

*Dictionary List*



**Acronyms and abbreviations  
used in AlphaCom E documentation**

**ADPCM** *Adaptive Differential Pulse Code Modulation*

A technology for coding of audio signals.

ADPCM produces a lower bit rate than standard PCM (Pulse Code Modulation) by recording only the difference between samples and adjusting the coding scale dynamically to accommodate large and small differences.

**AlphaNet**

Allows services to be available across a network of STENTOFON AlphaCom intercom exchanges.

**Alternative routing**

Re-route AlphaNet calls via transit exchange on congestion or link failure.

**ASCII** *American Standard Code for Information Interchange*

A common format for representing characters in text files in computers and on the Internet. In an ASCII file, each alphabetic, numeric, or special character is represented with a 8-bit binary number.

**ATA** *Analogue Telephony Adapter*

A device used to connect one or more standard analogue telephones to a Voice over IP service.

**ATM** *Asynchronous Transfer Mode*

A cell switched network protocol which encodes data or voice traffic into small fixed sized cells of 53 byte; 48 bytes of data and 5 bytes of header information, instead of variable sized packets as in packet-switched networks such as the Internet Protocol or Ethernet.

**CAT5** *Category 5 "data grade" cable*

The cable is capable of handling data and voice traffic at a frequency of up to 100 MHz over a length of minimum 100 meters.

Contains often 4 pair twisted cable pairs. Standard termination in an 8-pin RJ45 plug or socket. The cable may be with or without shield.

**CCoIP** *Critical Communication over IP*

Critical Communication over IP employs VoIP, but goes an important step further by adding new IP services and applications integrating security, quality and reliability capabilities required in critical situations.

**CCTV** *Closed Circuit TeleVision*

Camera system used for surveillance.

**Client**

The client part of a client-server architecture.

Typically, a client is an application that runs on a personal computer or workstation and relies on a server to perform some operations. For example, a PC can operate as a telephone or an e-mail client is an application that enables you to send and receive e-mail.

- Codec**     ***Compressor / Decompressor***  
Any technology for compressing and decompressing data. Codecs can be implemented in software, hardware, or a combination of both.
- DECT**     ***Digital Enhanced Cordless Telecommunications***  
An ETSI standard for digital cordless phones, commonly used for domestic or corporate use. DECT can also be used for wireless data transfers.  
DECT is (like GSM) a cellular system. A major difference between the systems is the cell radius — DECT cells have a radius of 25 to 100 meters, while GSM cells are 2 to 35 km.
- DiffServ**   ***Differentiated Services***  
The DiffServ model for QoS was developed to differentiate IP traffic so that the traffic's relative priority could be determined on a per-hop basis.  
By using DiffServ, traffic is classified based on priority. Traffic with similar service characteristics will be passed with similar traffic guarantees across multiple networks, even if the multiple networks don't provide the same service the same way. This is an important feature because the Internet is a network of multiple service provider networks.
- DMZ**     ***Demilitarized Zone***  
A security network area that sits between an organization's internal network and an external network, usually the Internet.  
Connections from the internal and the external network to the DMZ are permitted, whereas connections from the DMZ are only permitted to the external network. Hosts in the DMZ works as proxies towards the internal network. This allows the DMZ's hosts to provide services to the external network while protecting the internal network from someone on the external network who wants to illegally connect to the internal network.
- DSL**     ***Digital Subscriber Line***  
A family of technologies that provide digital data transmission over the wires used in the "last mile" of a local telephone network.  
Typically, the download speed of DSL ranges from 128 Kbps to 24,000 Kbps depending on DSL technology and service level implemented. Upload speed is lower than download speed for ADSL and symmetrical for SDSL.
- Dual display**  
Offers two displays in AlphaCom stations for easy use.  
The upper display provides dynamic labelling and status information for direct access keys. The lower display provides general display information such as number information, time and messages as well as dynamic menu labelling.
- E1**  
An European digital transmission standard.  
The E1 signal format carries data at a rate of 2.048 Mbps and can carry 32 of 64 Kbps channels.

**EDI**      *STENTOFON External Data Input*

The part of the STENTOFON Service Creation Environment which can interpret any incoming data into AlphaCom exchange understandable commands.

Prime examples are close integration with fire alarm or radio equipment. Incoming data strings are interpreted in the event handler and the required action can be performed, such as setting up calls between intercom stations, sending automatic broadcast messages or routing incoming received radio audio to the appropriate operators.

**EDO**      *STENTOFON External Data Output*

The part of the STENTOFON Service Creation Environment which can translate AlphaCom exchange actions into commands to be send to external equipment in the native protocol of that equipment.

An example is to send commands to CCTV equipment to switch a camera output to a certain monitor when a voice connection is established between intercom stations.

**Ethernet**

The most widely installed local area network (LAN) technology

Ethernet uses a bus or star topology and supports data transfer rates of 10 Mbps, 100 Mbps or 1 Gbps. The Ethernet specification served as the basis for the IEEE 802.3 standard, which specifies the physical and lower software layers.

**Firewall**

A set of related programs, located at a network gateway server that protects the resources of a private network from users from other networks.

The term also implies the security policy that is used with the programs. An enterprise with an intranet that allows its workers access to the wider Internet installs a firewall to prevent outsiders from accessing its own private data resources and for controlling what outside resources its own users have access to.

**FTP**      *File Transfer Protocol*

A commonly used protocol for exchanging files over any network that supports the TCP/IP protocol (such as the Internet or an intranet).

**G.711**

An ITU-T standard for audio companding.

A standard to represent 8 bit compressed pulse code modulation (PCM) samples for signals of voice frequencies, sampled at the rate of 8 kHz.

A G.711 encoder will create a 64 kbit/s bitstream. The frequency range is 300-3400 Hz.

There are two main versions defined in the standard, mu-law algorithm (used in North America & Japan) and a-law algorithm (used in Europe and the rest of the world).

**G.722**

An ITU-T standard for wideband speech codec operating at 32-64 kbit/s. Technology of the codec is based on split band ADPCM.

G.722 sample audio data at a rate of 16 kHz, double that of traditional G.711 telephony interfaces, which results in superior audio quality and clarity. The frequency range is 300-7000 Hz.

- HTML**     ***HyperText Markup Language***  
A markup language designed for the creation of web pages and other information viewable in a browser. HTML is used to structure information - denoting certain text as headings, paragraphs, lists and so on - and can be used to define the *semantics* of a document.
- HTTP**     ***HyperText Transfer Protocol***  
The primary method used to convey information on the World Wide Web. The original purpose was to provide a way to publish and receive HTML pages.
- HUB**  
An Ethernet hub is a device for connecting Ethernet devices together.  
It works at the physical layer of the OSI model, repeating the signal that comes into one port out each of the other ports.  
If a signal comes into two ports at the same time a collision occurs, so every attached device shares the same collision domain. Hubs support only half duplex Ethernet, providing bandwidth which is shared among all the connected devices.
- Intranet**  
The generic term for a collection of private computer networks within an organization. Intranets are communication tools designed to enable easy information sharing within workgroups.
- IP**         ***Internet Protocol***  
IP is the Internet Protocol.  
It is a mechanism by which packets may be routed between computers on a network-of-networks. IP allows computers to be connected using various physical media, ranging from modems to Ethernet cabling, fibre-optic cables and even satellite and radio links.  
IP is designed to be robust and to gracefully handle the loss of some connections. Individual packets of data are routed by hosts with little knowledge of the overall network structure - just a few local routing rules.  
As its name implies, the global Internet is constructed using the IP network protocol.
- IPsec**     ***IP security***  
A standard for securing Internet Protocol (IP) communications by encrypting and/or authenticating all IP packets. IPsec provides security at the network layer.
- ISDN**     ***Integrated Services Digital Network***  
A set of CCITT/ITU standards for digital transmission over ordinary telephone copper wire as well as over other media.
- ISP**       ***Internet Service Provider***  
A company that provides WAN links and internet access.
- ITSP**     ***Internet Telephony Service Provider***  
Offers services for making telephone calls using VoIP technology. Most ITSPs use the SIP standard for transmitting telephone calls as IP data packets.

- L2TP**     ***Layer 2 Tunneling Protocol***  
A tunnelling protocol used to support virtual private networks (VPNs).  
L2TP does not provide encryption of data.
- LAN**     ***Local Area Network***  
Supplies connectivity to a group of computers in close proximity to each other such as in an office building, a school or a home.
- PABX**     ***Private Automatic Branch Exchange***  
An automatic telephone switching system within a private enterprise.  
Originally, such systems - called private branch exchanges (PBX) - required the use of a live operator. Since almost all private branch exchanges today are automatic, the abbreviation "PBX" usually implies a "PABX."
- PBX**     ***Private Branch Exchange***  
A private telephone network used within an enterprise.  
Users of the PBX share a certain number of outside lines for making telephone calls external to the PBX.  
Most medium-sized and larger companies use a PBX because it's much less expensive than connecting an external telephone line to every telephone in the organization. In addition, it's easier to call someone within a PBX because the number you need to dial is typically just 3 or 4 digits.
- PHP**     ***Originally, "Personal Home Page". Today, "PHP Hypertext Preprocessor".***  
A popular open-source, reflective programming language used mainly for developing server-side applications and dynamic web content, and more recently, other software.
- PoE**     ***Power over Ethernet***  
IEEE 802.3af is a standard to distribute power from a central location to remote endpoints by using the same CAT5 cable which is used for the IP data connection to that endpoint.  
Powered endpoints are for instance STENTOFON IP-intercom units or IP-CCTV cameras. This method of powering IP-endpoints has a number of main advantages:  
- Backup power can be provided from a central location  
- There is no need of individual power points in the vicinity of each endpoint.
- PPTP**     ***Point-to-Point Tunnelling Protocol***  
PPTP is a tunnelling protocol used to support virtual private networks (VPNs).  
PPTP does not provide encryption of data.
- Proxy**  
The process of having one host act on behalf of another.
- PSTN**     ***Public Switched Telephone Network***  
The world's collection of interconnected voice-oriented public telephone networks, both commercial and government-owned.

- QoS**      ***Quality of Service***  
The system's ability to service a given application efficiently without affecting its function or performance.
- RFC**      ***Request For Comments***  
An RFC describes an internet standard. RFCs are published by the Internet Engineering Task Force (IETF) [www.ietf.org](http://www.ietf.org).
- RIO**      ***Remote Input/Output***  
RIO is the concept where the STENTOFON AlphaCom exchange has control over remotely located logical inputs and outputs through either a serial data link or across an IP data network.  
  
The logical inputs can receive status information from 3<sup>rd</sup> party equipment; the logical outputs can be used to control 3<sup>rd</sup> party equipment.
- Router**  
  
Network node for connecting networks together.  
  
Routers also handle certain functions, such as *routing*, or managing the traffic on the networks they connect.
- RTCP**      ***Real-time Transport Control Protocol***  
Provides out-of-band control information for an RTP flow. The primary function of RTCP is to provide feedback on the quality of service being provided by RTP.
- RTP**      ***Real Time Protocol***  
An IETF protocol for transmitting real-time data such as audio and video.  
  
Typically, RTP runs on top of the UDP protocol, although the specification is general enough to support other transport protocols.
- SIP**      ***Session Initiation Protocol***  
An IP telephony signaling protocol developed by the Internet Engineering Task Force (IETF). Primarily used for voice over IP (VoIP) calls, but SIP can also be used for video or any media type
- SLA**      ***Service Level Agreement***  
A formal written agreement made between two parties: the service provider and the service recipient. Generally, an SLA should contain clauses that define a specified level of service, support options, incentive awards for service levels exceeded and/or penalty provisions for services not provided.
- SNMP**      ***Simple Network Management Protocol***  
  
Simple network management protocol (SNMP) is a set of protocols for centralizing the management of IP networks.  
  
It is used for both collecting information from and configuring the full range of network devices, including servers, printers, switches, hubs, routers, firewalls, wireless access points and individual workstations. A wide variety of information can be collected, ranging from a server's CPU (central processing unit) usage level to its chassis temperature.

**syslog**     *system logging*

A standard for forwarding log messages in an IP network. The term "syslog" is often used for both the actual syslog protocol, as well as the application or library sending syslog messages. The syslog protocol is very simplistic: the syslog sender sends a small textual message via UDP in cleartext.

Syslog is typically used for computer system management and security auditing. It is supported by a wide variety of devices and receivers. Syslog can be used to integrate log data from many different types of systems into a central repository.

**TCP/IP**     *Transmission Control Protocol*

TCP is a connection-based protocol that provides a reliable flow of data between two computers

**ToS**     *Type of Service*

A field in an IP packet that is used for quality of service (QoS).

The TOS field is 8 bits. Routers use the value in the TOS field to make classify how the IP packets should be prioritized and processed.

**UDP/IP**     *User Datagram Protocol*

One of the core protocols of the Internet protocol suite.

Using UDP, programs on networked computers can send short messages known as *datagrams* to one another. UDP does not provide the reliability and ordering guarantees that TCP does; datagrams may arrive out of order or go missing without notice. However, as a result, UDP is faster and more efficient for many lightweight or time-sensitive purposes.

**UPS**     *Uninterruptible Power Supply*

A device or system that maintains a continuous supply of electric power to certain essential equipment that must not be shut down unexpectedly.

The equipment is inserted between a primary power source, such as a commercial utility, and the primary power input of equipment to be protected, for the purpose of eliminating the effects of a temporary power outage and transient anomalies.

**VLAN**     *Virtual LANs*

VLAN it is a logical subgroup within a local area network that is created via software rather than manually moving cables in the wiring closet.

**VoIP**     *Voice over IP (Internet Protocol)*

Voice over IP (VoIP) is a technology which allows voice communications to be transmitted over a data network.

**VoIP AlphaNet**

STENTOFON AlphaNet networking over an IP network.

**VPN**      *Virtual Private Network*

A private *network* that is constructed by using public networks to connect nodes.

For example, there are a number of systems that enable you to create networks using the Internet as the medium for transporting data. These systems use encryption and other security mechanisms to ensure that only authorized users can access the network and that the data cannot be intercepted.

**WAN**      *Wide Area Network*

A wide area network (WAN) spans a large geographic area, such as a state, country or even multiple countries. WANs normally connect multiple LANs and other smaller-scale area networks.

WANs differ from LANs in several important ways:

- More expensive networking equipment and infrastructures than LAN
- WAN usually carries significantly lower data bandwidth than LAN due to cost
- Need for bandwidth, security, quality of service must be evaluated against costs

The main implementation options that are:

- Leased or dedicated line infrastructure
- Outsourced to Internet Service Providers (ISP)
- Virtual Private Networks (VPN)

**Wi-Fi**      *Wireless Fidelity*

A term for certain types of wireless local area network (WLAN) that use specifications in the Ethernet (802.11 family).

**X.25**

An ITU-T standard protocol suite for WAN networks using the phone or ISDN system as the networking hardware.

It defines standard physical layer, data link layer and network layers of the OSI model.

**XML**      *Extensible Markup Language*

A W3C-recommended general-purpose markup language for creating special-purpose markup languages.

It is a simplified subset of SGML, capable of describing many different kinds of data. Its primary purpose is to facilitate the sharing of data across different systems, particularly systems connected via the Internet. Languages based on XML are defined in a formal way, allowing programs to modify and validate documents in these languages without prior knowledge of their form.



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