



Glossary

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AAA--Authentication, authorization, and accounting. Security services for packet networks.

AAL2--ATM Adaptation Layer 2. Supports traffic needing precise timing, such as compressed voice and video.

AAL5--ATM Adaptation Layer 5

AUEP--Audit Endpoint command. An MGCP or SGCP command that is used by the call agent to determine the status of a given endpoint on a gateway.

BGW--Business gateway.

bind--In MGCP, configuring the source address for signaling and media packets to the IP address of a specific interface.

business gateway--An xGCP media gateway which is a business customer premises equipment that has connection(s) to the VoIP network as well as connection(s) to the user's telephony equipment (typically a PBX, a corporate LAN or WAN). Such gateways are used to eliminate or reduce the need for individual medium (voice, data, and so forth) connectivity.

CA--Call agent.

CAC--Call admission control. Controls whether a call can be established, according to availability of local or network resources.

call agent--An intelligent entity in an IP telephony network which handles call control in an MGCP model Voice over IP network.

An intelligent entity in an IP telephony network that handles call control in an xGCP model Voice-over-IP network. A Call Agent is also known as a media gateway controller (MGC).

CAS--Channel Associated Signaling. A signaling technique that uses the same facility path for both voice and signaling traffic.

CCS--Common Channel Signaling

CID--AAL2 Channel Identifier

CLASS--Custom Local Area Subscriber Services, usually referred to as "Custom Calling" features

CLI--command-line interface.

CRCX--Create Connection request. Used in an MGCP call sequence by gateways to exchange SDP.



CSM--Call switching module. Card that contains digit collection logic to process incoming calls for automatic number information (ANI) and dialed number identification service (DNIS) digits.

DDR--Dial-on-demand routing.

disconnected procedure--When an endpoint attempts to communicate with its call agent and fails, the gateway may initiate the disconnected procedure, in which a timer (the disconnected timer) is started and RSIP messages are sent to the call agent at prescribed intervals until contact is established. This procedure ensures that an RSIP message is the first message to reach the call agent after communications are reestablished. The call agent may request an AUPEP after the RSIP is received.

DNS--Domain Name System. Used to translate H.323 IDs, URLs, or e-mail IDs into IP addresses. DNS is also used to assist in locating remote gatekeepers and to reverse-map raw IP addresses to host names of administrative domains.

DS-0--64-kbps channel in a T1/E1 line.

DTMF--Dual-tone multifrequency. Tones made by pushing buttons on a telephone. Tones used to send phone number digits to and from a switch. DTMF tones identify the numbers 0 through 9 and the * and # symbols.

E&M--Ear and Mouth analog signaling.

fax passthrough--The GW sends fax data encoded using a codec such as G.711 ulaw or G.711 alaw, resulting in a more reliable transmission. Fax passthrough provides repression of compression, echo cancellation, and other functions; issues redundant packets to ensure complete transmission; and provides a buffer to protect against clock skew.

FGD--Feature Group-D. Identifies a standardized service available to carriers delivered on a channelized T1 line.

FGD-OS--Feature Group-D Operator Services protocol. OS is a telephony signaling protocol for calls that originate from the Bell Operating Company (BOC) and are sent towards the carrier switch.

fx: extension--An extension of the local connection option used by the CA to instruct the GW to be in CA-controlled mode or GW-controlled mode.

FXO--Foreign Exchange Operator--An interface from a telephone to a PSTN central office or a station interface on a PBX.

FXS--Foreign Exchange Station--An interface that connects to a telephone, key set, or PBX to supply ring, voltage, and dial tone.

GW--Gateway.

IETF--Internet Engineering Task Force. Task force that consists of over 80 working groups responsible for developing Internet standards. The IETF operates under the auspices of the Internet Society.

IPDC--Internet Protocol Device Control. A device control specification.

ISP--Internet service provider.

MDCX--Modify connection request. Used in an MGCP call sequence by gateways to exchange SDP information.

media gateway--The emerging industry standard generic term for a gateway. Equipment that connects the PSTN or a PBX with the Voice-over-IP network. It is controlled by a call agent using MGCP.

MGC--Media gateway controller. The emerging industry standard generic term for the VSC. Another name for call agent.

MGCP--Media Gateway Control Protocol. A merging of the IPDC and SGCP protocols.

NAS--network access server. Communications processor that connects asynchronous devices to a LAN or WAN through network and terminal emulation software. Performs both synchronous and asynchronous routing of supported protocols.

NCS--Network-based Call Signaling. PacketCable protocol, profile of MGCP 1.0 for residential gateways.

NSE--Named Signaling Event. Format of RTP packets used for applications such as modem relay and fax relay. NSEs have different payload values than NTEs.

NTE--Named Telephony Event. Format of RTP packets used to transport DTMF digits as defined in RFC 2833, *RTP Payload for DTMF Digits, Telephony Tones and Telephony Signals* .

package--A set of signals and events that define a type of voice endpoint or connection. Examples include line-package, trunk-package, dtmf-package, and atm-package

payload type--Payload types are defined in RFC 2833, *RTP Payload for DTMF Digits, Telephony Tones and Telephony Signals* . A payload type is a number from 96 through 127 that identifies the type of payload carried in the packet (for example, a payload type of 121 denotes a Cisco DTMF relay payload; a payload type of 122 denotes a fax payload). The payload type should be identical on the GW and call agent.

PDU--protocol data units. Used by bridges to transfer connectivity information.

PRI--ISDN primary rate interface

PSTN--Public Switched Telephone Network

PVC--Permanent Virtual Circuit

residential gateway--An xGCP media gateway that is customer premises equipment and has one or more connections to the VoIP network as well as to user telephony equipment.

RGW--Residential gateway.

RSC--Router switch controller.

RSIP--Restart In Progress command. An MGCP or SGCP command that is used by the gateway to signal that an endpoint, or a group of endpoints, is being taken in or out of service.

RTCP--RTP Control Protocol. The protocol monitors an RTP connection and conveys information about the on-going session.

RTP--Real-Time Transport Protocol. The protocol provides end-to-end network transport functions for applications transmitting real-time data and services such as payload type identification, sequence numbering, timestamping, and delivery monitoring.

SDP--Session Description Protocol. Messages containing capabilities information that are exchanged between gateways.

SGCP--Simple Gateway Control Protocol. Controls Voice-over-IP gateways using an external call control element (called a call agent). SGCP is used to establish, maintain, and disconnect calls across an IP network.

SIP--Session Initiation Protocol.

SPVC--Soft Permanent Virtual Circuit

SVC--Switched Virtual Circuit

T1--24 64-Kbps time slots on a 1.544-Mbps serial interface.

TGW--see Trunking Gateway. Trunking gateway, also called the trunk side gateway. An xGCP media gateway that provides PSTN/IP gateway functionality.

trunking gateway--An xGCP media gateway that provides connectivity between the PSTN and VoIP networks. An external gateway control protocol (xGCP) media gateway that provides connectivity between the PSTN and VoIP networks.

TSE--Inband Telephony Signaling Events

VAD--Voice Activity Detection

VCC--Virtual Channel Connection (used where it may be a PVC, SPVC, or SVC)

VoIP--Voice over IP. The ability to carry normal telephone-style voice over an IP-based Internet with POTS-like functionality, reliability, and voice quality. VoIP is a blanket term that generally refers to the Cisco standards-based approach (for example, H.323) to IP voice traffic.

VToA--Voice Trunking on ATM.

XCSP--External Call Service Provider. Subsystem that interoperates with external call protocols to provide services such as modem call setup and teardown.

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