

The Electronic Commerce Glossary

ACH - Automated Clearing House.

ANSI - American National Standards Institute. Parent organization of Accredited Standards Committee X12. It is the recognized coordinator and clearinghouse for information on U.S., and in some cases Canadian national standards. Also serves as the North American representative to the ISO (International Standards Organization).

ANSI ASC X12 - American National Standards Institute Accredited Standards Committee X12 is the body designated to develop EDI standards.

API (Application Program Interface) - A language used between applications that do not otherwise communicate with each other.

AppleTalk - A network protocol for linking Macintosh computers and peripherals.

Application - Any specific software program used on a computer, such as word processing, spreadsheet, accounting package, etc.

Application interface - The software component that transfers electronic transactions between application systems.

Application-to-application - The direct interchange of data from one computer to another without re-keying.

ASCII File - A data or text file that contains only characters coded from the standard ASCII character set (characters 0 through 127 on the ASCII chart).

Asynchronous communications - The transmission of a single character at a time. Also called "start/stop" transmission because each character is treated as a unit, with a start bit signaling the character bits that follow, and one or more bits that signal the end of the character transmitted.

Authentication - A mechanism that allows the receiver of an electronic transmission to verify the sender as well as the integrity of a transmission's content through the use of an electronic "key" or algorithm shared by the trading partners. This is sometimes referred to as an electronic signature.

Auto dial - The ability of a modem to access a network, automatically dial, and connect to another modem.

Bandwidth – Communications power; measured by how many thousands or millions of bits of data can be transferred over computer networks per second.

Baud Rate - The transmission speed of a communications channel, commonly meaning bits per second. A 9600 bps baud rate is 9,600 bits per second of data transfer; equaling 960 characters per second in PC transmissions (asynchronous) since 10 bits are used for each character.

Bisync - A major category of synchronous communications protocols used in mainframe networks. It requires that both sending and receiving devices be synchronized before transmission is started. The bit patterns of each data character are sent in one contiguous stream.

Bit – The smallest unit of information, which means a one or a zero in the digital world. Eight bits make a byte, the equivalent of a character in a word processing program. Something that operates at 100 megabits sends 100 million bits of data per second; and a gigabyte is a billion bytes of stored data.

Bridge – A communication device that connects two or more networks.

Broadcast E-Mail – The transmission of the same message to multiple parties.

Browser – A piece of software that allows PC users to cruise the Internet's World Wide Web. The most popular browsers are made by Netscape and Microsoft.

Bulletin Board (BB) – An information source and forum for a particular interest group. It functions like a stand alone web site without graphics, but unlike a web site each has its own telephone number. They are disappearing due to the internet.

Bus Network – A network topology in which all devices share a common path. A single cable, running around the office, is linked to individual computers via drop cables. This network is easy to install and uses less cable but a break anywhere brings down the entire network.

Capture Mechanism – Guest books, registration pages, and other vehicle on a web site that collect information on interested people or prospects.

Chat Room – Web site feature where any number of users can type messages to each other in real time, creating an on-line conversation.

Clearing house - a third party used for centralizing the sending and receiving of electronic messages or documents between trading partners. Messages/documents are held by the third party until the receiver is available to receive them.

Client – A computer used to make requests for data from a larger computer. Clients most often are PC's, but they can also be laptops, hand-helds or hefty machines called work stations. The term is also applied to the software that runs the PC's.

Client-Server – A computer trend that is gradually replacing the old way of doing business with large mainframe computers connected to terminals. Now company software applications run on midrange computer (the server) that is connected by networks to PC's (clients).

Commercial network - A third party intermediary that received EDI transmissions from the source and reroutes them to the appropriate receiver.

Communication protocol - The method by which two computers coordinate their communications. BISYNC and MNP are two examples.

Confirmation - A notification that the transmission has been received by the intended receiver.

Convention - A subset of a broader standard; generally developed by an industry that does not require the generality and full capability of a national standard.

Cross-industry standard - Data standards that apply to and are adopted by several industries - ANSI X12, for example.

CTX - 1. An electronic funds transfer format compatible with X12. It carries information about a payment as well as transferring value.
2. Corporate Trade Exchange.

Cyberspace – A term referring to all computer networks including on-line services, private networks and the internet.

Data dictionary- The publication that defines all of the data elements which are utilized by the standards. The most widely used data dictionary for EDI is the JEDI dictionary.

Data element - The basic unit of information in the EDI standards, containing a set of values that represent a singular fact. They may be single character codes, literal descriptions or numeric values.

Data mapping - Specifying the relationship between a user's data and the X12 message syntax in order to accurately move the data between the standard and the user's application.

Delimiter - A character used to separate one data element or field from another; allowing variable length fields to be recognized.

Digital Camera – A camera that digitizes the image and stores it on a disk instead of film. It is then subject to immediate viewing on a computer or web site.

Digital Data - Computerized data in that it is represented by binary numbers. Also referred to as “Digital or digitized Data”.

Direct transmission - The exchange of data from the computer of the sender directly to the computer of the receiver. A third-party value-added service is not used in a direct transmission. Often called “point-to-point”.

Document - A transaction set or message.

Document standards - Approved EDI standards that simulate paper forms used by business, e.g.. invoice, purchase order, etc.

Domain Name – A generic internet name or identifier such as cieca.com. There are currently six types of domain names in the US; “com” for businesses, “edu” for educational institutions, “gov” for governmental agencies, “mil” for the military, “net” for networks, and “org” for organizations.

Download – The act of transferring data from the internet to a personal computer. A browser downloads a web page to the computer it is running on. It can also download files or entire application programs for storage and later use.

Dumb terminal - Composed of a keyboard and CRT; has no computing power of it's own.

Electronic Data Interchange (EDI) – The automated computer to computer exchange of information in national or international standard format.

E-mail - Electronic mail; it differs from EDI by being intended for human to human communication. EDI messages are highly structured so computers can interpret them.

E-Mail Targeting – Generating e-mail messages to specific addresses for group or commercial purposes. Used by political advocacy groups.

EDI-INT - The Current *de facto* standard for transmitting EDI via the Internet, utilizes S/MIME or PGP/MIME as a transport mechanism. EDI-INT is for companies and their trading partners that want to use the Internet and encryption to exchange EDI documents.

EDI translation - The conversion of application data to or from EDI standard format.

EDI translator - Computer software used to perform the conversion of application data to or from an EDI standard. It may have subsystems for mapping, auditing, and document management.

EDIFACT - EDI for Administration Commerce and Trade. A set of internationally agreed upon standards and guidelines for the electronic interchange of structured data among independent computerized information systems. EDIFACT is the most recently developed set of standards and is still under development.

EFT - Electronic Funds Transfer. Information passed between banks that results in debits and credits, i.e. value transfer between participant accounts.

Electronic Commerce - The application of advanced information technologies to improve the efficiency and effectiveness of business processes used between trading partners.

Electronic mailbox - Analogous to a post office box, a repository of information, usually provided by an Value Added Network. The mailbox makes it unnecessary for the user to provide dedicated hardware for the purpose of awaiting incoming calls. It also facilitates consolidation of EDI transactions, allowing the user to send to multiple receivers in a single session.

Encryption - The encoding and scrambling of data. Data is encrypted at the sending end and decrypted on the receiving end through the use of a predetermined algorithm and unique key. Encryption is done for reasons of information privacy and security.

Ethernet – A LAN that connects computers and peripherals and operates over twisted pair or coaxial cable at speeds up to 10 Mbps. Ethernet is the most widely used network access method. Fast Ethernet is a 100 Mbps implementation of the Ethernet standard.

Evaluated receipts settlement - Methods of initiating payment to a supplier without the need of an invoice. Used first in the automobile industry. Price is agreed upon by purchase order. An electronic material release tells the supplier what to deliver. An electronic advance ship notice confirms the quantity actually being shipped and payment is automatically triggered upon verification of receipt.

Event-Driven EDI - Applications and translators exchanging message sets as soon as they are created or received.

Extranet – Modeled after the World Wide Web a community of business partners uses the Internet to exchange information electronically.

Fileserver – A computer on the network running special software so that it can provide network services such as file transfer from its own disk space to “clients” on the network.

Firewall – Security software that limits access to all or part of a private computer network attached to the internet.

Flat file - A continuous stream of characters that represent the data in a totally independent data file; it has no physical relationship to any other file.

Frame relay - Frame relay is a protocol and method of connecting. It is a telecommunication service designed for cost-efficient data transmission for intermittent traffic between local area networks and between end points in a wide area network like the Internet. Frame relay puts data in a variable-sized unit called a frame and leaves any necessary error correction (retransmission of data) up to the end points, which speeds up overall data transmission. For most services, the network provides a permanent virtual circuit (PVC), which enables the customer to see a continuous, dedicated connection without having to pay for one. The service provider figures out the route each frame travels and can change based on an actual usage basis.

Format - The layout of data in preset positions which allows a computer to be programmed to recognize what data is in what field.

Front-end - A computer for EDI pre-processing. A computer used as a front-end usually performs communication and translation of EDI documents and is connected with a host computer for final processing. It can perform line control, message handling, code conversion and functions such as control of special purpose terminals.

FTP - File transfer protocol uses the Internet's TCP/IP protocols to transfer files from a web page to users on the Internet, transfer large documents from one computer to another, or to transfer EDI file between trading partners, or between a VAN and its customers.

Gateway - A connection between two networks that allows messages to be routed through to the other.

Generic standard - A standard that applies to more than one industry.

Graphical User Interface (GUI) – A computer work environment in which the user generally performs functions by selecting options (often in icon form) by using a mouse rather than typing in commands.

Guestbook – A form on a website for people to fill in with information and comments. The information is usually automatically sent to a database and provide immediate feedback on the website effectiveness.

Home Page – The main page on a website, and most often the first displayed when opening a website.

HTML – Hypertext Markup Language, a standardized programming language used to create web pages and documents. Hypertext refers to the ability of a browser to *jump* from one website or page to another.

Implementation - The complete process of developing a computer system from inception to production and eventually high-volume use. In EDI, emphasizes the expansion to many trading partners.

Instant Messaging – A feature that lets you know when a colleague is online so you can send them an instant message or question.

Integrated Services Digital Network (ISDN) – International telecommunications standard for transmitting voice, video, and data over digital lines running at 64 Kbps.

Integration – The process of programming computers to share information between their applications regardless of format. Generally requires application of standard interface rules to facilitate interpretation of data that is in a different format in another computer.

Interactive EDI - Two applications exchanging EDI in a near real time situation as if they were directly linked to each other.

Interchange Control Segments - ISA/IEA segments, which identify a unique interchange sent from one sender to one receiver (See Electronic Envelope).

Internet – The unaffiliated collection of computers all over the world that conform to TCP/IP protocol and support the flow of internet communications. The Internet was founded by the education community when agreement was reached on a protocol that would allow communication between computers with no existing relationship between the machines or their owners, other than the use of the standard protocol.

Internet Fax – Technology that allows the use of the internet to carry broadcast faxes and save long distance charges and speed up dissemination.

Interconnect - A secure interconnection between third-party service providers via telecommunications; allows for communication between the network used by the sender and the network used by the receiver. Provides the sender ease of access to the receiver.

Intranet – A private equivalent of the web. Companies store data or documents on their web sites making it easy for employees to find information using standard web browsers rather than special purpose database programs.

IP – Internet Protocol; the technical language and ground rules that form the basis for computerized communication. The Internet is all networks that speak IP (more formally known as TCP/IP).

ISO - International Standards Organization. Responsible for development of international standards.

JAVA – A programming language from Sun Microsystems Inc. that makes it easier to create programs that once written can run on any computer with special “virtual machine” software. Java inspired tiny “applets” which are tiny application programs that are electronically downloaded to PC’s as needed.

JIT - Just-In-Time. A business operating philosophy focused on reducing waste (i.e. inventory levels) and thereby increasing efficiency. Typically, deliveries from the seller to the buyer take place more frequently, more responsively, and in smaller lots.

LAN – Local Area Network; a data communication network which is typically geographically limited (under 1 kilometer), and allows easy interconnection of computers and peripherals in the same or adjacent buildings. Ethernet and FDDI are examples of standard LAN’s.

Legacy – An adjective that refers to technology associated with old corporate programs such as those on mainframes. Increasingly used as a put-down; opposite of cutting edge.

Listserv – E-mail discussion group (often moderated) that allow interested users to log on and participate in an ongoing (but not real time) discussion on a predetermined issue.

NC – Network Computer; simple device connected to the internet that can do many tasks associated with PC’s, but for a fraction of the cost.

Netware – The network operating system that runs on top of MS-DOS on Novell (brand name) networks.

Mailbox - See Electronic Mailbox.

MODEM - MOdulator-DEModulator. A device that converts signals from a computer into a series of tones for transmission over the telephone lines. The process is reversed at the other end.

Network - A group of terminals, computers, and other equipment that uses communication channels to share data.

OBI - The open buying on the internet (OBI) Consortium was formed out of a Fortune 500 roundtable in October 1996 to create an open, vendor-neutral, scaleable, interoperable and secure standard for conducting business-to-business electronic commerce. General Electric, Ford Motor and American Express are among the founders.

Open – The opposite of “proprietary”; refers to software and hardware made from public specifications that anyone can copy. Customers may then choose from multiple suppliers that compete on price and innovation.

Open Network - A network with which outside parties can communicate.

OS or Operating System – The software that handles fundamental housekeeping chores for computers such as storing programs, managing files, and printing.

OSI - Open Systems Interconnect. An international framework of standards for communications between different systems. Structure based on seven-layer model developed by ISO.

Peer to Peer Network – A network typically found in small companies in which all computers are equal and a file server is not required.

Peripherals – Digital devices that are connected to computers to accomplish specific tasks, such as a printer, a backup disk storage unit, and external CD drive, etc.

Platform – A platform can be a chip, a computer, an operating system, an application, or any combination of these. Usually it refers to a collection of technology that software companies use in making new products.

Private formats - A unique format developed between trading partners when they choose not to use or in the absence of standard industry formats.

Proprietary ordering system - An industry/company-specific system that allows a supplier to provide order entry capabilities to its customers.

Proprietary standard - An industry/company - specific data format developed for transmission of data to and from trading partners. Proprietary formats do not comply with the ASC X12 series of standards.

Protocol - Communication standards that determine message content and format, enabling uniformity of transmissions. Rules for transmission across a network.

Receiving Advice – An EDI transaction set that includes the quantity, description and condition of the product received.

Required data elements - Those elements that must be included in a transaction set according to the standards.

Router – This device interconnects different access methods and protocols. Routers act like bridges but have greater functionality. They are used to build Wide Area Networks.

Segment - A grouping of data. It is composed of data elements and is analogous to record.

Server – A midrange computer that stores file and programs use by other clients. Server is also used to refer to the software that runs on that computer.

Schema - The W3C XML Schema Working Group is addressing means for defining the structure, content and semantics of XML documents. In Internet Explorer 5, Microsoft is providing a release of XML Schema as a technology preview that may be useful for developers interested in building prototypes and gaining experience with schema. Microsoft is actively involved in defining the emerging W3C XML schema standard and will track this effort.

Solution – The term used when someone claims to have an ingenious integrated collection of software, hardware, and expertise that solves a customer's problem.

Standards levels - A particular release of a standard; effective until another release (level) is issued.

Structured Data – A term that describes how data are stored and used. A clerk types information into designated fields in a form on the computer screen and this goes into a database program. It structures or categorizes the information so it can be searched and sorted using such criteria as customer name or zip code. The Web, in contrast, stores data in an unstructured way that limits the kinds of searches that can be preformed.

Syntax - The rules for the construction of standards.

TCP/IP – Internet Protocol; the technical language and ground rules that form the basis for computerized communication. The Internet is all networks that speak IP (informally known as IP).

Third-party service provider - A communications intermediary between trading partners that acts as a service bureau by providing a link between otherwise incompatible systems.

Transaction level acknowledgment - Acknowledgment of receipt of a message and the totality of data transmitted in a functional group or individual transaction set.

Transaction set - Complete business document such as an invoice, a purchase order, or a remittance advise (X12).

Translation - The act of accepting documents in other than standard format and translating them to the standard and vice versa.

Translation software - Transforms data into a format that can be read by an otherwise incompatible system or network at either end of a transmission.

Transmission acknowledgment - The acknowledgment that a total transmission was received with no error detected.

Twisted Pair – Two insulated copper wires twisted around each other. Several sets of twisted pair can be enclosed in one cable. The twists reduce induction and interference from one wire to another.

URL (Uniform Resource Locator) – A registered web address such as *http://www.cieca.com*.

Value Added Network - “VAN” is an electronic postal service capable of receiving or encapsulating a message in an EDI envelope, and depositing it into the recipient’s mailbox, or forwarding it via standard interconnect to another VAN on which that mailbox resides. A communications network originally dedicated to enabling EDI transactions, now provides community networking services and translation for Internet commerce methods.

Variable-length file - A file composed of segments and data elements (fields) that vary within minimum and maximum lengths; antithesis of fixed length fields. A data element delimiter is required to mark the end of the element and a segment delimiter character is needed to mark the end of the segment.

Virtual – That which exists in effect, but not in reality. ie...a virtual corporation which in effect functions as one company even though it is a consortium of several different autonomous businesses each doing what they are best at.

World Wide Web – The global collection of software systems available on the internet which consist of three basic elements; pages or web documents, computers that store them and make them available, and browser that navigate the web and display the pages.

XML- extensible Markup Language, a World Wide Web Consortium standard that makes it easier for two computers to exchange data with each other. XML tells what is in the enclosed tags, and enables users to create unique document description tags. XML makes it easy to send structured data across the Web. If another partner or supplier teams up with an organization, new code doesn't have to be written to exchange data with their system. XML doesn't replace HTML, though; they're designed for different purposes, XML is the Web's language for data interchange and HTML is the Web's language for rendering.