



## DATA SHEET

# Polycom® UC Software

The telecommunications industry's broadest and most feature rich software for most IP-enabled devices running in open SIP or Microsoft® Lync® environments.

### Conference with confidence

Polycom® UC Software is the industry's leading, unified communications (UC) software platform for open standards-based communication. Whether your distributed teams engage your customers via IM, video conferencing, voice communications, UC Software ties it all together at the desktop. Polycom® UC Software powerful feature set enables Polycom devices to integrate seamlessly into a wide variety of open SIP UC environments improving communication and collaboration between your business and your customers.

### Broadest interoperability and investment protection

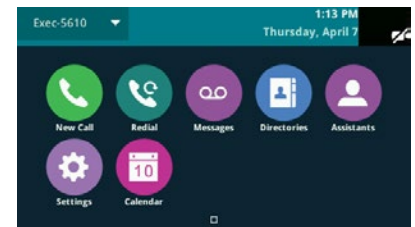
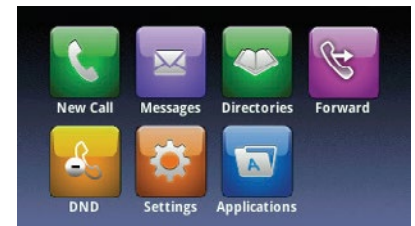
A powerful, Open SIP software platform, Polycom UC Software integrates more than 60 industry-leading call control platforms. The standards-based integration capabilities of UC Software make it the optimum unified communication layer to consolidate your communication components and simplify your IT environment. Complementing previous IT investments of any small business or enterprise, UC Software is easy to deploy and simple to manage. Polycom UC Software improves the usability and manageability of Polycom® VVX® products for all 'Open SIP' partners and enables existing Polycom customers to migrate their phone offerings from Polycom® SoundPoint® IP to Polycom VVX products. Polycom UC Software offers Lync telephony functionality required for large scale adoption of Polycom VVX products for enterprise use via Lync 2010 or Lync 2013 deployments. Polycom UC Software also provides support for the latest networking protocols, with support for both IPv4 and IPv6, providing investment protection as networks grow and migrate to IPv6.

Additionally, UC Software provides support for IP Multimedia Systems (IMS), allowing customers to bridge between their mobile and fixed line services.

### Maximize end-user productivity at the desktop

UC Software enables your knowledge workers and managers to reach the right person at the right time via the right communication mode. Polycom UC Software reduces communication delays and failures, which helps businesses and individuals be more productive. Polycom UC Software makes navigation easy and provides the broadest set of Open SIP and unified communications features. The software's wide range of advanced features save time on everyday tasks and enriches communications, ultimately improving end-user productivity across every layer of the organization. By upgrading to Polycom UC Software, enabled endpoint devices provide at-a-glance access to such capabilities as viewing and managing Exchange calendars/contacts, updating instant messaging status on the phone's large touch screen display, and receiving meeting reminders/alerts while still providing easy access to corporate directories.

Polycom UC software delivers advanced productivity applications to save time on everyday tasks using a standards based open application protocol and microbrowser.



### Benefits

- Improves desktop productivity for users at all levels of the organization
- Simple to deploy, easy to administer, upgrade and maintain
- Reduces downtime through robust security options
- Leverages existing communication investments, third-party UC and productivity applications
- Compatibility with multiple industry standard call control platforms, Open SIP and Microsoft Lync
- Compatible with IPv6 when used in Open SIP deployments

This open-standards approach provides third-party developers with maximum flexibility to build and customize unique solutions for customers in a wide range of industries. The Polycom® Acoustic Fence™ feature of UC Software helps in noisy environments such as call centers or large open plan offices; Acoustic Fence provides the best possible audio quality, reducing strain on the far end user who no longer has to struggle to differentiate between background noise and what is being said. Additionally, users can also save time by

extending their PC to their desk phone through a simple point-and-click interface to activate phone features directly through their PC using the Polycom Desktop Connector. The Polycom® Desktop Connector (PDC) simplifies your team's communication tasks by giving them convenient access to the screens of their desk phones by way of the mouse attached to their PCs.

### Polycom® BroadSoft UC-One integration

The Polycom BroadSoft integrates with a BroadSoft enterprise directory and BroadCloud services—a set of hosted services that BroadSoft runs—to provide three features on Polycom® VVX® 300, 400, 500 and 600 series business media phones.

- The Enhanced Call park feature can be used to park a call directly to a contact's line. This feature enhances the user experience by providing audio and visual indication when the call is parked against a phone line and also provides a mechanism to view the remote party details and retrieve the parked call without the need of remembering the feature access codes.
- Directory integration—Search and display of BroadSoft enterprise directory contacts; for example, work and mobile phone numbers
- UC-One presence—Unified presence information with the BroadTouch Business Communicator (BTBC) client applications on other devices
- UC-One contacts and favorites—Synchronized UC One contacts, personal groups and favorites with BroadTouch Business Communicator (BTBC) client applications
- BroadSoft Enhanced Executive—Assistant feature allowing for closer integration of Executive and Assistant functionality, including call screening and filtering, and management of executive calls by the assistant
- Broadsoft Flexible Seating—Improves on the existing hoteling feature by ensuring that, when a user logs into a host phone, all aspects of the configured guest profile are applied to the host phone
- Qualified UCS 5.5 against BroadWorks R21.

### BroadWorks UC one integration

- BroadWorks presence capability for all Polycom VVX Business Media Phones (XMPP)
- BroadWorks directory integration
- BroadSoft favorites
- Premium ACD: port hoteling and call center status

These features require the BroadSoft BroadWorks R18 SP1 platform with patches and the BroadSoft BroadCloud services.

- Compliant for Lync 2010 and 2013
- Basic Lync telephony (including with Lync soft client)
- Presence
- Active Directory support
- BS contact directory search
- Filter search
- Favorites
- Federated calling between networks
- Branch office resiliency
- Pin authentication
- Exchange calendar integration

### Microsoft Lync enhancements

- Lync 2013 interoperability
- Better Together over Ethernet
- Shared Line Appearance (Boss/Admin)
- Call park
- Address Book Service (ABS)
- Lync in-band device update
- Skype for Business User Experience—UCS can provide an experience familiar to all Skype for Business users, with the same color schemes, iconography and styling.
- Skype for Business Device Lock—Allows a user to lock their phone to prevent non-authorized users from accessing the phone.
- Distribution List Expansion—Allows the user to expand groups configured in Exchange to see individual members of the group.
- Skype for Business Quality of Experience (QoE)—Provides quality metrics to the Skype for Business management tool to allow the performance of the system to be monitored.
- Log Upload—The phone can be configured to upload logs to a server without any interaction from the user.
- BToE Manual Pairing—The BToE application is now able to pair with the phone automatically or have the user manually pair the phone using an authentication ID
- PIN Authentication—Makes use of ADAL functionality on

the PC to improve the security of the phone and simplify logging in using a PIN.

### Open SIP desktop features

- Verify missed call tracking on non-shared lines
- Message waiting status improvements

### Polycom UC Software complete feature list

#### Calling features

- Automatic off-hook call placement (hot dialing)
- Call media recording/playback
- Call timer
- Call waiting (visual, audible, per-line)
- Call Forward For Shared Lines, Private Hold For Shared Lines
- Distinctive incoming call treatment (visual, audible)
- Do not disturb (DND)
- Automatic/remote answer on headset using electronic hook-switch
- Local three-way and four-way conference with conference management
- One-touch speed dial, redial
- Call hold, diversion (forward), transfer (consultation, blind), pickup
- Calling, called, connected party identification
- Caller ID privacy
- Conference bridging
- Centralized conference bridge support
- Local call forwarding (all, busy, no answer) - destination shown on idle display
- Automatic call distribution (ACD)
- Automatic answer (intercom)
- Busy lamp field (BLF)/Attendant console
- Call park/retrieve
- Directed call pickup
- Group call pickup
- Hold, resume, answer, conference remote control
- Hunt group - sequential calling
- Last call return
- Shared call appearances (SCA) -

shared line on multiple phones

- Shared call/bridged line appearance
- Auto-answer a page with a muted microphone
- PTT and Multicast group paging

#### Audio processing

- Audio Codecs: G.711, G.729AB, G.722, G.722.1, G.722.1 Annex C, iLBC, Siren 14, Siren 22, L16/8000/16000/32000/44100/48000
- Opus
- Acoustic echo cancellation (speakerphone, handset)
- Automatic gain control
- Background noise suppression
- Comfort noise fill
- DTMF tone generation/DTMF event RTP payload
- Low-delay audio packet transmission
- Jitter buffer and packet loss concealment
- Rx: soft limiter, tone control
- Customizable Rx and Tx equalization
- Voice activity detection (VAD)
- Multicast RTP
- Digital headset
- Individual volume settings with visual feedback for each audio path
- Acoustic Fence

#### Video features and processing (V VX 1500 Only)

- Polycom® CMA® presence
- Video Codecs: H.261, H.263, H.264, H.323
- H.235 security
- ITU-T G.719 vocoder (fast video update via RFC 5104)
- Near-end camera control
- Video quality manipulation (configurable video call rate)
- Picture-in-picture, local camera playback
- Video call/three-way video conference

#### Network, provisioning, and server

- IPv6 and IPv4 support - including dual IPv4/IPv6 mode
- Emergency proxy routing

- Registration multi-homing
- DHCP support
- User Controlled Download
- SNTP time discovery from DHCP
- PoE 802.3af for power requirements notification
- SIP over TCP
- QoS support - IEEE 802/Q tagging (VLAN), IP Layer 3 ToS, DSCP)
- VLAN - CDP, DHCP VLAN discovery, LLDP-MED for VLAN discovery
- NAT support (static, keep alive, MCP NAT traversal)
- Administrator configuration website
- FTP/TFTP/HTTP/HTTPS serverbased central provisioning for mass deployments. Provisioning server redundancy supported
- Local UI SIP configuration menu
- Automatic configuration change polling
- URL syntax for boot server address
- AT&T SAS-VP management v3
- DHCP - option 60 string/binary configurable, option 125 as per RFC 3925, vendor ID information
- Simplified configuration and provisioning
- - Self contained and fault tolerant configuration requiring no restart or reboot, simplified configuration file arrays, default parameters included in UC Software
- SIP-Synchronized
- Obsolete and legacy platform coexistence
- Boot server discovery via DHCP INFORM
- Automatic application upgrade/downgrade, network file transfer client
- Automatic provisioning support for individual images
- Automatic bootBlock upgrade
- New image format for individual images
- Remote reboot via SIP NOTIFY with check-sync for phone updates
- Remote reboot using HTTP (requires license)
- Provisioning server redundancy with

DNS-A Records

- Quick setup button
- SIP server redundancy (DNS SRV, static) SIP server fall-back for survivability (DNS, static DNS)
- SIP proxy/SBC registration
- Survivable Remote Site Telephony (SRST)
- Redundant boot server support (DNS name discovery, URL lists, georedundancy, re-registration on fail over)
- Web configuration utility
- Host name for DHCP registration
- Distributed polling for software upgrades
- Support for TR-069 provisioning

Security features

- User and administrator passwords
- Per-method request challenges
- Configurable digest realm
- Serialized user-agent header
- Signed image support
- HTTPS secure provisioning and BootROM provisioning
- SIP Transport Layer Security (TLS) - mutual authentication, configurable cipher suites
- SRTP media encryption
- SIP NTLM authentication (basic, version 2)
- Network DoS attack mitigation (ICMP flood, broadcast storm, VLAN filter, multicast filter)
- OpenSSL library
- Configuration file downloadable custom TLS certificates
- Device certificates
- 802.1x Authentication and EAPOL
- Phone lock
- JITC latency management via configuration
- Custom device certificates
- Encrypted configuration files
- Support for URL syntax with password for boot server
- User profiles
- Multiple TLS profiles

Interoperability and integration

- Interoperability with a wide variety of SIP call servers (refer to Polycom's Partner Program for additional information).
- Windows Messenger 5.1 and Office Communicator support for presence and instant messaging
- C-link integration, SoundStation® IP 7000 daisy chaining, provisioning over c-link, video via Polycom HDX®, Polycom SoundStructure® solutions
- Exchange Calendaring (V VX 1500, V VX 500, SpectraLink 8400 phones)
- Polycom Desktop Connector (V VX 1500 V VX 500 business media phones)
- CMA Management (V VX 1500 phone)

Microbrowser

- Idle browser with interaction
- Table support
- Check boxes and radio buttons
- XHTML browser for application
- Push API, telephony XML API (Webkit browser (V VX))
- HTTP push
- SIP signaling associated web content (SSAWC) - open a URL provided in a SIP message
- API telephony event: successful line registration
- Microbrowser invokes reboot or reconfiguration
- Ability to control allowable characters in the input fields
- Display custom soft-keys in the input fields
- Ability to use the dial-pad to select entries from a list
- Play .wav files while off-hook using speakerphone

Protocol compliance

- RFC 3261: SIP basic (UDP, TCP, TLS, ETSI TS 102)
- RFC 3262: PRACK
- RFC 3263: DNS
- RFC 3264: SDP
- RFC 3265: NOTIFY
- RFC 3515: REFER

- RFC 3891: SIP replaces header
- RFC 3892: call transfer
- RFC 3842: message waiting summary and indication event
- RFC 4235: INVITE-initiated dialog event package
- RFC 3856: presence event package
- RFC 3325: asserted identity
- RFC 3311: UPDATE method
- RFC 3361 Dynamic Host Configuration Protocol (DHCP-for-IPv4) Option for Session Initiation Protocol (SIP) Servers
- RFC 2308: negative caching of DNS queries (DNS NCACHE)
- RFC 1738: uniform resource locators (URL)
- RFC 4662: event notification extension for resource lists
- RFC 3711: SRTP media security
- RFC 3389: RTP payload for comfort noise
- RFC 1889, 3550: transport protocol for real-time applications
- RFC 1890, 3551: RTP profile for audio/video conferences with minimal control
- RFC 3555: MIME type registration of RTP payload formats
- RFC 2833: RTP payload for DTMF digits, telephony tones, telephony signals
- RFC 3611: RTP control protocol extended reports (RTCP-XR)
- RFC 5104: fast video update via RTCP
- RFC 3925: DHCP option 25
- RFC3266 Reason Header Field
- RFC3911 SIP Join Header
- RFC3959 Early Session Disposition Type for SIP
- RFC 3984 RTP Payload Format for H.264 video
- RFC4575 SIP Event Package for Conference State
- RFC5952 IPv6 Text Representation
- RFC5954 Essential Correction for IPv6 ABNF and URI Comparison in RFC 3261
- TS24.229 3GPP IMS Base Spec (partial)
- RFC2460 Internet Protocol Version 6 Specification

- RFC4291 IPv6 Addressing Architecture
  - RFC4861 Neighbor Discovery for IPv6
  - RFC4862 Multimedia Terminal Adapter Management
  - RFC4443 Internet Control Message Protocol (ICMPv6)
  - RFC1981 Path MTU Discovery for IPv6
  - RFC6157 IPv6 Transition in SIP
  - RFC3266 Support for IPv6 in Session Description Protocol (SDP)
  - RFC3315 Dynamic Host Configuration Protocol for IPv6 (DHCPv6)
  - RFC3646 DNS Configuration options for DHCPv6
  - RFC3736 Stateless DHCP Service for IPv6
  - RFC3319 DHCPv6 Options for SIP
  - RFC4075 SNTP Configuration Option for DHCPv6
- System management**
- Event and error logging
  - Syslog reporting (TLS)
  - Menu-driven hardware diagnostics
  - CPU, DSP CPU, network load, memory graphs
  - Upload tech-support information
  - Voice quality metrics (RTCP-XR and SIP reporting)
  - Diagnostic menu configuration file statistics
  - Upload current configuration files to boot server for diagnostics and troubleshooting
  - User accessible network diagnostics
  - Reset phone to factory defaults
- Warning and error notifications management
  - Improved boot-up behavior
- Localization**
- Unicode multilingual user interface: English (US, Canada, UK), Danish, Dutch, French (France, Canada), German, Italian, Norwegian, Polish, Portuguese, Russian, Slovenian, Swedish, Chinese (simplified and traditional), Korean, Japanese
  - Downloadable and customizable UI text strings (V VX 600 and V VX Camera)
  - Voice Quality monitoring-compliant with RFC6035
  - Configurable fonts and indicators Local Features
  - Call logs/call lists (placed, received, missed, speed dial)
  - Configurable volume reset behavior
  - Local, group and corporate (LDAP) contact directories
  - Context sensitive volume control
  - Flexible line appearance (one or more line keys can be assigned per line extension)
  - Handset, headset, and speakerphone
  - Configurable idle display image
  - Microphone mute
  - Missed call notification
  - Configurable time and date display
  - Multiple line registrations per device
  - Soft key driven user interface
  - Screen capture utility
- System status monitoring
  - Music on hold
  - Multi-stage dialing
  - Voicemail (message waiting notification/indicator)
  - Enhanced feature keys (EFK) - speed dials, configurable soft keys, macros
  - Statically controlled BLF, call park/retrieve
  - Configurable, customizable call progress tones (.wav file)
  - Local dial plans/digit map
  - Configurable feature keys
  - Customizable audio sound effects (.wav)
  - Power-on welcome sound effect
  - Notification profiles (V VX 500, V VX 600, V VX Camera and V VX 1500)
  - Audio/video toggle (V VX500, V VX600 and V VX Camera)
  - Improved call list management (V VX 500, V VX 600, and V VX 1500)
  - Persistent ring volume after reboot
  - USB keyboard support (V VX 600 and V VX Camera)
  - ESK and EFK do not require a reboot
  - Next-gen contact directory
  - Predictive dialing (V VX500, V VX600 and V VX Camera)
  - Flexible home screen layout (V VX 500, V VX 600 and V VX Camera)
  - Flexible line key assignment
  - Selectable Modern and Classic UI Themes (V VX 500 and V VX 600)

## About Polycom

Polycom helps organizations unleash the power of human collaboration. More than 400,000 companies and institutions worldwide defy distance with video, voice and content solutions from Polycom. Polycom and its global partner ecosystem provide flexible collaboration solutions for any environment that deliver the best user experience and unmatched investment protection.

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