

Definition of Terms

Application Logic - The computational aspects of an application, including a list of instructions that tells a software application how to operate.

Application Service Provider (ASP) -An ASP deploys, hosts and manages access to a packaged application to multiple parties from a centrally managed facility. The applications are delivered over networks on a subscription basis. This delivery model speeds implementation, minimizes the expenses and risks incurred across the application life cycle, and overcomes the chronic shortage of qualified technical personnel available in-house.

Application Maintenance Outsourcing Provider - These providers manage a proprietary or packaged application from either the customer's or the provider's site.

ASP Infrastructure Providers (AIPs) - An AIP is a hosting provider that offers a full set of infrastructure services for hosting online apps.

ATM - An information transfer standard for routing high-speed, high-bandwidth traffic such as real-time voice and video, as well as general data bits.

Availability - The portion of time that a system can be used for productive work, expressed as a percentage.

Backbone - A centralized high-speed network that interconnects smaller, independent networks.

Bandwidth - The number of bits of information that can move through a communications medium in a given amount of time; the capacity of a telecommunications circuit/network to carry voice, data, and video information. Typically measured in Kbps and Mbps. Bandwidth from public networks is typically available to business and residential end-users in increments from 56Kbps to T-3.

Bit Error Rate - The number of transmitted bits expected to be corrupted when two computers have been communicating for a given length of time.

Burst Information Rate - The Burst Information Rate (BIR) is the speed or rate of information that the customer may need over and above the CIR. A burst is typically a short duration transmission that can relieve momentary congestion in the LAN or provide additional throughput for interactive data applications.

Business ASPs -provide mainly prepackaged application services in volume to the general business market, typically targeting small to medium size enterprises.

Business-Critical Applications - The vital software needed to run a business, whether custom-written or commercially packaged, such as accounting/finance, ERP, manufacturing, human resources and sales databases.

Business Service Providers - Companies that provide online services aided by bricks-and-mortar resources, such as payroll processing and employee benefits administration, printing, distribution or maintenance services. The category includes business process outsourcing (BPO) companies.

Commerce Network Providers - Commerce networks were traditionally proprietary value-added networks (VANs) used for electronic data interchange (EDI) between

companies. Today the category includes the new generation of electronic purchasing and trading networks.

Competitive Access Provider (CAP) - A telecommunications company that provides an alternative to a LEC for local transport and special access telecommunications services.

Capacity - the ability for a network to provide sufficient transmitting capabilities among its available transmission media, and respond to customer demand for communications transport, especially at peak times.

Client/Device - Hardware that retrieves information from a server.

Clustering - Group of independent systems working together as a single system. Clustering technology allows groups of servers to access a single disk array containing applications and data.

Computing Utility Providers (CUPs) - A provider who delivers computing resources, such as storage, database or systems management, on a pay-as-you-go basis.

CSU/DSU - Channel Server Unit/Digital Server Unit. A device used to terminate telephone company equipment and prepare data for router interface.

Data mart - A subset of a data warehouse, for use by a single department or function.

Data warehouse - A database containing copious amounts of information, organized to aid decision-making in an organization. Data warehouses receive batch updates, and are configured for fast online queries to produce succinct summaries of data.

Dedicated Line - A point-to-point, hard wire connection between two service locations.

Demarcation Line - The point at which the local operating company's responsibility for the local loop ends. Beyond the demarcation point (also known as the network interface), the customer is responsible for installing and maintaining all equipment and wiring.

Discard Eligibility (DE) Bit - The bit that is relevant in situations of high congestion, and indicates that the frame should be discarded in preference to other frames without the DE bit set. The DE may be set by the network or by the user; and once set can never be reset by the network.

DS-1 or T-1 - A data communication circuit capable of transmitting data at 1.5Mbps. Currently in widespread use by medium and large businesses for video, voice, and data applications.

DS-3 or T-3 - A data communications circuit capable of transmitting data at 45Mbps. The equivalent data capacity of 28 T-1's. Currently used only by businesses/institutions and carriers for high-end applications.

Electronic Data Interchange (EDI) - The electronic communication of the business transactions (orders, confirmations, invoices etc.) of organizations with differing platforms. Third parties provide EDI services that enable the connection of organizations with incompatible equipment.

Enterprise ASPs - typically deliver a select range of high-end business applications, supported by a significant degree of custom configuration and service.

Enterprise Relationship Management (ERM) - Solutions that enable the enterprise to share comprehensive, up-to-date customer, product, competitor and market information; for the end goals of long-term customer satisfaction, increased revenues, and higher profitability.

Enterprise Resource Planning (ERP) - An information system or process integrating all manufacturing and related applications for an entire enterprise. ERP systems permit organizations to manage resources across the enterprise and completely integrate manufacturing systems.

Ethernet - A local area network used to connect computers, printers, workstations, and other devices within the same building. Ethernet operates over twisted wire and coaxial cable.

Extended Superframe Format - A T1 format that provides a method for easily retrieving diagnostics information.

Fat Client - A computer that includes an operating system, RAM, ROM, a powerful processor and a wide range of installed applications that can execute either on the desktop or on the server to which it is connected. Fat clients can operate in a Server-based Computing environment or in a stand-alone fashion.

Fault Tolerance - A design method that incorporates redundant system elements to ensure continued systems operation in the event of the failure of any individual element.

FDDI - Fiber Distributed Data Interface. A standard for transmitting data on optical-fiber cables at a rate of about 100 Mbps.

Frame - The basic logical unit in which bit-oriented data is transmitted. The frame consists of the data bits surrounded by a flag at each end that indicates the beginning and end of the frame. A primary rate can be thought of as an endless sequence of frames.

Frame Relay - A high-speed packet switching protocol popular in networks, including WANs, LANs, and LAN-to-LAN connections across vast distances.

Gbps - Gigabits per second, a measurement of data transmission speed expressed in billions of bits per second.

Hosted Outsourcing - Complete outsourcing of a company's information technology applications and associated hardware systems to an ASP.

Hosting Providers - Providers who operate data center facilities for general-purpose server hosting and collocation.

Infrastructure ISVs - Independent software vendors (ISVs) who develop the infrastructure software that supports the hosting and online delivery of applications.

Integrated Services Digital Network (ISDN) - An information transfer standard for transmitting digital voice and data over telephone lines at speeds up to 128Kbps.

Integration - Equipment, systems, or subsystem integration, assembling equipment or networks with a specific function or task. Integration is combining equipment/systems with a common objective, easy monitoring and/or executing commands. It takes three disciplines to execute integration: 1) hardware, 2) software, and 3) connectivity – transmission media (data link layer), interfacing components. All three disciplines of

integration have to be understood to make two or more pieces of equipment or subsystems operate towards the common objective.

Inter-exchange Carrier (IXC) - A telecommunications company that provides telecommunication services between local exchanges on an interstate or intrastate basis.

Internet Service Provider (ISP) - Company that provides access for users and businesses to the Internet.

Independent Software Vendor (ISV) - generally a firm that develops software applications that is not a part of a computer systems manufacturer.

Internetworking - Sharing data and resources from one network to another.

IT Service Providers - Traditional IT services businesses, including IT outsourcers, systems integrators, IT consultancies and value added resellers.

Kilobits Per Second (Kbps) - A data transmission rate of 1,000 bits per second.

Leased Line - A telecommunications line dedicated to a particular customer along predetermined routers.

Local Access Transport Area (LATA) - One of approximately 164 geographical areas within which local operating companies connect all local calls and route all long-distance calls to the customer's inter-exchange carrier.

Local Exchange Carrier (LEC) - A telecommunications company that provides telecommunication services in a defined geographic area.

Local Loop - The wires that connect an individual subscriber's telephone or data connection to the telephone company central office or other local terminating point.

Local/Regional ASPs - deliver a range of application services, and often the complete computing needs, of smaller businesses in their local geographic area.

Megabits Per Second (Mbps) - A transmission rate where one megabit equals 1,024 kilobits.

MetaFrame - The world's first Server-based Computing software for Microsoft Windows NT 4.0 Server, Terminal Server Edition multi-user software (co-developed by Citrix).

Modem - A device for converting digital (data) signals to analog and vice versa, for data transmission over an analog telephone line.

Multiplexing - The combining of multiple data channels onto a single transmission medium. Sharing a circuit - normally dedicated to a single user - between multiple users.

Multi-User - The ability for multiple concurrent users to log on and run applications from a single server.

Net-based ISVs - ISVs whose main business is developing software for Internet-based application services. This includes vendors who deliver their own applications online, either direct to users or via other service providers.

Network Access Point (NAP) - A location where ISP's exchange each other's traffic.

Network Computer (NC) - A "thin" client hardware device that executes applications locally by downloading them from the network. NCs adhere to a specification jointly developed by Sun, IBM, Oracle, Apple and Netscape. They typically run Java applets within a Java browser, or Java applications within the Java Virtual Machine.

Network Computing Architecture - A computing architecture in which components are dynamically downloaded from the network onto the client device for execution by the client. The Java programming language is at the core of network computing.

Online Analytical Analytical Processing (OLAP) - Software that enables decision support via rapid queries to large databases that store corporate data in multidimensional hierarchies and views.

Operational Resource Providers - Operational resources are external business services that an ASP might use as part of its own infrastructure, such as helpdesk, technical support, financing, or billing and payment collection.

Outsourcing - The transfer of components or large segments of an organization's internal IT infrastructure, staff, processes or applications to an external resource such as an Application Service Provider.

Packaged Software Application - A computer program developed for sale to consumers or businesses, generally designed to appeal to more than a single customer. While some tailoring of the program may be possible, it is not intended to be custom designed for each user or organization.

Packet - A bundle of data organized for transmission, containing control information (destination, length, origin, etc.) the data itself and error detection and correction bits.

Packet Switching - A network in which messages are transmitted as packets over any available route rather than as sequential messages over switched or dedicated facilities.

Peering - The commercial practice under which nationwide ISPs exchange each other's traffic without the payment of settlement charges.

Performance - A major factor in determining the overall productivity of a system, performance is primarily tied to availability, throughput and response time.

Permanent Virtual Circuit (PVC) - A PVC is what connects the customer's port connections, nodes, locations, and branches to each other. All customer ports can be connected to each other, resembling a mesh, but PVCs usually run between the host and branch locations.

Point of Presence (POP) - A telecommunications facility through which the company provides local connectivity to its customers.

Portals - This category is for companies whose primary business is operating a Web destination site, hosting content and applications for access via the Web.

Remote Access - The hookup of a remote computing device via communications lines such as ordinary phone lines or wide area networks to access distant network applications and information.

Remote Presentation Services Protocol - A set of rules and procedures for exchanging data between computers on a network, enabling the user interface, keystrokes, and mouse movements to be transferred between a server and client.

Reseller/VAR - An intermediary between software and hardware producers and end users. Resellers frequently "add value" (thus Value-Added Reseller) by performing consulting, system integration and product enhancement.

Router - A communications device between networks that determines the best path between them for optimal performance. Routers are used in complex networks of networks such as enterprise-wide networks and the Internet.

Scalability - The ability to expand the number of users or increase the capabilities of a computing solution users without making major changes to the systems or application software.

Server - The computer on a local area network that often acts as a data and application repository and that controls an application's access to workstations, printers and other parts of the network.

Server-based Computing - A server-based approach to delivering business-critical applications to end-user devices, whereby an application's logic executes on the server and only the user interface is transmitted across a network to the client. Its benefits include single-point management, universal application access, bandwidth-independent performance, and improved security for business applications.

Single-Point Control - One of the benefits of the ASP model, single-point control helps reduce the total cost of application ownership by enabling widely used applications and data to be deployed, managed and supported at one location. Single-point control enables application installations, updates and additions to be made once, on the server, which are then instantly available to users anywhere.

Specialist ASPs - provide applications which serve a specific professional or business activity, such as customer relationship management, human resources or Web site services.

Systems Manufacturers - Manufacturers of servers, networking and client devices come in this category.

Telecoms Providers - Both traditional and new-age telecommunications network providers (telcos) fall into this category.

Thin Client - A low-cost computing device that accesses applications and and/or data from a central server over a network. Categories of thin clients include Windows-Based Terminals (WBT, which comprise the largest segment), X-Terminals, and Network Computers (NC).

Total Cost of Ownership (TCO) - Model that helps IT professionals understand and manage the budgeted (direct) and unbudgeted (indirect) costs incurred for acquiring, maintaining and using an application or a computing system. TCO normally includes training, upgrades, and administration as well as the purchase price. Lowering TCO through single-point control is a key benefit of server-based computing.

Total Security Architecture (TSA) - A comprehensive, end-to-end architecture that protects the network.

Transmission Control Protocol/Internet Protocol (TCP/IP) - A suite of network protocols that allow computers with different architectures and operating system software to communicate with other computers on the Internet.

User Interface - The part of an application that the end user sees on the screen and works with to operate the application, such as menus, forms and "buttons."

Vertical Market ASPs - provide solutions tailored to the needs of a specific industry, such as the healthcare industry.

Virtual Private Network (VPN) - A secure, encrypted private Internet connection.

Web Hosting - Placing a consumer's or organization's Web page or Web site on a server that can be accessed via the Internet.

Wide Area Network - Local area networks linked together across a large geographic area.

Windows-Based Terminal - Thin clients with the lowest cost of ownership, as there are no local applications running on the device. Standards are based on Microsoft's WBT specification developed in conjunction with Wyse Technology, NCD, and other thin client companies.