as a STUN client to send a request to the STUN server to discover the public IP and port(s). You can also configure the phone to send keep-alive messages to refresh NAT bindings.

## Device Analytics Support for PDMS-SP

Polycom introduces device analytics to enable and configure your phone to provide details on many aspects of the phone's system and usages such as network stats, feature usage, memory and CPU, SIP service state, and connected peripherals.

A Polycom Cloud Services account is required to access these analytics. For more information, refer <https://console.plcm.cloud>.

## Multilevel Precedence and Preemption (MLPP) for Assured Services - Session Initiation Protocol (AS-SIP) On Shared Lines

Multilevel Precedence and Preemption (MLPP) enables you to configure a precedence level for outgoing calls. Polycom implements MLPP in accordance with the standards set by Assured Services for Session Initiation Protocol (AS-SIP).

Higher precedence calls preempt – and thereby end - active calls with a lower precedence level. When an active call is preempted, the phone plays a preemption tone and displays a preemption screen. Polycom now provides the capability for shared lines when operating in a Ribbon environment.

## Support for H.264 Packetization Mode 1 and H.264 Constrained Baseline Profile

VVX business media phones support H.264 Packetization Mode 1 for incoming and outgoing video calls. Packetization Mode 1 enables high resolution video by allowing media packets to be fragmented during transport.

VVX business media phones also support H.264 constrained base Profile which enables to send and receive calls to IR94 capable devices.

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## Enhanced Busy Lamp Field (BLF)

VVX phones supporting Broadworks Enhanced Busy Lamp Field (BLF) are now able to enable and configure new short and long key press behaviors when touching the line key for a monitored BLF user. New actions are 1-touch blind transfer or 1-touch park and retrieve.

A new preferences option in the basic settings is available when configured allowing the phone user to choose their preferred default key press action.

## Busy Lamp Field Hold Alerting

VVX phones now support the Busy Lamp Field (BLF) sip.rendering state. For call control platforms that also support or allow this dialog attribute to be used. VVX phones can add display information when the monitored user places a call on hold with accompanying changes to LED behavior, key press action precedence, and an optional ringtone.

## Busy Lamp Field (BLF) Spontaneous Call Appearance on Per BLF Basis

VVX phone supports Spontaneous Call Appearance property for an incoming call and incoming ringtone per Busy Lamp Field (BLF).

## Enhanced Feature Key Macro Actions

A new macro \$Tconsult\$ is added to execute the consultative transfer functionality irrespective of default transfer type (Consultative/Blind) set on the phone.

## Retrieve Logs from Support Information Package Page in the Web Configuration Utility

You can export the Support Information Package (.tar file) using Web Configuration Utility.

The support information package includes the following log files:

- .pbu file
- app log file
- boot log file
- audit log file

## Simple Certificate Enrollment Protocol

The Simple Certificate Enrollment Protocol (SCEP) is a protocol that enables you to automatically enroll devices to retrieve new digital certificates or re-enroll to renew expired or expiring certificates.

This feature applies to all phones except VVX 1500 business media phones.

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## Privacy for Call Logs and Contacts

Your call logs and contacts you save are stored on the phone and a server. You can clear your personal history of stored call logs and contacts from the phone. You can also restrict the phone from uploading your call logs and contacts to the server.

## Enhancement to Wireless Network Connectivity

You can configure the phone so that users can view the Wi-Fi menu under Basic settings. This allows users to also add a Wi-Fi network manually. Additionally, you can also configure the phone to display the Wi-Fi icon on the phone's status bar and home screen.

You can manually add a new wireless network on VVX phone from the **Basic** menu.

## Call Hold Timer

Polycom VVX phones will now display the timer when an active call is put on hold. The active call timer will resume when the user retrieves the call.

`up.holdTimerDisplay.enable` parameter is used to enable or disable the hold timer display on the VVX phone.

## GZIP Encoding of SIP INFO Messages

Polycom VVX phone sends notifications for various activities to the server in gzip format saving network bandwidth.

You can configure this feature by `voIpProt.SIP.gzipEncoding.enable` parameter that is set to 0 by default.

## Enhanced Boss-Admin for VVX Phones

When using Skype for Business you can configure Enhanced Boss-Admin feature on allowing users to add and edit delegates from the phone's user interface using the contacts list.

Users can also set Call Forward or Simultaneous Call Ringing option from the phone's user interface. When Enhanced Boss-Admin delegation occurs, you can view the delegate key icon on the phone's screen.

## Web Sign In for Skype for Business On-Premise Deployment

Polycom UC Software 5.9.0 allows users to sign in to Skype for Business client on VVX phones. Web Sign In enables users to securely log in to Skype for Business from the phone using a computer web browser or mobile device browser. Users can sign in concurrently to a maximum of eight devices by default. When users are signed in to multiple devices and sign out from one device, users remain signed in to all other devices.



Web Sign In for Skype for Business server support requires Hybrid Modern Authentication (HMA) to be enabled. To use the capability of HMA with Skype for Business On-premise AD should be federated with Azure AD. For more information about Hybrid Modern Authentication (HMA), refer [Hybrid Modern Authentication for Skype for Business](#).

Common Area phone (CAP) feature is not supported for Web Sign In for Skype for Business On-Premises.



Polycom VVX 250, 350, and 450 business IP phones support on-premises deployments only.

## Configuration File Enhancements

The following table lists configuration file enhancements that include new or changed parameters for the Polycom UC Software 5.9.0 release. For more information on using configuration parameters to enable or disable features, see the latest *Polycom UC Software Administrator Guide* for your release, available on [Latest Polycom UC Software Release](#).

### Configuration File Enhancements for UC Software 5.9.0

<i>Parameter</i>	<i>Permitted Values</i>	<i>Restart or Reboot</i>
<code>feature.nat.stun.enabled</code>	0 (default) - Disable the STUN feature on the phones. 1 - Enable the STUN feature on all registered Open SIP lines on a phone.	Yes
<code>nat.stun.server</code>	Enter a STUN server IP address or domain name. Null (default)	Yes
<code>nat.stun.port</code>	Set the server port number for all Open SIP-registered phones. 3478 (default)1 to 65535	Yes

<i>Parameter</i>	<i>Permitted Values</i>	<i>Restart or Reboot</i>
<code>reg.x.nat.traversal.mode</code>	<p>Enable or disable NAT traversal mode with STUN for signaling and media on the basis of the phone-level STUN feature.</p> <p>Auto (default) - Apply NAT configuration to both media and signalling per registration.</p> <p>Disabled - The phone does not use STUN for NAT traversal for this registration.</p> <p>For example, if <code>feature.nat.stun.enabled</code> is set to 1, and <code>reg.x.nat.traversal.mode</code> is set as Auto, the STUN feature is enabled for signaling and media for the registered line.</p>	No
<code>nat.refresh.interval</code>	<p>Set the time interval for the phone to send NAT keep-alive packets that keep the NAT port open and the phone reachable.</p> <p>30 seconds (default) - The phone sends NAT keep-alive packets that keep the NAT port open and the phone reachable.</p> <p>5 - 3600 seconds</p>	No
<code>calendar.monthView.enabled</code>	<p>0 (default) - Disables the <b>Month View</b> soft key.</p> <p>1 - Enables the <b>Month View</b> soft key.</p>	No
<code>device.da.enabled.set</code>	<p>0 (default) - Do not use the <code>device.da.enabled</code> value.</p> <p>1 - Use the <code>device.da.enabled</code> value.</p>	No
<code>device.da.enabled</code>	<p>0 (default) – Disable the device analytics feature.</p> <p>1 – Enable the device analytics feature.</p>	Yes
<code>feature.obitalk.enabled</code>	<p>0 (default) - Disable the connection to the OBiTalk cloud.</p> <p>1 - Enable the connection to the OBiTalk cloud.</p>	Yes

<i>Parameter</i>	<i>Permitted Values</i>	<i>Restart or Reboot</i>
<code>obitalk.accountcode</code>	Specifies the account code provided to the service provider during registration. Null (default) String (maximum of 256 characters).	Yes
<code>da.supported.services</code>	Specify the Device Analytics service to enable. all (default) Comma seperated list of below strings need to be configured (maximum of 2048 characters) sdi ni service tsid pcap log config core vqmon cdr uptimeanalytics hardwareanalytics uianalytics blf sca restart reboot resettofactory	Yes
<code>attendant.callAction</code>	Specify the call action behavior for an Active call. Dial-Pick up (default) – An active call goes on hold and dials to monitor line when you short press the monitored line keys Blind – Blind transfer an active call on the monitored line keys Park – Parks an active call on the monitored line keys. If there is already a parked call on a monitored line then it will retrieve the parked call.	No

<i>Parameter</i>	<i>Permitted Values</i>	<i>Restart or Reboot</i>
<code>attendant.callActionMenu.enabled</code>	<p>This parameter is configured to get the Attendant Call Action menu on the phone when dynamic BLF is configured on the phone.</p> <p>0 (default) – <b>Attendant Call Action</b> menu will not appear on the phone.</p> <p>1 - <b>Attendant Call Action</b> menu will appear on the phone.</p>	No
<code>attendant.displayHoldState.enable=1</code>	<p>Specifies the control of the display on the phone for BLF hold state.</p> <p>0 (default) –The phone displays a busy state.</p> <p>1 – The phone displays a hold state.</p> <p>Note: This parameter is only applicable to static BLF.</p>	No
<code>attendant.resourceList.x.hold.ringer</code>	<p>The ringtone that plays on the phone when BLF is in a hold state.</p> <p>The parameter depends on the value set for the parameter <code>attendant.displayHoldState.enabled</code>. If the parameter <code>attendant.displayHoldState.enable</code> is set to 1, use the parameter <code>attendant.resourceList.x.hold.ringer</code></p> <p>Triplet (default) – Specifies the ringtone name for the parameter <code>ringer11</code>.</p> <p>Ringtone for BLF Hold should play for only 10 sec.</p>	No
<code>ind.pattern.blfHold.step.1.state</code>	<p>0 – Turns off the LED indicator for BLF Hold.</p> <p>1 (default) – Turns on the LED indicator for BLF Hold.</p>	Yes
<code>ind.pattern.blfHold.step.1.duration</code>	<p>Specify the duration of the LED indicator for the pattern when BLF is in a hold state.</p> <p>1000 (default)</p> <p>0- 32767</p>	Yes

<i>Parameter</i>	<i>Permitted Values</i>	<i>Restart or Reboot</i>
<code>ind.pattern.blfHold.step.1.color</code>	<p>Set the color of the LED indicator for the pattern when BLF is in a hold state.</p> <p>Red (default) – LED indicator turns to red when the BLF is in a hold state.</p> <p>Green – LED indicator turns green when the BLF is in a hold state.</p>	Yes
<code>ind.pattern.blfHold.step.2.state</code>	<p>0 (default) – Turns off the LED indicator for BLF Hold.</p> <p>1– Turns on the LED indicator for BLF Hold.</p>	Yes
<code>ind.pattern.blfHold.step.2.duration</code>	<p>Specify the duration of the LED indicator for the pattern when BLF is in a hold state.</p> <p>1000 (default)</p> <p>0 – 32767</p>	Yes
<code>ind.pattern.blfHold.step.2.color</code>	<p>Set the color of the LED indicator for the pattern when BLF is in a hold state.</p> <p>Red (default) – LED indicator turns to red when the BLF is in a hold state.</p> <p>Green – LED indicator turns green when the BLF is in a hold state.</p>	Yes

<i>Parameter</i>	<i>Permitted Values</i>	<i>Restart or Reboot</i>
<code>attendant.resourceList.x.display.spontaneousCallAppearances</code>	<p>This parameter is applicable to Static BLF.</p> <p>Specifies spontaneous call appearance property for an incoming call.</p> <p>This parameter will override the phone level configuration parameters</p> <p><code>attendant.behaviors.display.spontaneousCallAppearances.normal</code> and <code>attendant.behaviors.display.spontaneousCallAppearances.automata</code> to show or hide the call appearance property for BLF incoming call based on the resource type.</p> <p>Auto (default) – This value will use phone-level configuration depending on the BLF resource type.</p> <p>Show – This value will override the phone-level configuration and show the call appearance.</p> <p>Hide – This value will override the phone-level configuration and hide the call appearance.</p> <p>Note: Existing BLF ringtone will not stop if new BLF call comes.</p>	No
<code>attendant.resourceList.x.ringType</code>	<p>This parameter is applicable to Static BLF.</p> <p>Specifies incoming ringtone for each static BLF line</p> <p>defaultAll (default) – Specifies the ringtone type ring for the ringtone name.</p> <p>ringer1 - ringer 24.</p> <p>If no ringtone is configured for any static BLF line, then phone level incoming ringtone defined with <code>attendant.ringType</code> parameter will be played.</p>	No

<i>Parameter</i>	<i>Permitted Values</i>	<i>Restart or Reboot</i>
SCEP.CAFingerprint	Configure the CA certificate fingerprint to confirm the authenticity of the CA response during enrollment. null (default) 0 - 255 characters	No
SCEP.certPoll.retryCount	Specify the number of times to poll the SCEP server when the SCEP server returns a Certificate Enrollment Response Message with the pkiStatus set to 'pending'. 12 (default) 1 – 24	No
SCEP.certPoll.retryInterval	Specify the number of seconds to wait between poll attempts when the SCEP server returns a Certificate Enrollment Response Message with the pkiStatus set to 'pending'. 300 seconds (default) 300 - 3600 seconds	No
SCEP.certRenewalRetryInterval	Specify the time interval to retry certificate renewal. 86400 seconds (default) 28800 - 259200 seconds	No
SCEP.certRenewalThreshold	Specify the percentage of the certificate validity interval to initiate a renewal. 80 (default) 50 – 100	No
SCEP.challengePassword	Specify the challenge password to send with the Certificate Signing Request (CSR) when requesting a certificate. null (default) 0 - 255 characters	No
SCEP.csr.commonName	Specify the common name to use for CSR generation. null (default) 0 – 64	No

<i>Parameter</i>	<i>Permitted Values</i>	<i>Restart or Reboot</i>
<code>SCEP.csr.country</code>	Specify the country name to use for CSR generation. null (default) 0 – 2	No
<code>SCEP.csr.email</code>	Specify the email address to use for CSR generation. null (default) 0 – 64	No
<code>SCEP.csr.organization</code>	Specify the organization name to use for CSR generation. null (default) 0 – 64	No
<code>SCEP.csr.state</code>	Specify the state name to use for CSR generation. null (default) 0 - 128 characters	No
<code>SCEP.enable</code>	0 (default) - Disable the SCEP feature. 1 - Enable the SCEP feature.	No
<code>SCEP.enrollment.retryCount</code>	Specify the number of times to retry the enrolment process in the case of enrolment failure. 12 (default) 1 – 24	No
<code>SCEP.enrollment.retryInterval</code>	Specify the time interval to retry the enrolment process. 300 seconds (default) 300 - 3600 seconds	No
<code>SCEP.http.password</code>	Specify the password that authenticates with the SCEP server. null (default) string, max 255 characters	No
<code>SCEP.http.username</code>	Specify the user name that authenticates with the SCEP server. null (default) string, max 255 characters	No

<i>Parameter</i>	<i>Permitted Values</i>	<i>Restart or Reboot</i>
SCEP.url	Specify the URL of the SCEP server. null (default) 0 - 255 characters	No
feature.wifi.basicmenu.enable	1 (default) – The phone displays the Wi-Fi menu under <b>Basic</b> settings. 0 – The phone does not display the Wi-Fi menu.	No
status.wifi.icon.enable	1 (default) – Display the Wi-Fi icon on the status bar of the phone's screen. Users can access Wi-Fi settings by selecting the Wi-Fi icon. 0 – Does not display the Wi-Fi icon on the status bar.	No
homeScreen.wifi.enable	1 (default) – Display the Wi-Fi icon on the phone's Home screen. 0 – Does not display the Wi-Fi icon on the phone's Home screen.	No

<i>Parameter</i>	<i>Permitted Values</i>	<i>Restart or Reboot</i>
video.profile.H264.packetizationMode	<p>Set to control the H.264 encoding and decoding capabilities on supported VVX business media phones.</p> <p>0 (default) - Supports Single NAL unit mode.</p> <p>For Incoming calls:</p> <ul style="list-style-type: none"> <li>If the remote endpoint supports only Non-Interleaved mode, the VVX business media phones reject the video with mline 0.</li> <li>If the remote endpoint supports Single NAL Unit mode, then the VVX business media phones answer the incoming call with Single NAL mode.</li> </ul> <p>For Outgoing calls:</p> <ul style="list-style-type: none"> <li>In all outgoing calls, the VVX business media phones send packetization-mode=0 in the offer.</li> </ul> <p>1 - Supports both Single NAL Unit mode and Non-Interleaved mode.</p> <p>For Incoming calls:</p> <ul style="list-style-type: none"> <li>The VVX business media phone answers both Single NAL Unit mode and Non-Interleaved mode.</li> </ul> <p>For Outgoing calls:</p> <ul style="list-style-type: none"> <li>The VVX business media phones send packetization-mode=0 and packetization-mode=1 in the offer.</li> </ul>	No
up.enhancedbossadmin	<p>0 (default) - Disables the Enhanced Boss-Admin feature.</p> <p>1- Enables the Enhanced Boss-Admin feature.</p>	Yes
up.phoneBootStatusPopupEnabled	<p>1 (default) - Phone displays the Popups after reboot.</p> <p>0 – Phone does not display any popup after reboot.</p>	No

<i>Parameter</i>	<i>Permitted Values</i>	<i>Restart or Reboot</i>
voIpProt.SIP.gzipEncoding.enable	0 (default) – Disable the Gzip encoding. Notifications will not be sent to server in gzip format.  1 – Enable the Gzip encoding. Notifications will be sent to the server in gzip format	No
up.holdTimerDisplay.enable	0 (default) – Hold Timer will not display. 1 – Hold Timer will display	No

## Security Updates

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

The following table contains the security updates in UC Software 5.9.0.

### Security Updates

<i>Category</i>	<i>Issue ID</i>	<i>Release</i>	<i>Description</i>
Security	EN-103735	5.9.0	Don't use basic authentication on VVX phones due to security issues.

## Resolved Issues

The following table lists the resolved issues in UC Software 5.9.0

### Resolved Issues

<i>Category</i>	<i>Issue ID</i>	<i>Description</i>
Application	EN-112576	The phone crashed during a reboot.
Application	EN-104339	VVX business media phone reboots while processing Reverse Name Lookup (RNL).
Application	EN-104422	Once you disable KeepAlive you cannot enable until you restart the phone.
Audio	EN-105156	Audio quality is bad when using the handset.
Audio	EN-111048	When audio and video is streamed from VVX phones to far end through BTOE application, the audio is choppy due to a shortage of CPU cycles.
Audio	EN-29792	In a Lync environment, the far-end occasionally hears distorted music for Music on Hold (MOH) when the call is established via TCP.

<i>Category</i>	<i>Issue ID</i>	<i>Description</i>
Audio	EN-94188	In a GENBAND environment, Music on Hold (MOH) doesn't play to the far end because the phone doesn't send the full codec list when holding the call.
Audio	EN-88372	There is a 5-second audio delay on the VVX phone when you resume the remote held call on the shared phone.
Calling	EN-105254	When you set the <code>feature.persistentMute.enabled</code> parameter to 1, the active call audio splits to the speaker along with the handset after a PTT/Paging call.
Calling	EN-104607	DUT is sending binding request to STUN during the hold and resume calls.
Calling	EN-99796	When making a point-to-point call between a VVX 1500 business media phone and an HDX system with media encryption enabled, the VVX 1500 business media phone doesn't receive audio.
Calling	EN-97739	In an intercom call between the two VVX D60 handsets, when the first handset answers an incoming call, the second VVX D60 handset is unable to resume the on-hold intercom call.
Calling	EN-97737	In a certain environment, the VVX business media phone is not able to retrieve the parked call using the BLF line key.
Calling	EN-95752	When server-based Automatic Call Distribution feature is enabled on the phone and the agent is in a call, pressing the EFK configured Unavailable soft key doesn't change the agent's state.
Calling	EN-97753	When you configure the Busy Lamp Field feature on the VVX business media phones and search for a directory via the directory soft-key, the phone returns to the Home screen.
Calling	EN-101429	VVX phone is unable to resume the held call during call transfer when off-hooked.
Calling	EN-97737	In a certain environment, the VVX business media phone is not able to retrieve the parked call using the BLF line key.
Call Management	EN-110627	VVX phones failed to accept the finalized peer-reflexive ICE candidates published by the far end.
Call Management	EN-108200	The VVX phone doesn't pick up the Busy Lamp Field (BLF) incoming call when the line key is pressed while the phone is off-hook.
Certificate Management	EN-107069	DUT is disclosing certificate private key and sending insecure HTTP message.
Configuration	EN-104784	VVX phones fail to open the Web Configuration Utility in the browser in Chinese due to the insufficient size of the buffer to hold the Chinese Language file. The buffer size was increased to 256MB to hold large files.
Configuration	EN-101931	The SRTP status shows incorrect details on VVX 411 and 501 business media phones.

<i>Category</i>	<i>Issue ID</i>	<i>Description</i>
Configuration	EN-96691	Default value of parameter <code>callLists.logConsultationCalls</code> should be changed to 1.
Configuration	EN-76181	The <code>dialplan.routing.emergency.x.value</code> parameter considers value only up to 255 characters.
Configuration	EN-111457	VVX phone displays Speed Dial Keys configuration even if the phone doesn't support the feature. This is applicable to all VVX business media phones except the VVX 1500 business media phones.
Configuration	EN-98530	The <code>SwitchingFunctionDevices</code> event sends incorrect registration line details when registration address contains domain name along with registration number.
Directories/Address Books	EN-109289	The VVX expansion modules don't refresh the speed dial list after a favorite is added or removed from the phone keys.
Directories/Address Books	EN-98753	When you configure the Busy Lamp Field feature on the VVX business media phones and search for a directory via the directory soft-key, the phone returns to the Home screen.
General	EN-109713	Polycom terminates NOTIFY line to seize Bridged Line Appearance (BLA) dialog event after it gets a 500-internal error with a retry-after 3 seconds from UAS. The parameter <code>voIpProt.SIP.blaGlaReHonorRetryAfter</code> was introduced to control this issue.
General	EN-108308	A 3-second timer is applied to 911 calls on VVX phones when "[2-9]11" is not at the beginning of the digit map.
General	EN-101084	Removed <code>up.onHookDialingEnabled</code> parameter from the code as this parameter is applicable only for Spectralink wireless phones.
General	EN-95586	VVX business media phone continues to display the Message Waiting Indicator (MWI) after reboot / de-registration even though no voicemail is available on phone.
General	EN-107207 EN-92897	Intermittently, a VVX phone doesn't register with the backup server after an outage.
General	EN-92078	VVX business media phones receive a 400-missing contact error from session border controllers (SBC) even when sending the contact header in a 200 OK for NOTIFY.
General	EN-76384	When entering the PIN code to a conference bridge, some digit plays a long tone as if it gets stuck.
General	EN-97274	VVX business media phones intermittently display LDAP error on corporate directory screen during search operations at times of peak load.
General	EN-94806	Polycom UC software upgrade fails on VVX phones while upgrading from UC software version 5.4.5 and 5.5.1 due to "Bad Image Checksum" error.

<i>Category</i>	<i>Issue ID</i>	<i>Description</i>
General	EN-103385	In Skype for Business environment, RGB color for VVX phones is low in UC Software 5.7.x version.
Interoperability	EN-98487	When processing SIP URLs for a Record-Route header, VVX business media phones incorrectly prepend SIP in the URL.
Localization	EN-111652	VVX phones are not translating the Inactive string to other languages other than default language.
Localization	EN-105378	DUT sending En-Us as default language when inviting far-end PSTN users into a conference.
Logs	EN-95299	In a Skype for Business environment, the username and password for the Skype for Business account display in plain text in the <b>app</b> logs and sys logs.
Network	EN-107375	In a Skype for Business environment, the description is missing in Field Help for the <code>server.log.setting.enabled</code> parameter.
Network	EN-104641	VVX phones fail to get an IP address when they receive two server identifiers (Option 54) in a DHCP offer.
Network	EN-102127	VVX business media phones use an incorrect TLS version, so TLS v1.2 connections fail.
Network	EN-98838	The INVITE for Session Description Protocol (SDP) in a conference call does not include SAVP and cryptographic line details.
Network	EN-92987	When you set the <code>feature.EWSAutodiscover.enabled</code> parameter to 1, VVX business media phones don't send the WPAD PAC file request.
Network	EN-112091	DUT fails to upgrade in a remote network using NTLM authentication.
Network	EN-102142	Phone authentication fails for the first time when using the TLS method with Polycom certificates for 802.1x authentication.
Provisioning	EN-93405	After a factory reset, while provisioning, the VVX business media phone accepts the parameter value of <code>voIpProt.SIP.assuredService.namespace</code> as "ets" even though configured as "dsn".
Provisioning	EN-101878	VVX business media phones restrict uploading Certificate Signing Request (CSR) and CSV files to the provisioning server root directory which causes RealPresence Resource Manager provisioning server failure.
Shared Lines	EN-104744	In VVX business media phones, the call is being answered on the headset when trying to pick up the held Multiple Appearance Directory Number (MADN) call on the remote shared device using the handset.
Security	EN-102441	When you enable the Device lock feature for the guest user, the phone asks to set a PIN lock.

<i>Category</i>	<i>Issue ID</i>	<i>Description</i>
Security	EN-95756	VVX business media phones don't support the NTLM v2 mechanism with the down-level format.
User Interface	EN-104782	VVX business media phones don't send any error response when the phone is in an idle state and receives an INVITE with replace header.
User Interface	EN-104591	Headset volume is increasing while switching between headset and handset.
User Interface	EN-101057	The VVX business media phone web UI help text for the <code>msg.bypassInstantMessage</code> parameter displays incorrect information.
User Interface	EN-100103	While using handsfree, headset or lifting handset to initiate a call, the idle display screensaver continues to stay on VVX business IP phone's screen.
User Interface	EN-99550	The brightness/ contrast level on Expansion Modules (EMs) connected to the VVX 601 business media phone is lower when compared to EMs connected to the VVX 600 business media phone.
User Interface	EN-93448	VVX business media phone is unable to display Unicode text having Armenian characters.
User Interface	EN-93031	While inviting a participant to the conference, the Reverse Name Lookup fails to continue with the next source when the display name is not received in SIP signaling.
User Interface	EN-92639	When "P-Asserted-Identity" in a 200 OK response doesn't have a display name, the phone doesn't display the caller ID details for an incoming call during call pick-up.
User Interface	EN-79960	When you connect an unsupported USB device to a VVX business IP phone, the phone doesn't display the rear USB port's power alert pop-up.
User Interface	EN-97749	On VVX business media phones, the call center queue status notification menu doesn't close automatically after 30 seconds.
User Interface	EN-97248	While playing video on an idle microbrowser, VVX 501 and 601 business media phones don't display incoming calls.
User Interface	EN-96709	During failover/ fallback, the phone resets the SIP Open Programmable Interface (SOPI) subscription and phone loses speed dial and directory.
General	EN-100838	VVX business media phone does not increment the Cseq value in the PRACK message in call forking.
User Interface	EN-100910	EagleEye Mini Camera does not publish privacy report which causes VVX phones to show the wrong LED.

## Getting Help

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

For information about Polycom partner solutions, see [Polycom Global Strategic Partner Solutions](#).

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