

Glossary of Internet Banking Terms

ACH/Automated Clearing House

Stands for "Automated Clearing House." An "ACH" is a transfer between accounts. When a user of an Internet banking system requests to move \$50 from a checking to a savings account, the transfer ends up in an ACH file. This ACH file contains the instructions for the bank's core software on what transactions to perform.

Account Analysis

Method by which a bank will wave certain "hard charges" to their customers account depending on their average balance.

Active X

A brand name from Microsoft for various technologies based on its Component Object Model (COM), many of which are targeted for the Internet. (See more information under COM)

ADSL

ADSL is a newly standardized transmission technology facilitating simultaneous use of normal telephone services, data transmission of 6 Mbit/s in the downstream and Basic-rate Access (BRA).

ASCII

(**American Standard Code for Information Interchange**) Pronounced "ask-ee." A binary code for text as well as communications and printer control. It is used for most communications and is the built-in character code in most minicomputers and all personal computers. ASCII is a 7-bit code providing 128 character combinations, the first 32 of which are control characters. Since the common storage unit is an 8-bit byte (256 combinations) and ASCII uses only 7 bits, the extra bit is used differently depending on the computer.

ASP/Active Server Page

A Web page that contains programming code written in VB Script or Jscript. Microsoft starting with Version 3.0 of its Internet Information Server (IIS) developed it. When the IIS server encounters an Active Server page that is requested by the browser, it executes the embedded program. Active Server Pages are Microsoft's alternative to CGI scripts, which allow Web pages to interact with databases and other programs. Active Server Pages use an .ASP extension

Bandwidth

The transmission capacity of an electronic line such as a communications network, computer bus or computer channel. It is expressed in bits per second, bytes per second or in Hertz (cycles per second). When expressed in Hertz, the frequency may be a greater number than the actual bits per second, because the bandwidth is the difference between the lowest and highest frequencies transmitted.

Glossary of Internet Banking Terms

Banner Ad (or Ad Banner)

A graphic image used on Web sites to advertise a product. Banner ads are typically rectangles about 460 pixels wide by 60 pixels deep.

Batch

As opposed to Real Time, the process whereby a bank (or credit union) collects transactions over a specific period of time (typically one business day) and process the transactions at the end of that day. Most banks and credit unions operate in the batch mode.

Baud

The signaling rate of a line, which is the number of transitions (voltage or frequency changes) that are made per second. The term has often been erroneously used to specify bits per second. However, only at very low speeds is baud equal to bps; for example, 300 baud is the same as 300 bps. Beyond that, one baud can be made to represent more than one bit. For example, a V.22bis modem generates 1200 bps at 600 baud.

BOT

A program used on the Internet that performs a repetitive function such as posting a message to multiple newsgroups or searching for information. Bots are also used to keep a channel open on the Internet Relay Chat (IRC). Increasingly, the term is used for all variety of macros and intelligent agents that are Internet or Web related.

Browser

The program that serves as your front end to the World Wide Web on the Internet. In order to view a site, you type its address (URL) into the browser's Location field; for example, **www.computerlanguage.com**, and the home page of that site is downloaded to you. The home page is an index to other pages on that site that you can jump to by clicking a "click here" message or an icon. Links on that site may take you to other related sites. Browsers have a bookmark feature that lets you store references to your favorite sites. Instead of typing in the URL again to visit the site the next time, you select one of the bookmarks. Although Mosaic was the browser that put the Web on the map, the two major browsers today are Netscape Navigator and Microsoft Internet Explorer. Navigator and Internet Explorer each vie for top recognition by introducing new features and functions that fragment Web sites into competing camps. When a site says, "best viewed by Netscape Navigator" or "best viewed by Internet Explorer," it means that the pages were programmed for that particular browser. Using the other browser will ignore some of the page's fancy features until a subsequent release supports them.

Cable modem

A modem used to connect a computer to a cable TV service that provides Internet access. Cable modems can dramatically increase the bandwidth between the user's computer and the Internet service provider. Cable modems link to the computer via Ethernet, which makes the service online all the time. However, Ethernet is a shared medium, and the speed will vary depending on how many customers on that cable segment are using the Web at the same time.

Glossary of Internet Banking Terms

Cash Management

Software that allows retail Internet banking, plus features designed for corporate banking, such as payroll, wire transfers, tax payments and more.

CGI/Common Gateway Interface

A small program written in a script language such as Perl that functions as the glue between HTML pages and other programs on the Web server. For example, a CGI script would allow search data entered on a Web page to be sent to the DBMS (database management system). It would also format the results of that search onto an HTML page, which is sent back to the user. CGI scripts have been the initial mechanism used to make Web sites interact with databases and other programs. Java and JavaScript programs and ActiveX components are expected to perform much of this processing in the future.

Click

To select an object by pressing the mouse button when the cursor is pointing to the required menu option, icon or hypertext link.

Click-Through

On the Web, the act of linking to a third party. Click-through rates are used to measure the effectiveness of one site persuading a user to go to another site. On "click-through advertising," royalties may be paid on this number.

Client

- (1) A workstation or personal computer in a client/server environment.
- (2) One end of the spectrum in a request/supply relationship between programs.

COM

(Component Object Model) Component software architecture from Microsoft, which defines a structure for building program routines (objects) that can be called up and executed in a Windows environment. This capability is built into Windows 95/98 and Windows NT 4.0. Parts of Windows itself and Microsoft's own applications are also built as COM objects. COM provides the interfaces between objects, and Distributed COM (DCOM) allows them to run remotely.

Core Processor

Also called "core software provider" or "host processor", the core processor is the company that sells and supports the bank's or credit union's processing software. Examples are McCoy Myers out of Dallas, Kirchman, and Fiserv.

Data Mining

Exploring detailed business transactions. It implies "digging through tons of data" to uncover patterns and relationships contained within the business activity and history. Data mining can be done manually by slicing and dicing the data until a pattern becomes obvious. Or, it can be done with programs that analyze the data automatically.

Glossary of Internet Banking Terms

Dial-Up

Dial-up Internet connections are the most common type of Internet connections used today. A dial-up connection is using a modem to connect to the Internet, via an Internet service provider (ISP) over the phone lines.

Dhtml/Dynamic HTML

Specific enhancements to HTML tags that allow Web pages to function more like regular software. For example, fonts could be changed or images could be selected without having to jump to another page. Dynamic HTML (DHTML) is based on the Document Object Model (DOM) interface that allows HTML tags to be dynamically changed via JavaScript or some other scripting language. Netscape Communicator and Internet Explorer 4.0 use different methods to implement DHTML.

Digital Identification

The digital equivalent of an ID card used in conjunction with a public key encryption system. Also called digital IDs, digital certificates are issued by trusted third parties known as certification authorities (CAs) such as VeriSign, Inc., Mountain View, CA, (www.verisign.com), after verifying that a public key belongs to a certain owner. The certification process varies depending on the CA and the level of certification. Driver's licenses, notarization and fingerprints are examples of documentation required.

The digital certificate is actually the owner's public key that has been digitally signed by the CA. The digital certificate is sent along with an encrypted message to verify that the sender is truly the entity identifying itself in the transmission. The recipient uses the public key of the CA, which is widely publicized, to decrypt the sender's public key attached to the message. Then the sender's public key is used to decrypt the actual message. The most vulnerable aspect of this method is the CA's private key, which is used to digitally sign a public key and create a certificate. If the CA's private key is uncovered, then false digital certificates can be created. The digital certificate contains the following data:

- owner name, company and address
- owner public key
- owner certificate serial number
- owner validity dates
- certifying company ID
- certifying company digital signature

DLT (Digital Linear Tape)

A magnetic tape technology originally developed by Digital for its VAX line. The technology was later sold to Quantum, which makes it available to other manufacturers. DLT uses half-inch, single-hub cartridges somewhat like IBM's 3480/3490/3590 line. It writes 128 or 208 linear tracks, depending on model, and provides capacities from 10 to 35GB. DLT usage started to grow rapidly in 1995 and has been widely used on medium to large-scale LANs. Super DLT increases capacity from 35 to 50GB and transfer rate from 5 to 10MB per second. SuperDLT capacities of 500GB and speeds of 40MB per second are expected in the future.

Glossary of Internet Banking Terms

Domain Name

The term may refer to any type of domain within the computer field, since there are several types of domains. However, today, it often refers to the address of an Internet site.

Download

To receive a file transmitted over a network. In a communications session, download means receive, upload means transmit. Downloads depend on file size and network speed. Via a 28800 bps modem, small Web pages take seconds when everything is running smoothly, but a 10MB video file takes at least an hour. LAN downloads are much faster. That same 10MB file can fly across a high-speed LAN in one second. Downloading files from the Internet has become a snap with "click here to download this file" messages on Web pages. The Web browser prompts you where to save the file. Downloading from an online service requires following the menu prompts to find the topics and files of interest. On a network server, downloadable files are placed in public directories (folders) that can be copied using the normal file management procedures of the operating system. On a Windows LAN for example, files are selected by drive letter, directory (folder) and file name. The user could select the J: drive, \PUBLIC directory and NEWDRIVR.SYS file by clicking on the appropriate references to them in File Manager or Explorer.

EBPP/Electronic Bill Payment & Presentment

Allows the customer to view bills (such as cable TV or utilities) via their browser and allows the option of payment. There are four stages to EBPP:

- 1) enrollment of customer
- 2) presentment of bill
- 3) customer's approval of payment
- 4) payment of bill

EDI

Electronic data interchange (EDI) is the exchange of documents in a structured form between computers via telephone lines. It is being increasingly used to great effect worldwide, most commonly, but not exclusively, for purchasing and distribution - orders, confirmations, shipping papers and invoices - but also for dentists payments and the distribution of exam results.

E-Commerce/Electronic Commerce

Can be simply described as doing business electronically. More precisely it is conducting the exchange of information using a combination of structured messages (EDI), unstructured messages (Email), data, databases and database access across the entire range of networking technologies. The sharing of information with business partners leads to cost savings, increased competitiveness, improved customer relations and greater efficiency through the redesign of traditional processes.

Glossary of Internet Banking Terms

EDI/Electronic Data Interchange

The electronic communication of business transactions, such as orders, confirmations and invoices, between organizations. Third parties provide EDI services that enable organizations with different equipment to connect. Although interactive access may be a part of it, EDI implies direct computer to computer transactions into vendors' databases and ordering systems. According to Dataquest, the EDI market is expected to grow from \$937 million in 1996 to two billion by 2000. The Internet is expected to make it easier for small and medium-sized companies to implement EDI systems.

EFT/Electronic Funds Transfer

The transfer of money from one account to another by computer.

EFTPS

The payment of taxes over the Internet.

Encryption

To encode data for security purposes.

Fastpay (or quickpay, etc.)

A local electronic transfer from one account to another. Payments are routed internally from the sender's account to the receiver's account without leaving the bank.

Fed File

This is the file that contains ACH's, which are moving money from an end user's Account inside the bank (or credit union) to an account at another bank or credit union.

Fed Line

Is used to refer to the actual machine and/or mechanism by which the Fed File is transported to the Federal Reserve.

FEDI

Financial Electronic Data Interchange (FEDI) involves the computer to computer transmission of both payment instructions and remittance details using international message standards. An example would be trade payments - e.g. a retailer sending a payment to a supplier in payment of multiple invoices.

Firewall

A method for keeping a network secure. It can be implemented in a single router that filters out unwanted packets, or it may use a combination of technologies in routers and hosts. Firewalls are widely used to give users access to the Internet in a secure fashion as well as to separate a company's public Web server from its internal network. They are also used to keep internal network segments secure. For example, a research or accounting subnet might be vulnerable to snooping from within. Following are the types of techniques used individually or in combination to provide firewall protection.

Glossary of Internet Banking Terms

Packet Filter

Blocks traffic based on IP address and/or port numbers. Also known as a "screening router."

Proxy Server

Serves as a relay between two networks, breaking the connection between the two. Also typically caches Web pages

Network Address Translation (NAT)

Hides the IP addresses of client stations in an internal network by presenting one IP address to the outside world. Performs the translation back and forth.

Stateful Inspection

Tracks the transaction in order to verify that the destination of an inbound packet matches the source of a previous outbound request. Generally can examine multiple layers of the protocol stack, including the data, if required, so blocking can be made at any layer or depth.

Frame

- (1) In computer graphics, one screen full of data or its equivalent storage space. In full-motion video, it requires approximately 24 consecutive frames in one second (24 fps) to simulate real, continuous motion.
- (2) In communications, a fixed block of data transmitted as a single entity. In local area networks (LANs), the terms frame and packet are used synonymously.
- (3) In a Web browser, a separate, scrollable window on screen.
- (4) In desktop publishing, a movable, resizable box that holds a graphic image.
- (5) In AI, a data structure that holds a general description of an object, which is derived from basic concepts and experience.

Ftp/File Transfer Protocol

A protocol used to transfer files over a TCP/IP network (Internet, UNIX, etc.). It includes functions to log onto the network, list directories and copy files. It can also convert between the ASCII and EBCDIC character codes. FTP operations can be performed by typing commands at a command prompt or via an FTP utility running under a graphical interface such as Windows. FTP transfers can also be initiated from within a Web browser by entering the URL preceded with **ftp://**. Unlike e-mail programs in which graphics and program files have to be "attached," FTP is designed to handle binary files directly and does not add the overhead of encoding and decoding the data. The term is also used as a verb; for example, "let's FTP them the file."

GIF

A popular bitmapped graphics file format developed by CompuServe. It supports 8-bit color (256 colors) and is widely used on the Web, because the files compress well. GIFs include a color table that includes the most representative 256 colors used. For example, a picture of the forest would include mostly greens. This method provides excellent realism in an 8-bit image. GIF89 allows one of the colors to be made transparent and take on the background color of the underlying page or window. GIF89a supports animated GIFs,

Glossary of Internet Banking Terms

which are sequences of images displayed one after the other to simulate movement. Macintosh users call GIF files "giff" files, while PC users call them "jiff" files.

Gopher

A program that searches for file names and resources on the Internet and presents hierarchical menus to the user. As users select options, they are moved to different Gopher servers on the Internet. Where links have been established, Usenet news and other information can be read directly from Gopher. There are more than 7,000 Gopher servers on the Internet.

Hit

The number of times a program or item of data has been accessed or matches some condition. For example, when you download a page from the Web, the page itself and all graphic elements that it contains each count as one hit to that Web site. If a search yields 100 items that match the searching criteria, those 100 items could be called 100 hits.

Home Page (also called Web Page)

The first page retrieved when accessing a Web site. It serves as a table of contents to the rest of the pages on the site or to other Web sites

Host

A computer that acts as a source of information or signals. The term can refer to almost any kind of computer, from a centralized mainframe that is a host to its terminals, to a server that is host to its clients, to a desktop PC that is host to its peripherals. In network architectures, a client station (user's machine) is also considered a host, because it is a source of information to the network in contrast to a device such as a router or switch that directs traffic.

Host Processor

Also called "Core software provider", the Host Processor is the company that sells and supports the bank's or credit union's processing software. Specific Processors we work with are: McCoy Myers out of Dallas, Kirchman, and Fiserv.

HTML(Hypertext Markup Language)

The document format used on the World Wide Web. Web pages are built with HTML tags, or 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. Each link contains the URL, or address, of a Web page residing on the same server or any server worldwide, hence "World Wide" Web. The Internet Engineering Task Force (IETF) defined HTML 2.0 with a basic set of features including interactive form capability. Subsequent versions added more features such as blinking text, custom backgrounds and tables of contents. However, each new version requires agreement on the tags (codes) used and browsers must be modified to implement those tags. Although programming-like statements are being added to HTML, it is not a full-blown programming language such as Java or JavaScript. Rather it could be considered a "presentation language." HTML is derived from SGML, the Standard Generalized Markup Language, which is widely used to publish documents. HTML is an SGML document with a fixed set of tags

Glossary of Internet Banking Terms

that, although change with each new revision, are not flexible. XML is a subset of SGML that includes some of SGML's flexibility for structuring and coding Web pages.

HTTPS

- 1) (**HyperText Transport Protocol Secure**) The protocol for accessing a secure Web server. Using HTTPS in the URL instead of HTTP directs the message to a secure port number rather than the default Web port number of 80. The session is then managed by a security protocol.
- 2) (**HyperText Transport Protocol Server**) A Web server that runs under Windows NT, developed by the European Microsoft Windows Academic Centre.

Hyperlink/Hotlink

A predefined linkage between one object and another. The link is displayed either as text or as an icon. On World Wide Web pages, a text hyperlink displays as underlined text typically in blue, while a graphical hyperlink is a small graphics image.

Hypertext

A linkage between related text. For example, by selecting a word in a sentence, information about that word is retrieved if it exists, or the next occurrence of the word is found. In this software, you can hypertext to the definition of any term you encounter by clicking on the word or highlighting the phrase. Hypertext is the foundation of the World Wide Web. Links embedded within Web pages are addresses to other Web pages either stored locally or in a Web server anywhere in the world. Links can be text only, in which case they are underlined, or they can be represented as an icon of any size or shape. Ted Nelson originally coined the hypertext concept as a method for making the computer respond to the way humans think and require information.

Image Map

A picture that is logically separated into areas, each of which is used to select a different option or display a different message when clicked. It is widely used on the Web to provide links to other pages.

Interactive

Back-and-forth dialog between the user and a computer.

Internet

- (1) A large network made up of a number of smaller networks.
- (2) (**Internet**) "The" Internet is made up of more than 100,000 interconnected networks in over 100 countries, comprised of commercial, academic and government networks. Originally developed for the military, the Internet became widely used for academic and commercial research. Users had access to unpublished data and journals on a huge variety of subjects. Today, the Internet has become commercialized into a worldwide information highway, providing information on every subject known to humankind.

Glossary of Internet Banking Terms

Internet Banking (also called Online Banking, etc...)

The technology, tools and processes that give you access to your bank accounts and banking transactions from your personal computer. Typically this includes checking account balances, obtaining a list of transactions affecting an account, and perhaps transferring funds from one online account into another.

InterNIC

(Internet Network Information Center, www.internic.net) The organization that handles Internet domain name registration. It is currently managed by Network Solutions, Inc. (NSI), Herndon, VA, and was formed in 1993 by agreements between it, the National Science Foundation, General Atomics and AT&T.

Intranet

- 1) An in-house Web site that serves the employees of the enterprise. Although intranet pages may link to the Internet, an intranet is not a site accessed by the general public. Using programming languages such as Java, client/server applications can be built on intranets. Since Web browsers that support Java run under Windows, Mac and UNIX, such programs also provide cross-platform capability. Intranets use the same communications protocols and hypertext links as the Web and thus provide a standard way of disseminating information internally and extending the application worldwide at the same time.
- 2) (2) The term as originally coined in the definition above has become so popular that it is often used to refer to any in-house LAN and client/server system.

IP Address

(Internet Protocol address) The address of a computer attached to a TCP/IP network. Every client and server station must have a unique IP address. Client workstations have either a permanent address or one that is dynamically assigned to them each dial-up session. IP addresses are written as four sets of numbers separated by periods; for example, 204.171.64.2. The TCP/IP packet uses 32 bits to contain the IP address, which is made up of a network and host address (net id and host id). The more bits used for network address, the fewer remain for hosts. Certain high-order bits identify class types and some numbers are reserved. The following table shows how the bits are divided. The Class Number is the decimal value of the high-order eight bits, which identifies the class type.

ISDN

(Integrated Services Digital Network) An international telecommunications standard for transmitting voice, video and data over digital lines running at 64 Kbps. The telephone companies commonly use a 64 Kbps channel for digitized, two-way voice conversations. ISDN service is available in most parts of the U.S. ISDN uses 64 Kbps circuit-switched channels, called B channels, or "bearer" channels, to carry voice and data. It uses a separate D channel, or "delta," channel for control signals. The D channel is used to signal the telephone company computer to make calls, put them on hold and activate features such as conference calling and call forwarding. It also receives information about incoming calls, such as the identity of the caller.

Glossary of Internet Banking Terms

ISP/Internet Service Provider

An organization that provides access to the Internet. Small Internet service providers (ISPs) provide service via modem and ISDN while the larger ones also offer private line hookups (T1, fractional T1, etc.). Customers are generally billed a fixed rate per month, but other charges may apply. For a fee, a Web site can be created and maintained on the ISP's server, allowing the smaller organization to have a presence on the Web with its own domain name. The major online services, such as America Online and CompuServe, provide Internet access but are still known as "online services," not ISPs. They generally offer the databases, forums and services that they originated over the years in addition to Internet access. While they may host a customer's home page, they typically do not host Web sites with unique domain names. All this is changing rapidly, however. To keep up-to-date, look for Boardwatch Magazine's "Internet Service Providers" bimonthly directory at your local bookstore or visit www.boardwatch.com.

Java

A programming language for Internet (World Wide Web) and intranet applications from Sun. Java was modeled after C++, and Java programs can be called from within HTML documents or launched stand alone. The first Web browsers to run Java applications were Sun's HotJava and Netscape's Navigator 2.0. Java was designed to run in small amounts of memory and provides its own memory management. Java is an interpreted language that uses an intermediate language. The source code of a Java program is compiled into "byte code," which cannot be run by itself. The byte code must be converted into machine code at runtime. Upon finding a Java applet, the Web browser switches to its Java interpreter (Java Virtual Machine) which translates the byte code into machine code and runs it. This means Java programs are not dependent on any specific hardware and will run in any computer with the Java Virtual Machine. On the server side, Java programs can also be compiled into machine language for fastest performance, but they lose their hardware independence as a result.

JavaScript

A script language from Netscape that is supported in Netscape Navigator as of Version 2.0. It is easier to use than Java, but not as powerful. JavaScript uses the HTML page as its user interface, whereas Java can generate a completely custom interface. On the client, JavaScript applets are maintained in source code. On the server, they are compiled into byte code (intermediate language), similar to Java programs. JavaScript evolved from Netscape's LiveScript language and was made more compatible with Java. JavaScript does not have the programming overhead of Java, but can be used in conjunction with it. For example, a JavaScript applet could be used to display a data entry form and validate the input, while a Java program processes the information. JavaScript is also used to tie Java applets together.

JPG (or JPEG)

(**Joint Photographic Experts Group**) Pronounced "jay-peg." An ISO/ITU standard for compressing still images that is becoming very popular due to its high compression capability. Using discrete cosine transform, it provides lossy compression (you lose some data from the original image) with ratios up to 100:1 and higher.

Glossary of Internet Banking Terms

Keywords

- (1) A word used in a text search.
- (2) A word in a text document that is used in an index to best describe the contents of the document.
- (3) A reserved word in a programming or command language.

Linux

Pronounced "linn-icks." A version of UNIX that runs on x86, Alpha and PowerPC machines. Linux is essentially freeware; however, the full distribution of Linux along with proprietary Add-ons and support are available for a fee from vendors such as Red Hat Software (www.redhat.com) and Caldera (www.caldera.com). The distribution CD-ROMs include the complete source code as well as hundreds of tools, applets and utilities. Due to its stability, Linux has gained popularity with ISPs as the OS for hosting Web Servers. Its usage is expected to grow as a server OS as well as for the desktop. In 1990, Finnish computer science student Linus Torvalds turned Minix, a popular classroom teaching tool, into Linux, which is closer to the real UNIX. Torvalds created the kernel, and most of the supporting applications and utilities came from the GNU project of the Free Software Foundation. Many programmers have contributed to the Linux/GNU system

Log

A record of computer activity used for statistical purposes as well as backup and recovery. Log files are created for such purposes as storing incoming text dialog, error and status messages and transaction detail

Memo Post

A file that gets posted to your account when you perform a transaction that has not officially cleared. This is the feature that adds and subtracts funds from your account throughout the day, even though technically the money hasn't left your account, because your bank operates in the batch mode. Real Time financial institutions do not need Memo Post.

Menu

An on-screen list of available functions, or operations, that can be performed currently. Depending on the type of menu, selection is accomplished by (1) highlighting the menu option with a mouse and releasing the mouse, (2) pointing to the option name with the mouse and clicking on it, (3) highlighting the option with the cursor keys and pressing Enter, or (4) pressing the first letter of the option name or some designated letter within the name

Meta Tags

An HTML tag that identifies the contents of a Web page. Using a format, meta tags contain such things as a general description of the page, keywords for search engines and copyright information.

Glossary of Internet Banking Terms

Modem

(**MO**dulator-**DE**Modulator) A device that adapts a terminal or computer to a telephone line. It converts the computer's digital pulses into audio frequencies (analog) for the telephone system and converts the frequencies back into pulses at the receiving side. The modem also dials the line, answers the call and controls transmission speed. Although modems have come in speeds of 300, 1200, 2400, 9600, 14400, 28800, 33300 and 56000 bits per second, only the latter, higher speeds are typically used

For hookup to a personal computer, an internal modem needs a free expansion slot, while an external modem requires a free serial port. The software required to use a modem depends on what service you want. A connection to an Internet service provider (ISP) requires a Web browser and TCP/IP stack, both of which are either provided by the ISP or are included with the operating system such as Windows 95/98 and NT. The online services (America Online, CompuServe, etc.) generally give you the required software and dial-up utilities. To connect to a BBS or private computer, a communications program (comm program) is required.

Mouseover

A JavaScript element that triggers a change on an item (usually a graphic) in a Web page when the mouse passes over it. The change usually signifies that the item is a link to related or additional information. Mouseovers are widely used in Navigation Bars, pop-up boxes, and/or form submissions.

Mouseovers require JavaScript in two places of an html document. At the beginning of your document and before the BODY tag, JavaScript defines the event to take place. After the BODY tag, HTML code contains the actual mouseover element in the place on your Web page you want the action to take place. When your mouse passes over the html code containing the mouseover element, it signals the JavaScript event to take place.

NACHA

Stands for "National Automated Clearing House Association". Pronounced "nacha", it is the standard format to which almost all core software providers write. We write the output of our ACH file in NACHA format, and almost any bank can use it. We have to determine in the pre-installation process whether the client's core software deviates from this standard. If so, Q-UP programmers must research the new format and write to it.

NACHA Terms

- (1) **Originator:** Any individual, corporation or other entity that initiates entries into the Automated ClearingHouse system.
- (2) **Originating Depository Financial Institution (ODFI):**
A participating financial institution that originates ACH entries at the request of and by (ODFI) agreement with it's customers. ODFI's must abide by the provisions of the ACH Operating Rules and Guidelines
- (3) **Receiver:** An individual, corporation or other entity that has authorized an originator to initiate a credit or debit entry to a transaction account held at an RDFI.
- (4) **Receiving Depository Financial Institution (RDFI):** Any financial institution qualified to receive ACH entries that agree to abide by the NACHA Operating Rules and Guidelines

Glossary of Internet Banking Terms

Navigation

"Surfing the Web." To move from page to page on the Web.

NSF

"Not Sufficient Funds" in your account to cover the specific amount of a transaction.

OFC/Open Financial Connectivity

Microsoft Money 97's file format.

OFX/Open Financial Exchange

Microsoft Money 98's file format

Page Counter

Normally found at the bottom of a webpage, a page counter actually counts the number of times people have viewed the webpage.

Page Source

The code that underlies a webpage, showing the html Meta tags.

Password

A word or code used to serve as a security measure against unauthorized access to data. It is normally managed by the operating system or DBMS. However, the computer can only verify the legitimacy of the password, not the legitimacy of the user.

Perl

(**P**actical **E**xtraction **R**eport **L**anguage) A programming language written by Larry Wall that combines syntax from several UNIX utilities and languages. Perl is designed to handle a variety of system administrator functions. Because of its comprehensive string handling capabilities, it is widely used on Web servers. Stemming from the UNIX world, Perl has been adapted to other platforms.

Proxy

An application that breaks the connection between sender and receiver. All input is forwarded out a different port, closing a straight path between two networks and preventing a hacker from obtaining internal addresses and details of a private network. Proxy servers are available for common Internet services; for example, an HTTP proxy is used for Web access, and an SMTP proxy is used for e-mail. Proxies generally employ network address translation (NAT), which presents one organization-wide IP address to the Internet. It funnels all user requests to the Internet and fans responses back out to the appropriate users. Proxies may also cache Web pages, so that the next request can be obtained locally. Proxies are only one tool that can be used to build a firewall.

QIF

Quicken's proprietary file format which is downloaded from the Internet into their financial software program.

Glossary of Internet Banking Terms

RAID

(**Redundant Array of Independent Disks**) A disk subsystem that provides increased performance and/or fault tolerance. Performance is improved by disk striping, which interleaves bytes or groups of bytes across multiple drives, so more than one disk is reading and writing simultaneously. Mirroring or parity achieves fault tolerance. Mirroring is 100% duplication of the data on two drives (RAID 1), and parity calculates the data in two drives and stores the result on a third drive (a bit from drive 1 is XOR'd with a bit from drive 2, and the result bit is stored on drive 3). A RAID system comprises a RAID controller and two or more regular disk drives. The RAID functionality is built into the controller. RAID can also be implemented in ordinary PCs via software only, but with less efficiency and performance.

Real-Time

An immediate response. It refers to process control and embedded systems; for example, space flight computers must respond instantly to changing conditions. It also refers to fast transaction processing systems as well as any electronic operation fast enough to keep up with its real-world counterpart (animating complex images, transmitting live video, etc.).

Rotating Banner

An ad banner that changes, showing different ads for short amounts of time, constantly rotating.

Router

A device that forwards data packets from one local area network (LAN) or wide area network (WAN) to another. Based on routing tables and routing protocols, routers read the network address in each transmitted frame and make a decision on how to send it based on the most expedient route (traffic load, line costs, speed, bad lines, etc.). Routers work at layer 3 in the protocol stack, whereas bridges and switches work at the layer 2. Routers are used to segment LANs in order to balance traffic within workgroups and to filter traffic for security purposes and policy management. Routers are also used at the edge of the network to connect remote offices. Multiprotocol routers support several protocols such as IP, IPX, AppleTalk and DECnet. Routers can only route a message that is transmitted by a routable protocol such as IP or IPX. Messages in non-routable protocols, such as NetBIOS and LAT, cannot be routed, but they can be transferred from LAN to LAN via a bridge. Because routers have to inspect the network address in the protocol, they do more processing and add more overhead than a bridge or switch, which both work at the data link (MAC) layer. Most routers are specialized computers that are optimized for communications; however, router functions can also be implemented by adding routing software to a file server. NetWare, for example, includes routing software. The NetWare operating system can route from one subnetwork to another if each one is connected to its own network adapter (NIC) in the server. The major router vendors are Cisco Systems and Bay Networks. Routers serve as an Internet backbone, interconnecting all networks in the enterprise. This architecture strings several routers together via a high-speed LAN topology such as Fast Ethernet or Gigabit Ethernet. Routers are also the backbone of "the" Internet, which spans the planet. Another approach within an enterprise is the collapsed backbone, which uses a single router with a

Glossary of Internet Banking Terms

high-speed backplane to connect the subnets, making network management simpler and improving performance. In older Novell terminology, a router is a network-layer bridge. Routers also used to be called gateways

Search Engine

Software that searches for data based on some criteria. Although search engines have been around for decades, they have been brought to the forefront since the World Wide Web exploded onto the scene

Server

A computer in a network shared by multiple users. The term may refer to both the hardware and software or just the software that performs the service. For example, Web server may refer to the Web server software in a computer that also runs other applications, or, it may refer to a computer system dedicated only to the Web server application. There would be several dedicated Web servers in a large Web site.

Service Bureau Vs In-house

Host Processors will take the processing job off of the bank or credit union's hands under the Service Bureau model. In the Service Bureau model, the bank collects its transactions during the day and then sends them up to the Processor for...processing. Likewise, when processing is finished, the bank downloads this data from the Processor to update its own records (so that when you walk into the lobby you've got your updated balance).

SET

(Secure Electronic Transaction) A standard protocol from MasterCard and Visa for securing online credit card payments via the Internet. It is a three-way transaction: the user, merchant and bank must use the SET protocols. Credit card data and a digital certificate (for authentication) are stored in a plug-in to the user's Web browser. A SET-enabled merchant server that passes encrypted payment information to the bank receives the order. Approval is electronically sent to the merchant.

Sitemap

A hierarchical diagram of the pages on a Web site.

Spider

Also known as a crawler, ant, robot ("bot") and intelligent agent, a crawler is a program that searches for information on the World Wide Web. It is used to locate new documents and new sites by following hypertext links from server to server and indexing information based on search criteria.

SSL/Secure Socket Layer

The leading security protocol on the Internet. When an SSL session is started, the browser sends its public key to the server so that the server can securely send a secret key to the browser. The browser and server exchange data via secret key encryption during that session. Developed by Netscape, SSL has been merged with other protocols and authentication methods by the IETF into a new protocol known as Transport Layer Security (TLS).

Glossary of Internet Banking Terms

Surf

To browse the Internet. The most common Internet browsing today is done on the World Wide Web.

T1

A 1.544 Mbps point-to-point dedicated, digital circuit provided by the telephone companies. The monthly cost is typically based on distance. T1 lines are widely used for private networks as well as interconnections between an organization's PBX or LAN and the telco. The first T1 line was tariffed by AT&T in January 1983. However, starting in the early 1960s, T1 was deployed in intercity trunks by AT&T to improve signal quality and make more efficient use of the network.

A T1 line uses two wire pairs (one for transmit, one for receive) and time division multiplexing (TDM) to interleave 24 64-Kbps voice or data channels. The standard T1 frame is 193 bits long, which holds 24 8-bit voice samples and one synchronization bit with 8,000 frames transmitted per second. T1 is not restricted to digital voice or to 64 Kbps data streams. Channels may be combined and the total 1.544 Mbps capacity can be broken up as required.

TIN

"Taxpayer Identification Number" assigned to you by the internal revenue service.

Transactional Website

A website that allows transactions, such as Internet Banking allows you to pay bills or transfer funds, or an e-commerce site that allows you to make purchases.

UNIX

A multi-user, multitasking operating system that is widely used as the master control program in workstations and servers. There are many versions of UNIX on the market, and, except for the PC world, where Windows dominates, almost every hardware vendor offers it either as its primary or secondary operating system. Sun and SCO have been major sponsors of UNIX over the years. UNIX is written in C, and both UNIX and C were developed by AT&T and freely distributed to government and academic institutions, causing it to be ported to a wider variety of machine families than any other operating system. As a result, UNIX became synonymous with "open systems." UNIX is made up of the kernel, file system and shell (command line interface). The major shells are the Bourne shell (original), C shell and Korn shell. The UNIX vocabulary is exhaustive with more than 600 commands that manipulate data and text in every way conceivable. Many commands are cryptic, but just as Windows hid the DOS prompt; the Motif GUI presents a friendlier image to UNIX users.

URL/Uniform Resource Locator

The address that defines the route to a file on the Web or any other Internet facility. URLs are typed into the browser to access Web pages, and URLs are embedded within the pages themselves to provide the hypertext links to other pages.

The URL contains the protocol prefix, port number, domain name, subdirectory names and file name. Port addresses are generally defaults and are rarely specified. To access a

Glossary of Internet Banking Terms

home page on a Web site, only the protocol and domain name are required. For example, <http://www.computerlanguage.com> retrieves the home page at The Computer Language Company's Web site. The <http://> is the Web protocol, and www.computerlanguage.com is the domain name. If the page is stored in another directory, or if a page other than the home page is required, slashes are used to separate the names. For example, <http://www.computerlanguage.com/order.html> points to the order page.

Upload

To transmit data from a computer to a bulletin board service, mainframe, or network. For example, if you use a personal computer to log on to a network and you want to send files across the network, you must upload the files from your PC to the network.

Usenet

(**USEr NETwork**) A public access network on the Internet that provides user news and group e-mail. It is a giant, dispersed bulletin board that is maintained by volunteers who provide news and mail feeds to other nodes. All the news that travels over the Internet is called NetNews, and a running collection of messages about a particular subject is called a newsgroup. Usenet began in 1979 as a bulletin board between two universities in North Carolina. Today, there are more than 50,000 newsgroups. News can be read with a Web browser or via newsreaders such as nn, rn, trn and tin.

VRML

(**Virtual Reality Modeling Language**) A 3-D graphics language used on the Web. After downloading a VRML page, its contents can be viewed, rotated and manipulated. Simulated rooms can be "walked into." The VRML viewer is launched from within the Web browser. The first VRML viewer was WebSpace from SGI, whose Open Inventor graphics library was the basis for developing VRML. WebFX, WorldView and Fountain are other Windows viewers, and Whirlwind and Voyager are Mac viewers.

Windows NT

(**Windows New Technology**) An advanced 32-bit operating system from Microsoft for Intel x86 and Alpha CPUs. Support for the PowerPC and MIPS platforms was dropped. Introduced in 1993, NT does not use DOS, it is a self-contained operating system that runs 16-bit and 32-bit Windows applications as well as DOS applications. Features include peer-to-peer networking, preemptive multitasking, multithreading, multiprocessing, fault tolerance and support for the Unicode character set.

WYSIWYG/What-you-see-is-what-you-get

Pronounced "wizzy-wig." It refers to displaying text and graphics on screen the same, as they will print. To have WYSIWYG text, there must be an equivalent screen font for each printer font used. The screen and printed results may look the same, but, in fact, it is impossible to get an exact representation because screen and printer resolutions do not match. The typical monitor may display 75 dpi, whereas a low-end desktop printer prints 300 dpi. That means the screen produces approximately 5,000 dots per square inch compared to the printer's 90,000. Many basic web design packages, such as MS FrontPage, are called WYSIWYG programs because they simulate the end product on the screen and do not require knowledge of HTML or other web languages.

Glossary of Internet Banking Terms

Website

A server that contains Web pages and other files which is online to the Internet 24 hours a day.

XML

(EXtensible Markup Language) A document format for the Web that is more flexible than HTML. While HTML uses only predefined tags to describe elements within the page, XML allows tags to be defined by the developer of the page. Thus, tags for virtually any data items such as product, sales rep and amount due, can be used for specific applications, allowing Web pages to function like database records. XML is a subset of the SGML document language, and HTML is a document type of SGML

Written by Kay Cavin
7/7/99