

Polycom® Unified Conferencing Solutions

Any Application, Any Endpoint Device, Any Network

Benefits

Enables concurrent delivery of multiple conferencing types (scheduled and on-demand) – On the same platform with a single management system, providing significant cost benefits

Users can connect into the same conference and experience the same features – Regardless of network connection or endpoint device, with a single dial-in number

Reliable connectivity is guaranteed – With industry-leading automatic transcoding, ensuring users connect at optimum quality

Open, flexible platform – Allows customers to choose the precise configuration they want, with easy upgrades to new technologies

Customize and personalize your video conferencing – With advanced features such as Continuous Presence and Click&View™

The only solution that supports both legacy applications and future environments – For all your conferencing application needs today and tomorrow

Polycom's Unified Conferencing solutions provide the ultimate in multi-media conferencing and collaboration for both legacy applications and future environments.



Polycom Unified Conferencing is the first solution in the industry to offer full-featured voice, video and Web conferencing applications on a single platform, with an advanced set of applications and services that provide a simple yet unique experience for the end user.

Polycom's vision of Unified Conferencing - delivering video, voice and data conferencing transparently to the user on one platform - is here today with the MGC™ Unified Conferencing Bridge; the powerful ReadManager™ LX100 scheduling and management system; and fully integrated end-user applications and endpoint devices that work together over any network.

Users today are surrounded by an ever-growing number of complex systems, each with their own set of user interfaces and commands. Polycom simplifies the conferencing experience by providing a platform that was designed from the outset to deliver a full range of media services over disparate networks. This enables users to be presented with consistent, repeatable and easy-to-use conference features, regardless of endpoint device or whether they are connecting via voice, video, PSTN, ISDN, IP (H.323 or SIP).

Unified conferencing truly becomes as simple as making a phone call...

The ultimate voice and video experience to access the power of Polycom unified collaborative communications solutions.

With the greatest breadth and depth of integrated video, voice, and Web solutions, only Polycom delivers the ultimate communications experience. Our market-leading conferencing and collaboration technologies, supported by world-class service, enable people and organizations to maximize their effectiveness and productivity. Add to that the most experience and proven best-practices in the industry, and it's clear why Polycom has become the smart choice for organizations seeking a strategic advantage in a real-time world.



Connect. Any Way You Want.

What is Polycom Unified Conferencing?

Polycom's Unified Conferencing provides the ultimate multipoint voice, video and web conferencing experience that takes conferencing to a new level. Driven by today's distributed, extended and mobile organizations, the ability for end users to initiate any type of conference – from any type of network at any time – is provided today by the Polycom MGC Unified Conferencing Bridge.

What are the conferencing features that voice and video participants experience in a Polycom Unified Conference?

A Polycom Unified Conference experience starts with the capability to support both scheduled and on demand conferences with attended and/or unattended scheduling and conference management support. All voice and video conference participants enter the same entry queue to the conference, all hear the same conference greeting and use the keypad or keyboard to enter the same conference PIN code, all participants hear the same IVR message prompting them to record their names for announcement of their names during entry and exit from the conference and for roster roll calls during the conference. Once all voice and video conference participants have entered the conference, any combination of conference features can be used using IVR/DTMF to create a more effective, more productive conference.

What are the unique video features available with unified conferencing?

Polycom revolutionizes multipoint video conferencing by providing premier video quality, advanced Continuous Presence, and Polycom's revolutionary Click&View end-user DTMF control of personal video layouts. Premier video quality with unique 14 kHz audio creates a distance meeting environment that is more natural, spontaneous and productive.

Highlights

- Unique multi network solution - Connect any ISDN and/or IP (H.323, SIP) endpoint
- Full, automatic transcoding - Endpoints connect at their optimal capabilities
- Customize your meeting with advanced Continuous Presence - Choice of 27 different layouts, custom background colors, custom borders, and custom speaker highlights
- Personalize your video conferencing experience with Click&View - Manage your personal view of the conference from any endpoint with a simple, intuitive interface
- Data collaboration support - Choice of H.239 or T.120 data collaboration, ISDN, or IP
- H.261, H.263, H.264 video algorithms
- 30 frames-per-second, 60 fields-per-second video frame rate

Personalize Your Experience with Click&View

Polycom's revolutionary Click&View feature empowers each participant in a Continuous Presence conference to select their personal CP layout to view during a conference using their endpoint keypad or keyboard. An intuitive GUI provided by the Polycom MGC enables conference participants to:

- Change the conference CP layout
- Change your personal CP layout
- Return to the conference or previous personal layout
- Request operator assistance

Advanced Continuous Presence Features

- Available for any network type – IP or ISDN
- 27 different layouts available including landscape or portrait layouts
- Customizable video borders, speaker highlight, and background colors
- Change layouts on the fly
- Modify each Continuous Presence window – fixed or voice-activated
- Supports sites running up to 30 fps
- Low video latency

Basic Continuous Presence (Conference On a Port)

- Basic CP only requires one video module port resource to support a conference that can scale up to the total system port capacity
- 27 CP layout options including landscape or portrait layouts, every participant site views the same layout
- Click&View can be used to change the CP layout for the conference
- Customizable video borders, speaker highlight, and background colors
- Site names for each participant site displayed in a CP layout
- Fixed and voice switched CP frames per participant site

IP SW Continuous Presence

- Standard feature in any MCU with IP configuration
- Two layouts available: Two-way and a traditional quad layout
- Flexible layouts – Change layouts on the fly
- Flexible windows – Fixed windows or voice-activated windows
- High quality IP Continuous Presence with 30 fps support
- Conference capacity up to the IP port capacity

What are the unique voice features available with unified conferencing?

Audio support for voice, video, and Unified Conferencing

- G.711, G.722, G.722.1, G.723, G.728, G.729a
- Siren™ 7, Siren 14

Conference Quality Features

- SilenceIT mutes music on hold and noisy lines automatically in an unattended conference
- Noisy line detection eliminates unwanted distractions
- Transcodes all audio algorithms
- Integrated echo cancellation

Security

- PIN code access and conference lock
- Chairperson's presence is required for active conference
- Entry and exit tones
- Roll Call plays the participant's name upon entry and exit
- Attendant managed access for participant greeting and verification
- Dial-out to defined numbers eliminates unwanted entry
- Certified integrated firewall for VoIP to VoIP connectivity
- CLI validation for predefined dial-in participants

Conference Control

- Volume control and audio mix depth
- DTMF and multilingual IVR
- Question and answer sessions
- Voting and polling
- Automatic conference termination and extension

Standard Polycom Voice Features

- Create/start/terminate conference
- Connect/disconnect party – dial-in, manual dial-out, and blast dial-out
- Mute/unmute/set participant's volume
- DTMF detection
- IVR service messages
- Entry/exit/end time alert tones
- Conference auto terminate and auto extend
- Automatic allocation of conference passwords

DTMF Polycom Voice Features

- Mute, Unmute, Mute 'all-but-me'
- Put/Release conference on hold
- Lock conference
- Request attendant assistance
- Increase/Decrease self volume
- Provide billing code
- Voting/Polling
- Questions and Answers sessions
- Invite participants by chairperson
- Help menu of DTMF options

What are the content presentation and collaboration options that are supported in a Polycom Unified conference?

Polycom Unified conference supports a range of content presentation and collaboration options that enables the customer to select the solution that best meets their requirements and conference application.

T.120

- In-band T.120 support
- ISDN, IP And ISDN/IP multipoint video conferences
- Point-to-Point ISDN-to-IP gateway conferences

H.239

- Full transcoding of proprietary implementations
- View people and content at the same time
- High resolution display of content
- ISDN, IP and ISDN/IP multipoint video conferences

Polycom Web Office™

- Web based content presentation and collaboration
 - Integration with Microsoft® Windows® Messenger

How do I deploy and manage Polycom Unified Conferencing?

Polycom Unified Conferencing can be deployed on a single MGC-25, MGC-50 or MGC-100 platform. On a single MGC platform, conferencing resources are dynamically allocated to conferences and/or participants. The MGC architecture enables you to simply add the appropriate resources when your requirements grow or change. This leverages your investment and lowers your cost of ownership. Duplicate investments in equipment and infrastructure to support voice and video conferencing are no longer required.

Conference scheduling and device management is simplified with the introduction of ReadManager LX100, a web-based network appliance with a "wizard" interface for simplified conference set up and management. End users can benefit from familiar scheduling interfaces such as Microsoft Outlook® and IMB® Lotus Notes®.

What system resources are shared on the MGC between voice, video and unified conferences?

Both hardware and software resources can be shared to support voice and video conferences on the MGC Unified Conferencing Bridge. The hardware resources that are shared/leveraged include:

- MGC-25 Conferencing Platform
- MGC-50 Conferencing Platform
- MGC-100 Conferencing Platform
- Audio+ 12/24 Port Resource Module
- Audio+ 24/48 Port Resource Module
- Audio+ 48/96 Port Resource Module
- Net 2T1/E1/PRI Resource Module
- Net 4T1/E1/PRI Resource Module
- Net 8T1/E1/PRI Resource Module
- Net 2 T1 CAS
- Net 4 T1 CAS
- Net 8 T1 CAS
- IP+ 12 Port Resource Module
- IP+ 24 Port Resource Module
- IP+ 48 Port Resource Module

The software resources that are shared/leveraged include any of the following:

MGC MCMS System Software

- Multipoint Conferencing
- Gateway Conferencing

Full, Automatic Transcoding

- IP and ISDN network protocols
- Network speed – 128 Kbps to 2 Mbps
- Audio and video algorithms
- Video resolution and frame rates
- Data rates

Unified Conference Suite

- IVR/DTMF
- Greet & Guide
- Single Number per Conference
- Virtual Meeting Rooms
- Auto Add Participants
- Auto Extend Conference
- Auto Terminate Conference

IP Packet Commander

- Duplicate Packets
- Audio Optimization
- Packet Synchronization
- Jitter Correction

What are the requirements to upgrade a MGC-25, MGC-50 or MGC-100 to Unified Conferencing capability?

Any configuration of the MGC-25, MGC-50 and MGC-100 supporting voice and video conferencing can be upgraded to support full capabilities of Polycom Unified Conferencing.

Upgrading a MGC-25 to Unified Conferencing is a simple software upgrade.

Upgrading a MGC-50 or MGC-100 to Unified Conferencing capabilities requires minimum release 5.0 of the MGC operating system software. Support for the Unified Conference Suite software is also required. Audio+ 24, 48 or 96 port resource modules with IVR/DTMF support will need to be added, unless these resources and the extra capacity needed are already available on the system.

If ISDN and/or IP network interfaces and services are not already available to support the addition of voice or video conferencing, then these resources need to be added.

The migration path to Unified Conferencing on the MGC-50 and MGC-100 is as follows:

1. ISDN Video System: PSTN voice conferencing capability included. Add IP video and VoIP functionality by configuring IP resource modules. Result: Multi network Unified Conferencing MCU.
2. IP Video System: VoIP conferencing capability included. Add PSTN voice conferencing capability by configuring ISDN Net modules. Now, to configure ISDN video capability, simply add Mux modules. Result: Multi network Unified Conferencing MCU.
3. VoicePlus : PSTN voice conferencing capability only. Add ISDN video conferencing capability by configuring Mux modules. Add IP video and VoIP functionality by configuring IP resource modules. Result: Multi network Unified Conferencing MCU.

Do I have to order a system today that supports both voice and video conferencing in order to receive the benefits of Unified Conferencing?

A MGC-25, MGC-50 or MGC-100 system configuration that supports voice and video conferencing and supports the Unified Conference Suite software can deliver the full benefits of Polycom Unified Conferencing. Even if the customer does not plan to use the voice conferencing capabilities of a Unified Conferencing MGC, support for full voice conferencing features with IVR/DTMF end user interface, delivers unique added value and productivity to video only conferences. The customer can start at any level of voice and/or video configuration of a MGC and then easily upgrade to Polycom Unified Conferencing when required.

What is the API to support Unified Conferencing?

There is a comprehensive XML API available for custom software integration. This API is consistent for all services delivered on the Polycom MGC-25, MGC-50 or MGC-100 chassis. This consistency ensures that existing customer or third party applications can be quickly upgraded to support Unified Conferencing capabilities.

What are the key features of the MGC Unified Conferencing Bridge?

Multi-network support for voice, video, and unified conferences

- IP (H.323 & SIP) and ISDN (H.320) video
- PSTN and VoIP voice

Flexible deployment options

- Choice of MGC platforms
 - MGC-100 – Customizable, large enterprise/carrier-class platform
 - MGC-50 – Customizable, enterprise platform
 - MGC-25 – “Plug and Play” value, compact platform
- Centralized or distributed network deployments

Transcoding

- MGC-25, MGC-50 and MGC-100
 - Audio Algorithms G.711, G.722, G.722.1, G.723, G.728, G.729a, Siren 7, Siren 14
 - Networks – IP/H.323, ISDN/H.320
 - Network Speed – 128 Kbps up to 2 Mbps
 - Resolution – QCIF or CIF
 - Video Algorithms – H.261, H.263, H.264
 - Frame Rate – 7.5 fps-30 fps – 60 fields-per-second
 - Data Rates – 6.4-46.4 Kbps MLP, 64-128 Kbps HMLP

Unique IP QoS Support

- Packet Commander reorders and synchronizes incoming IP packets for video and voice calls
- IP Error Resiliency
 - Dynamic jitter buffer for minimum lip synch
- IP Precedence Support
- IP DiffServ Support

System Security and Firewall

- Works with existing data firewalls and securely handles IP voice and video traffic between private and public IP networks.
- The MGC platform firewall solution is Check Mark certified

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