



POLYCOM®

Communication and Collaboration Technologies Glossary

A B C D E F G H I J L M N P Q R S T U V W

A

access points (AP) [or wireless access points, (WAP)]

A device that allows wireless communication devices to connect to a wireless network using Wi-Fi (IEEE 802.11), Bluetooth or other like standards.

Acoustic Clarity Technology

Patented acoustic technology from Polycom that allows for natural, simultaneous two-way conversations.

acoustic echo cancellation

Technology that uses complex algorithmic procedures to compute speech models and predict, adapt to and cancel echoes.

adaptive jitter buffers

Jitter is an unwanted variation in a telecommunications signal. Jitter buffers counter jitter introduced by queuing in packet switched networks to ensure the continuous audio or video transmission over a network. 'Adaptive' refers to the ability to adjust the size of the jitter buffer based on the measured jitter in the network, i.e., if the jitter increases, the buffer becomes larger and can store more packets; if the jitter decreases, the buffer becomes smaller and stores fewer packets.

analog phone

Analog phones use the first telephone technology which converts air vibrations into analogous electrical frequencies. Even today, unless a key telephone system, digital PBX, or voice over IP (VoIP) is used, most homes and small offices continue to use analog phones.

application development environment

The set of processes and programming tools used to create a program or software product.

aspect ratio

The width-to-height ratio of a video or film image.

Assisted Operations Service (AOS)

A Polycom service offering that streamlines back-end management for Polycom Immersive Telepresence solutions.

attendant console

A telephone station that is part of a private branch exchange (PBX) or other private telephone system. They usually have a lot of programmable keys and allow attendants to hold, transfer, or park incoming calls. IP-PBXs frequently employ software-based attendant consoles which provide similar functionality on a computer screen.

attended audio

An operator-facilitated conference telephone call.

audio conference, audio conferencing

See teleconference.

automatic camera tracking

Automatic camera tracking in video conferencing and telepresence communications uses array of microphones or ultrasonic emitter combined with advanced algorithms in Polycom equipment to identify the position of and follow/track participants as they move in the room during a video call.

B**bandwidth**

Capacity of a network or network segment to receive and transmit video, audio, and data.

baud rate

The number of distinct symbol changes (signaling events) made to a transmission medium per second in a digitally modulated signal or a line code; sometimes called modulation rate.

Bluetooth

A short-range wireless transmission technology for networking of multiple devices. Due to its limited range, Bluetooth is used for connecting devices that are close to each other, for example, a Bluetooth headset and a Bluetooth-enabled mobile phone.

C**caller ID**

A popular feature in Central Office switches, IP soft switches, PBXs, IP-PBXs, and video communication systems that allow the user ("subscriber" in service provider terminology) to identify who is calling. The information can include caller's phone number, caller's name, or both. Modern telephones and soft clients expand the definition of Caller ID by associating pictures and ring tones with callers, so that the user can immediately recognize who is calling.

Call Manager

A new term for an IP-PBX. When PBXs started supporting IP devices, there was no special term for these products and they were simply called 'IP-PBX'. Later, vendors started using the term "Call Manager" instead to distance themselves from the PBX legacy.

chroma key technology

A technique for mixing two images or frames together, in which a color (or a small color range) from one image is removed (or made transparent), revealing another image behind it. Chroma key technology is commonly used for weather forecast broadcasts in which the broadcaster appears to be standing in front of a large map, but is actually simply standing in front of a large green or blue backdrop. The Polycom HDX™ made chroma key technology available and affordable for everyone by introducing the Polycom PeopleOnContent™ feature.

CIF (Common Intermediate Format)

CIF stands for common intermediate format, a video format used in video conferencing systems that supports both NTSC and PAL signals. CIF is part of the ITU H.261 video conferencing standard.

closed captioning

Closed captioning allows persons with hearing disabilities to have access to video viewing by displaying the audio portion of a meeting, a television program, or a movie as text on the screen.

codec

A device or software that enables compression and/or decompression for digital video and audio.

Common Intermediate Format (see CIF.)**Computer Calling Kit**

The kit connects Polycom SoundStation2™ or Polycom SoundStation2W™ conference phones to a computer running a soft client such as Polycom CMA Desktop, Polycom PVX, or another soft client such as Skype.

conference bridge, video conference server, or MCU (also see: voice conference server)

A server on a video network that allows video endpoints to participate in a multipoint conference. "MCU" stands for Multipoint Conferencing Unit; the term is used in the ITU-T H.323 standard and technical specifications. "Conference bridge" is a colloquial term used in conversations. The term "Conference server" is better aligned with the modern media server/media controller architecture that is widely deployed in Voice Over IP and was first introduced by Polycom into video conferencing. (The Polycom Distributed Media Application™ (DMA™) 7000 is the media controller while Polycom RMX 2000® is the media server optimized for video conferencing.)

Conference Composer software

Design and configuration software that is supplied with Polycom® Vortex® that makes it easy and intuitive to configure Vortex products; share configuration files; and create presets, macros, and logic assignments.

conference management

The ability to manage conference calls, that is, schedule conferences, monitor who joins the conference, and be able to add and remove participants. Most of these features are implemented in the conference server (MCU) and are available to the "conference chairperson." The features are often used in operator-assisted conferencing and immersive telepresence where the operator or the Video Network Operating Center (VNOC) can use conference management to provide the best experience for all participants.

conference management software

Software that provides the functionality described in "Conference Management," above, for example Polycom Converged Management Application™ (CMA™) 5000.

conference phones

Audio or video conference telephones that allow multiple participants to communicate and collaborate. Conference phones have higher quality speakers and microphones than regular desktop telephones and are specifically designed for conference room acoustics.

conference scheduling software

Server software that allows scheduling conference calls. It is a subset of 'Conference Management Software' and usually allows access over a web interface and through office collaboration tools such as Microsoft Outlook and IBM Lotus Notes.

conferencing application server

A carrier grade audio conferencing solution, usually purpose-built for service providers.

conferencing network

A group of stations or "endpoints" (telephones, computers, video screens, or other devices) connected by communications facilities for exchanging information. Connection can be permanent using cables, or temporary, using telephone or other communications links. The medium for transmission can be physical using fiber optic cable, or wireless using with satellite link-up.

conferencing platform (see Conference Bridge and MCU)

content

Any data such as presentations, spreadsheets, and schematics that can be displayed and presented to far side endpoints, or received and view on the near side.

context-dependent softkeys

As opposed to traditional navigation keys that have only one label, for example, "Hold," soft keys allow the endpoint or telephone to change the labels while the user makes selections in the user interface. The softkeys therefore have different labels and different functions depending on the user input (context).

continuous presence video

A feature in multi-point conferencing that allows the video endpoint to see images from multiple video endpoints at the same time. All parties remain continuously visible or 'present' for the duration of the call and the user can have control over the screen layout. In comparison, Voice Activated Switching only allows the user to see the current speaker on full screen while the rest of the participants remains hidden. Continuous Presence is better suited for team collaboration since it allows participants to see the reactions (body language) of all participants, not just the speaker.

D

data conference (see content)

desktop video client

A software application used to communicate over video with telepresence and video conference systems. One example is the Polycom CMA Desktop, which enables a person on a PC to communicate clearly and with great clarity to other video clients such as desktops, conference rooms, and immersive telepresence suites.

DHCP server

DHCP—or Dynamic Host Configuration Protocol—is the network application protocol used by devices (called clients) to acquire configuration information to operate in an IP—Internet Protocol—network. A DHCP server manages a pool of IP addresses and client configuration parameters such as the default gateway, the domain name, the DNS servers, other servers such as time servers. When a DHCP server receives a valid request it assigns the computer an IP address, a lease (the length of time for which the allocation is valid), and other IP configuration parameters. this sort of query is usually initiated immediately after the computer starts up and must be completed before the client can initiate an IP-based communication.

dialing entry field

In discussing video endpoints, this is the part of the screen where the user can enter the destination (number, name, URI).

dual-mode phone

A wireless handset that operates on both Wi-Fi (802.11) and cellular (GSM, CDMA, or other) frequencies. The idea behind dual mode devices is that when the device is indoors and close to a Wi-Fi access point, it can connect cost effectively through Wi-Fi and the terrestrial network while when the device is outdoors and away

from Wi-Fi access point, it can connect through the cellular network. Cost savings for the user and cellular network offload for the service provider are driving this application.

dual monitor emulation

This feature is used when only one monitor is connected to the video endpoint and the user wants to see two of the following three image types: near-end video (user's own video captured by the local camera), far-end-video (sent by remote video endpoint), or content (sent by remote video endpoint). Dual monitor emulation allows any two of these three types of video to be displayed next to each other on a single monitor.

E

encryption

Alteration of transmitting information to protect it from unauthorized tapping. All Polycom telepresence and video conference endpoints utilize AES encryption.

endpoint

The term endpoint is used in many standards specifications to describe an entity that can initiate and receive communication. In audio-visual communication, an endpoint is a video system (video conferencing or telepresence), a telephone handset, or a soft client.

Ethernet

The most popular interface (physical and data link layer) used in Local Area Networks, and now also deployed in access networks.

F

far end / far side

The remote party or parties connected to a call. Contrast to "Near End / Near Side."

firewall

A network node set up as a boundary to prevent traffic from one segment to cross over into another.

fixed/mobile convergence

The merging of wired and wireless communications into a single system that enables seamless roaming across the two domains.

frames per second (fps)

Frequency with which video frames appear. Broadcast quality video generally consists of 30 frames per second. Full motion videoconferencing typically offers video in the range of 10 to 15 frames per second. At very low bandwidths, such as 56 or 112 Kbps, the frame rate may be lower.

full-duplex conferencing

Conferencing that supports simultaneous, two-way communication.

full-duplex speakerphone

A conference phone that support simultaneous, two-way communication.

G

gatekeeper

A software application or appliance that provides address translation, registration, call control, directory services and bandwidth management functions. The gatekeeper may also track usage and thereby provide some level of support for billing functions."

gateway

An entity that provides real-time, two-way communication between dissimilar (H.323 and H.320) video endpoints operating across dissimilar networks by reformatting data and protocols.

H**H.323**

The umbrella for a set of standards defining real time multimedia communications for packet based networks otherwise known as IP telephony. H.323 is comprised of the following standards: H.225, H.245, G.711, G.722, G.723.1, G.728, G.729.

H261

H.261 is a 1990 ITU-T video coding standard that was first designed for transmission over ISDN lines on which data rates are multiples of 64kbits. It is one member of the H.26x family of video coding standards in the domain of the ITU-T Video Coding Experts Group (VCEG).

HD (see high definition)

high definition

Refers to a video system of higher resolution than standard-definition (SD) video, most commonly at display resolutions of 1280×720 (720p) or 1920×1080 (1080i or 1080p). High definition (HD) refers to an increase in display or visual resolution of television formats (HDTV), high definition video (used in HDTV broadcasting, digital film and computer HD video film formats), high definition multimedia interface (HDMI), an all-digital audio and video interface capable of transmitting uncompressed streams and other formats for recording and transmitting visual and audio communications.

high resolution

Refers to video systems with display resolutions approximating 704×480 (480p) (16:9 aspect ratio) or 704×480 (4:3 aspect ratio).

I**Instructor™ FS**

An integrated video conferencing solution designed for instructional applications such as training, education courses, etc.

internal multipoint

Capability within a video or telepresence endpoint to bridge multiple parties in a single simultaneous video conference.

interoperability

The ability to communicate between different codecs. More generally, interoperability is the ability of systems and units to provide services and to accept services from other systems and units and to use the services to operate effectively together. In communications electronics systems or equipment for those systems, interoperability is the ability for information or services to be exchanged directly and smoothly between them and their users.

IP phone

IP phones use Voice over IP technologies that enable calls to be made over an IP network such as the Internet instead of the ordinary PSTN system. Calls are conducted via the Internet, or a private IP network, or

intercompany intranet. IP phones use control protocols and can be simple software-based purpose-built hardware devices.

IP video

IP devices are now available that allow users to transmit video signals over an IP network such as the Internet. This technology makes video conferencing and telepresence conferencing possible. See VoIP for more.

J

jitter

The variation in packet delay as packets cross the network, characterized by stilted video motion quality.

L

latency

Delay in the response of far end participants, often a result of network congestion and geographic distance.

Lost Packet Recovery

Unique to video endpoints and conference platforms from Polycom, a technology sustaining video and audio interaction quality across "dirty" or irregularly performing networks.

M

management

The ability to view, control, provision, update, and allocate resources and rights to video and telepresence endpoints and conference bridges within a video ecosystem. Characterized by a centralized application, management also commonly provides gatekeeper functions, conference scheduling activities, integration with existing IT directory structures, and alarm notifications.

master control unit

The Master Control Unit (MCU) is a modular unit that connects a host telephone switch to Polycom® SpectraLink® 6000 Wireless Telephone System using digital or analog circuit-switched line interfaces.

MCU

See "master control unit" or "multipoint conferencing unit" and "conference bridge."

multipoint call

A multipoint call is one in which several phones, terminals, or stations are all connected, as opposed to point-to-point communications where the communication is between only two stations.

multipoint conference

Communication between more than two sites. Multipoint conferences may be established internally within a video endpoint, or through an external dedicated device such as a Conference Bridge.

multipoint conferencing unit

A multipoint conferencing unit (MCU) connects multiple audio and video sites in one or many conferences at the same time. Also see "conference bridge."

multipoint software

Software that allows a video endpoint to connect with two or more sites.

N

near end / near side

The local side with a videoconference.

network

A network is a collection of computers and devices connected to each other. The network allows computers and their users to communicate with each other and share resources and information over a variety of connection methods.

network interfaces

A network interface is the device of software point of communication between a user device and a private or public network.

P

p2p video conference

Point-to-point video conference is a term used by ITU-T in the H.323 standard, and is in fact a basic point-to-point video call. Since per definition every call in H.323 is a conference call, the term 'point-to-point conference call' was coined.

packet loss

An inherent feature of IP networks to lose packets. Packets gets dropped by routers and switches in the network when there is congestion and a buffer overflows. Packets also get destroyed if their check sums are not correct (suspicion of manipulation) and in other error conditions during transmission.

People + Content IP

A PC-based software application that allows people to easily share content during a video conference.

People On Content

Chroma key (also known as "green screen") technology that allows people to become part of their presentation. A common example of the technology is in weather broadcasting where the announcer is in front of or beside the weather map he/she is describing.

point-to-point call

Point-to-point telecommunications refers to a connection restricted to two endpoints, usually host computers. Point-to-point is distinct from point-to-multipoint which also refers to broadcast or downlink.

point-to-point video conference

Peer-to-peer video conferences use a computer network to connect participants for user communications as well as file or content sharing. P2P conferencing can transmit audio, video, data or any digital format as well as real-time telephony traffic.

presence awareness

From a user interface, the ability to graphically discern the state of a (video) endpoint and/or user. Common states include "Available", "Unavailable", "In a meeting", and "Do Not Disturb."

Q

QCIF (Quarter Common Intermediate Format)

A video resolution one quarter the size of CIF. Typically used in very low bandwidth videoconferences. Compare to CIF.

R

resolution

A measure of sharpness or clarity on a display.

S

scheduling

As it applies to voice, video, telepresence technology, it is the ability to schedule conference areas, resources and equipment for audio or video calls.

SIP trunking

Transports voice traffic via public IP networks rather than using traditional voice alternatives (e.g., T1).

Siren14

14 kHz wideband audio technology developed by Polycom.

siren22

22 kHz wideband audio technology developed by Polycom.

Siren7

7 kHz wideband audio technology developed by Polycom.

softphone

A softphone is a software program for making telephone calls over the Internet using a general purpose computer, rather than using dedicated hardware.

S-Video

S-Video, also known as Separate Video, is an analog video signal that carries the video data as two separate signals.

T

T1/E1

T1, or DS-1, is a Level 1 digital transmission system that operates at 1.536 mbps. E1, or Euro DSS1, is the transmission bit rate of 2.048 mbps (millions of bits per second). This is the equivalent to the ISDN Primary Rate Interface for the Europe (30B+ 1D). The T1 transmission rate in the United States is 1.536 mbps.

TCP ports

In computer networking, a port is an application-specific or process-specific software construct that acts as a communications endpoint used by Transport Layer protocols. Transport Layer protocols, such as TCP, specify a source and destination port number in their packet headers.

TCP/IP

The TCP/IP model is a specification for computer network protocols created in the 1970s by DARPA, an agency of the United States Department of Defense. It laid the foundations for ARPANET, the world's first wide area network and a predecessor of the Internet. The TCP/IP suite defines a set of rules that enable computers to communicate over a network.

teleconference, teleconferencing

A teleconference is a live meeting among several people who are removed from each other by short or long distances, but who are linked by a telecommunications system and equipment. Audio conferencing, voice

conferencing, and telephone (or phone) conferencing are all alternative terms used to describe teleconferencing.

telephone conference, telephone conferencing

See teleconference.

telepresence

A technology that enables highly life-like, face-to-face interactions to occur between individuals and groups over distance. Characterized by high definition video, audio, and content. Subcategories include "Immersive", "Room", and "Personal."

trace route

A trace route, or traceroute, is a computer network tool used to determine the route taken by packets across an IP network.

traffic management

Traffic or bandwidth management is the process of measuring and controlling the communications (traffic, packets) on a network link, to avoid filling the link to capacity or overfilling the link, which would result in poor performance and network congestion.

transport protocol

Transport protocols or Transport.

U

unattended audio

An audio conference, in which a moderator schedules, sets up, and facilitates the call without operator assistance.

unified communications

Technology that combines voice, video, and content into one real-time communications solution no matter where the participants are.

unified messaging/unified messaging capable (UM/UM-capable)

Systems capable of combining voice, e-mail, and fax, although today, such systems are most often used for voicemail.

video bridging

Service used to connect more than two videoconferencing endpoints into one conference. While most video bridging services are operator attended, many video calls are unattended today. The client or the service provider can conduct invitations and scheduling.

V

Video Cart

A mobile stand/cabinet that supports a display/monitor and houses video conferencing equipment.

video conference server

A server on a video network that allows video endpoints to participate in a multipoint conference. "MCU" stands for Multipoint Conferencing Unit; the term is used in the ITU-T H.323 standard and technical specifications. "Conference bridge" is a colloquial term used in conversations. The term "Conference server" is better aligned with the modern media server/media controller architecture that is widely deployed in Voice Over IP and was

first introduced by Polycom into video conferencing. (The Polycom Distributed Media Application™ (DMA™) 7000 is the media controller while Polycom RMX 2000® is the media server optimized for video conferencing.)

video endpoint

A video conferencing system such as a camera and codec, or in the case of immersive telepresence suite, an entire room composed multiple cameras and codecs that provide a unified life-like experience.

voice activated switching

A mode in a multipoint videoconference that switches the window view to the participant site currently speaking. Compare to "Continuous Presence."

voice conference, voice conferencing

See teleconference.

Voice conference server

A server that enables voice conferencing, mostly used by conference service providers (CSPs) to offer voice conferencing services to enterprises and other organizations. An example of a voice conferencing solution is Polycom RadianVoice which migrated to the modern media server-media controller architecture: RadianVoice V4 is the media controller while InnoVox 4000 is the media server, optimized for voice conferencing.

VoIP

VoIP technology is a general term for a family of transmission technologies that allow the delivery of voice communications over Internet Protocol networks such as the Internet or other packet-switched networks. Voice over Internet Protocol or VoIP allows devices or people using them to communicate with each other and most recently IP technology has expanded to allow video as well as voice communications.

W**Web conferencing**

A collaborative session hosted by a service provider, which uses a standard Web browser or downloaded client to share an application or to make a remote presentation over the Internet. Voice communications to accompany the conference or presentation is typically over the public switched or IP network.

Web conferencing server

Software running on a central computer that enables workstations to exchange slides, application views, and other data in real-time with other networks.