

# A

## **ActiveX Control**

A software module based on Microsoft's ActiveX technology enabling a program to add functionality by calling ready-made components that blend in and appear as normal parts of the program. They are typically used to add user interface functions, such as streaming video, 3-D toolbars, calculator or even a spreadsheet.

On the Internet or intranet, ActiveX controls can be linked to a Web page and downloaded by an ActiveX-compliant Web browser. ActiveX controls turn Web pages into software pages that can perform just like any program that is launched from a server.

## **Agent**

This is a part of the client-server model that performs information preparation and exchange on behalf of a client or server application.

## **Application layer**

It is the tool in the Open System Interconnection (OSI) model that ensures communication is possible

## **ARP (Address Resolution Protocol)**

A protocol used to discover a device's physical (MAC address) address by translating its IP address that is recognized in the local network.

# B

## **BOOTP:**

Bootstrap protocol. A method of server addressing, which allows devices on a network to obtain an IP address automatically.

## **Bps (bits per second ):**

The measurement of the speed of data transfer in a communications system.

## **bridge**

An electronic device to enable signals to span from one network circuit to another. In videoconferencing, a bridge is an abbreviation for multipoint bridge, which enables the linking together of three or more conference sites so that they can communicate simultaneously. Multipoint bridges are often called MCS: multipoint conferencing servers.

The term "bridge" can be used in audio conferencing to refer to a device that connects multiple (more than two) voice calls so that all participants can hear and be heard.

Finally, in IEEE 802 parlance, a bridge is a device that interconnects LANs or LAN segments at the data-link layer of the OSI model to extend the LAN environment physically. They work with frames (as opposed to packets) of data, forwarding them between networks. They learn station addresses and they resolve problems with loops in the topology by participating in the spanning tree algorithm

**browser**

A browser is an application program that provides a way to look at and interact with all the information on the Internet, Intranet and Extranet.

**byte**

A set of 8 bits, usually representing a single character in English and European languages.

**Bandwidth**

It is the amount of information that can be send through a network connection. It is expressed in bits per second, bytes per second or in Hertz .

**Bit**

(Binary DigIT) - A single digit in a binary number (0 or 1).

**C****CGI (Common Gateway Interface) script:**

A small program that functions as the link between HTML pages and other programs on the Web server. The CGI script resides in the server and obtains the data from the user via environment variables that the Web server makes available to it.

CGI scripts have been the initial mechanism used to make Web sites interact with databases and other applications.

**Client:**

A program that requests services from a server.

**Client/server model :**

This describes the relationship between two computer programs in which one program, the client, makes a service request from another program, the server, which fulfills the request.

**Coaxial cable:**

A high-capacity cable used for data networks and video transmission commonly called "co-ax."

**CSMA/CD (Carrier Sense Multiple Access/Collision Detection )**

A LAN access method used in Ethernet by which multiple network devices can transmit across the cable simultaneously, possibly causing collisions.

## **Gigabyte**

A gigabyte is 1024 megabytes or 1,073,741,824 bytes. Because of the large size of today's hard disks, storage capacity is usually measured in gigabytes. Abbreviation: "GB".

## **GUI**

Acronym for Graphical User Interface.

Abbreviation of **Graphical User Interface**, a way of using interactive screen displays to operate your computer. The most famous GUI is, undoubtedly, Microsoft Windows.

## **H**

### **Host:**

The machine you log into is your 'login host'; the machine you read news from is a 'news host', etc. At a party, a good host will make sure that you can talk with everyone. Similarly, a computer host allows all the computers on a network to communicate with each other.

### **HTTP (Hyper Text Transport Protocol)**

The communications protocol used to connect to servers on the World Wide Web. Its primary function is to establish a connection with a Web server and transmit HTML pages to the client browser.

### **HTML (Hyper Text Markup Language ):**

The document format used on the World Wide Web. Web pages are built with HTML codes embedded in the text. HTML defines the page layout, fonts and graphic elements as well as the hypertext links to other documents on the Web.

### **Hub**

A central connecting device in a star topology LAN configuration

### **Hypertext**

A system of "live" documents where a text file contains references to other documents that can be followed, thus linking documents to other related materials. The best known example is HTML.

## **I**

### **Icon**

A graphical image representing a (usually easily recognized) function or control.

### **Image Compression :**

Reducing the file size of video images while keeping the video quality on an acceptable level.

## **Internet**

When it is written with a lowercase "i", internet refers to any group of local area networks (LANs) connected by a common communications protocol. Also see Internet.

## **Internct**

The Internet is a system of globally linked computer networks. Its forerunner, ARPAnet, was originally designed by the U.S. Defense Department to maintain worldwide military communications in the event of a nuclear war. The Internet is also known simply as "the net".

When you see internet written with a lower case "i", it usually refers to any group of connected local area networks (LANs) .

## **Intranet**

An in-house Web site that can be accessed by the employees of the enterprise only

## **In-Line Power Hub**

Power over LAN technology (IEEE802.3af) allowing power to be supplied via the same cable that connects your server to the network.

## **IP (Internet Protocol)**

This is the protocol that allows for data to be transferred between systems over the Internet. It provides a standard set of rules for sending and receiving data via the Internet. People often say "IP" when referring to an IP address. The two are not necessarily synonymous

## **ISP**

Abbreviation for **Internet Service Provider**, a company that gives you access to the Internet, normally for a fee. To surf the net and transmit e-mails, you must "dial-up" to your ISP's server.

# **J**

## **Javascript :**

A general-purpose programming language developed by Sun Microsystems and widely used on the Internet.

## **JPEG (Joint Photographic Experts Group) –**

A standard for compressing still images that is very popular due to its high compression capability. Using discrete cosine transform, it provides compression with ratios up to 100:1 and higher.

## **K**

### **Kbps:**

Kilobits per second. Thousands of bits per second.

## **L**

### **LAN(Local Area Network ):**

Abbreviation of Local Area Network. This is a group of linked computer systems. Typically, they include a single central server with several connected PCs, all within a limited or "local" office area (e.g. they are all located on the same floor or within the same building).

## **M**

### **Megabyte**

A million bytes. Technically: 1024 kilobytes.

### **Modem:**

Abbreviation for **MOD**ulator-**DEM**odulator. PCs use modems to transmit digital data via an analogue phone line.

### **multicast**

A special form of broadcast where copies of the packet are delivered to only a subset of all possible destinations.

## **N**

### **NAT (Network Address Translation)**

This is a system included with many routers and some operation systems where many hosts "behind" the router, or firewall host are translated to a single IP address.

### **Network**

In the world of computers, a network is a group of two or more linked systems. There are many types of computer networks, including LANs and WANs.

### **NIC (Network Interface Card)**

It is a circuit board that plugs into both the clients and servers and controls the exchange of data between them.

## **RS-232C**

Standard for serial data transmission between computers and peripheral devices such as a modem, telemetry control, VCR control etc.

## **ROM**

Acronym for **Read-Only Memory**, ROM is used for permanent storage, such as system bootstrap routines.

## **S**

### **Server:**

A computer in a network shared by multiple users. The term may refer to both the hardware and software or generically, any device offering services, such as mail service, file service, printing services, domain name services, etc.

## **SMTP**

Abbreviation for **Simple Mail Transfer Protocol**, the standard Internet rules about transferring electronic mail messages.

## **STP (Shielded Twisted Pair)**

A twisted pair cable with shielding for applications in noisy environments in order to protect them from ambient noise in the form of EMI (Electro Magnetic Interference).

## **T**

### **TCP (Transmission Control Protocol)**

Abbreviation for **Transmission Control Protocol**, which is the wrapper for the data to be transmitted. This wrapper provides destination and other routing information and also arranges the transmission sequence of data packets.

### **TCP/IP (Transmission Control Protocol/Internet Protocol)**

The technical rules, which allow computer files to be sent across the Internet. TCP organises the data into equal sized packets and then sends the packets out over the Internet. IP governs the address to which the packets will be sent

### **telnet :**

A protocol (usually text based) commonly used on the Internet and TCP/IP-based networks. It allows a user at a terminal or computer to log onto a remote device and run a program.

**Token ring :**

Is a LAN access method that is still being used, but not as popular anymore as Ethernet. It can connect up to 255 devices (or "hosts") in a star topology.

**Transport layer**

The OSI layer that is responsible for reliable end-to-end data transfer between end systems.

**Twisted Pair**

Two insulated copper wires twisted around each other to reduce interference from one wire to the other. Twisted pair cable is the most common type of transmission. Several sets of twisted pair wires may be enclosed in a single cable. The twists are varied in length to reduce the potential for signal interference between pairs

## U

**URL (Uniform Resource Locator ):**

Abbreviation for **Uniform Resource Locator**, often referred to as a Web address. A URL is the address of an Internet site on the World Wide Web (www). The first part consists of a protocol name (e.g. http or ftp), a colon (:), and two forward slash characters (//). The second part, which you must type into the address line when you want to access this address, usually consists of www, followed by the company name and an ending such as .com. For example:  
<http://www.sonypresentations.com>

**UTP (Unshielded Twisted Pair)**

A twisted pair cable without shielding for standard applications in non-noisy environments.

**Unix**

A computer operating system that is designed to be used by many people at the same time (multi-user) and has TCP/IP built-in. It is the most common operating system for servers on the Internet.

## V

**VoIP (Voice over IP)**

The technology used to transmit voice conversations over a data network using the Internet Protocol.

# W

## **WAN (WIDE AREA NETWORK)**

Abbreviation for **Wide Area Network**. You can create a WAN by linking several computers or local area networks (LANs) together over long distances. This enables you to form a geographically dispersed network, usually along leased long-distance lines. A WAN can connect your systems across town, in different cities or in different regions of the world.

## **Web site**

A home and/or location on the Internet, intranet or extranet. A Web site is made up of Web pages that can contain a mixture of graphics, text, audio, video and other dynamic and static materials. Like many Internet terms, "Web site" is constantly used interchangeably with other terms, such as homepage or Web page.

## **World-Wide-Web**

Abbreviation for **World Wide Web**, a global hypertext system that uses the Internet as its transport mechanism. In a hypertext system, you navigate by clicking hyperlinks, which display other documents that also contain hyperlinks. The Web makes the Internet easy to use. Created in 1989 at a research institute in Switzerland, the Web relies on HTTP. Most Web documents are created using HTML. Incorporating hypermedia (graphics, sounds, animations, video), the Web has become the ideal medium for publishing information on the Internet.