

### **DATA SHEET**

# Polycom UC Software

# Feature-rich software for IP-enabled devices running in Open SIP and Microsoft environments

### Call and conference with confidence

Polycom UC Software is a leading unified communications (UC) software platform for open standards-based communication. Whether your teams engage your customers via IM, video conferencing or voice communications, UC Software brings it all together at the desktop or on your phone with all the features you need.

### Interoperability and investment protection

Polycom UC Software works with more than 60 industry-leading call control platforms. No business wants to be locked in with proprietary phones. Open standards-based phones are the answer and Polycom UC Software makes it possible. Our software delivers on features—over 500 features delivered or enhanced over a succession of software releases. It's easy to upgrade and stay current with the latest feature innovations. Industry standards and protocols change, too. IPv4 is moving to IPv6. Security is a must—and TLS 1.2 is not supported on IP phones that you bought 8 years ago. Polycom customers who originally bought Polycom SoundPoint IP phones because of their reliability and feature performance can easily upgrade to the more powerful, more current and more capable Polycom VVX phones, and stay with the service providers they rely on and trust. Polycom UC Software makes the transition easy.

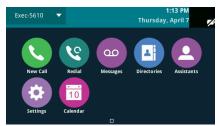
### Desktop productivity is feature-driven

Businesses who are moving from legacy proprietary PBX systems to cloud-based and hosted solutions have more choices, but they still want a mix of traditional phone features alongside the new features that increase productivity. How a phone sounds and performs in a noisy office may be at the top of your list or maybe it's "how easy it is to join my next scheduled meeting." Feature-rich headsets on phones, remote workers, web sign-in, desk phones connected via Wi-Fi, hybrid registrations—there's a growing list of features to consider. Polycom UC Software delivers phone performance that makes your employees more productive. And Polycom UC Software on the phones makes it easier for IT to troubleshoot and manage.

Access at-a-glance—View and managing Exchange calendars/contacts. Update your presence status on the phone's large touchscreen display (VVX 500 and 600 series). Click-to-join calls from the meeting reminder prominently displayed on your phone. Easy search to corporate directories—it's right there where you need it on your always-on, always-connected phone.

Open and expandable—Polycom UC software delivers advanced productivity features to save time on everyday tasks using standards-based open application protocols. This open-standards approach, combined with a set of REST APIs, provides third-party developers with maximum flexibility to build and customize unique features for customers in a wide range of industries.







#### 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 Skype for Business
- · Compatible with IPv6 when used in Open SIP deployments

Hear the difference—The award-winning Polycom Acoustic Fence feature helps in noisy environments like call centers and open offices. Acoustic Fence removes the background office noise that your caller would otherwise hear. They no longer have to struggle to hear what you are saying over the background noise at your location. And while you are on conference calls, you can stay focused on your meeting knowing that you don't constantly need to manually mute and unmute your phone.

PC-phone integration—Users 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) gives your team convenient access to the screens of their desk phones by way of the mouse attached to their PCs.

#### UC Software for federal

Polycom UC Software is the best choice for delivering advanced telephony features in Federal environments. Polycom UC Software provides support for critical U.S. federal security standards such as FIPS 140-2 on all VVX models except VVX 501 and VVX 601. UC Software also supports AS-SIP. Along with robust security and broad feature support, UC Software running on VVX business media phones provide the best feature set with the highest level of security required for critical U.S. federal deployments.

### 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 features like.

- Enhanced Call Park—Park a call directly to a contact's line with audio and visual indication and retrieve the parked call without needing to remember the feature access codes
- Directory integration—Unified presence information with the BroadTouch Business Communicator (BTBC) client applications on other devices; i.e., work and mobile numbers
- Search and display all BroadSoft directories—Group, Group Common, Enterprise, Enterprise Common and Personal directory contacts
- UC-One presence—Unified presence information for contacts 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—Improved call screening and filtering, and management of executive calls by the assistant
- BroadSoft flexible seating—Improves on the existing hoteling feature; when a user logs into a host phone, all aspects of the configured guest profile are applied to the host phone
- · Qualified UCS latest release against BroadWorks R21

### BroadWorks UC-One integration

- BroadWorks server-based call waiting
- · BroadWorks server-based redial
- · BroadWorks server-based DND
- · BroadWorks server-based call forward

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

- Broadsoft User Experience Theme
- Presence
- BS contact directory search
- · Filter search
- Favorites

## Polycom Skype for Business integration

Polycom UC Software has delivered over 70 features for Skype for Business (many of them carried over from Microsoft Lync). Most of these features are still supported on VVX phones registered to Microsoft Teams through a Teams gateways service provided by Microsoft. Phones supported on Microsoft Teams through the gateway service include the VVX 201, 301, 311, 401, 411, 501 and 601. The newest VVX 250, VVX 350, and VVX 450 are not supported on Microsoft Teams through the gateway service. Please note, phones running UC Software connected to Teams are not running Microsoft Teams natively.

### UC Software hybrid line registration

VVX phones support the hybrid line registration feature that enables you to register to a Skype for Business server on one line and an OpenSIP platform on your other lines. This feature was first introduced on Polycom Trio. It was added to VVX phones in UCS release 5.8.0.

## Better together headset features

The combination of a Plantronics headset on a Polycom phones provides many benefits to employees—both in the office and for remote workers. Poly is actively working to deliver new phone/ headset integration features that will benefit users. With support of Plantronics HID 1.0 in UC software 5.9.0--Mute, Volume, Call Answer/End, Call Hold/Resume, Multiple Call Management are now synced across VVX and the Plantronics headset. With UC Software release 6.0.0, we deliver "Plantronics Hub-like" headset configuration on VVX 501 and VVX 601 with a limited selection of Plantronics headset models. There are plans for support for more VVX phone models and Plantronics Headset models in future releases. And stay tuned for more phone/headset features to come.

### Easy to manage

With Polycom Device Management Service (PDMS) and Zero Touch Provisioning, it's easy to bring all the features you need to your phones. Deploy your unique predefined phone feature profiles at a department, location or country level or schedule phone firmware upgrades. UC Software and our management tools work together to make IT's configuration and troubleshooting tasks easier.

### Skype for Business enhancements

- Common Area Phone
- · Hot Desking
- Web Proxy Auto Discovery (WPAD)
- Skype for Business Cloud PBX interoperability (Office 365)
- Skype for Business interoperability
- Better Together over Ethernet (BToE)
- Shared Line Appearance (Boss/Admin)
- · Address Book Service (ABS)
- · Audio media path support with BToE
- · Smart Search
- Flexible Line Keys
- · Music on Hold
- Calendar Support / Meeting Reminders
- · Visual Voicemail
- Federated calling between networks
- · Branch office resiliency
- · Exchange calendar integration
- · Pin authentication
- · Enhanced Presence support
- · Active Directory support
- Skype for Business/Lync in-band device update
- PIN Authentication—Makes use of ADAL functionality on the PC to improve the security of the phone and simplify logging in using a PIN
- Multiple Emergency Dial Plans
- · Hot Desking/Common Area Phone
- · Web Proxy Support
- · BToE Static Pairing
- Skype for Business look and feel
- Skype for Business Hybrid Registration
- kype for Business Simplified PSTN Failover/Failback
- · Reverse Name Lookup
- Boss-Admin Workflow Enhancements
- Web Sign-In for Skype for Business onpremise deployments
- "Guest" Softkey Customization
- BToE default support for TLS 1.2

# Polycom UC Software complete calling features

- Automatic off-hook call placement (hot dialing)
- Call media recording/playback
- · Call timer
- · Call hold timer
- Call waiting (visual, audible, per-line)
- Call Forward and 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)
- · Call park/retrieve
- Busy lamp field (BLF)/Attendant console
- Enhanced Busy Lamp Field (one-touch call park, call retrieve or blind transfer)
- Directed call pickup
- · Group call pickup
- Hold, resume, answer, conference remote control
- Hunt group—sequential calling
- Last call return
- Key System Emulation
- Shared call appearances (SCA)—shared line on multiple phones
- Shared call/bridged line appearance

- Audible call ended indication
- Auto-answer a page with a muted microphone
- PTT and Multicast group paging
- Emergency Instant Message Display
- Enhanced Feature Key Macro Actions
- Configurable volume reset behavior
- Local, group and corporate (LDAP) contact directories including support for OpenLDAP
- · Context sensitive volume control
- Flexible line appearance
- · 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 (VVX 500, VVX 600, VVX Camera and VVX 1500)
- Audio/video toggle (VVX 500, VVX 600 and VVX Camera)
- Improved call list management (VVX 500, VVX 600, and VVX 1500)
- Persistent ring volume after reboot
- USB keyboard support (VVX 600 and VVX Camera)

- ESK and EFK do not require a reboot
- Next-gen contact directory
- Verify missed call tracking on non-shared lines
- Predictive dialing (VVX 500, VVX 600 and VVX Camera)
- Flexible home screen layout (VVX 500, VVX 600 and VVX Camera)
- · Flexible line key assignment
- Selectable Modern and Classic UI Themes (VVX 500 and VVX 600)
- Call logs/call lists (placed, received, missed, speed dial)

### Audio processing

- SILK codec (only for VVX 501 and 601)
- Audio Codecs: G.711, G.729AB, G.722, G.722.1, G.722.1 Annex C, iLBC, Siren 7 (Skype for Business), Siren 14, Siren 22, L16/8000/16000/32000/4, 4100/48000, Opus
- · 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
- Polycom Acoustic Fence (with user control)

### 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
- Two-Way Active Measurement Protocol (TWAMP) per RFC5357
- 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 server based 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
- · 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
- · Wireless connectivity via ObiWiFi5G
- Collection of log files on USB for troubleshooting

# Better together Plantronics headset features

- Plantronics HID 1.0 support (Mute, Volume, Call Answer/End, Call Hold/ Resume, Multiple Call Management)
- Headset Device Management (VVX 501 and 601 with certain headsets)

#### Microbrowser

- · Idle browser with interaction
- Table support
- · Check boxes and radio buttons
- XHTML browser for application
- Push API, telephony XML API (Webkit browser (VVX)
- HTTP push
- SIP signaling associated web content (SSAWC)—open a URL provided in a SIP message
- Microbrowser invokes reboot or reconfiguration
- 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

### Security features

- Enhanced 911 Location support
- Support for FIPS 140-2 security protocols (All VVX models EXCEPT VVX 501/601)
- User and administrator passwords
- Privacy option for Call Logs and Contacts
- 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
- Support for TLS 1.0/1.1/1.2
- · 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
- AS-SIP (Assured Services—SIP)/ MLPP (Multilevel Precedence and Preemption)
- Voice over Secure IP (Encrypted RTP media streams)
- Session Traversal Utilities for NAT (STUN)

## 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 (VVX 1500, VVX 500, SpectraLink 8400 phones)
- · Polycom Desktop Connector
- CMA Management (VVX 1500 phone)
- REST APIs for 3rd party application development
- uaCSTA (Basic and Minimal Profiles per TR-087) for PC-based call management
- uaCSTA Advanced Features (conference, device snapshot, consultation call and transfer call)

## 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
- Basic Device Monitoring via Polycom ObiTalk cloud service

### 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 (VVX 600 and Polycom
   VVX Camera)
- Configurable fonts and indicators local features

# Video features and processing (VVX 1500 only)

- · Video on VoLTE networks
- · 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

### Video features with Eagle Eye Mini Camera

(Polycom VVX 601 v 5.87.1 or above) (Polycom VVX 501 v 5.8.1 or above)

- H.264 Constrained Baseline Profile support
- Packetization Mode 1 support
- Automatic exposure and white balance
- · Autofocus, 8cm-infinity
- EagleEye Mini USB camera firmware updates through VVX software updates

### Protocol compliance

- RFC 3261: SIP basic (UDP, TCP, TLS, ETSI TS 102)
- RFC 3262: PRACK
- RFC5357: TWAMP
- RFC 3263: DNS
- RFC 5357: TWAMP
- 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 IAdapter 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
- RFC6035 Voice Quality monitoring-compliant

### Learn more

For more information on Polycom UC Software, visit

www.polycom.com/uc-software.

