



Glossary

Application Software. Software designed to achieve a specific business process or application (*such as word processing, spreadsheets, presentations, Web access, accounting, inventory management, etc.*), as opposed to operating system software that simply empowers the computer hardware to function.

ASP (Application Service Provider). An ASP is an external resource that provides computing services to individuals or companies at a set cost per month or cost per transaction. The ASP operates and maintains the software and the hardware on which the applications run. ASPs can vary in type, ranging from providing a single specialized application to a broad range of enterprise computing capabilities.

Assurance. Software assurance relates to the level of confidence that software will function as intended and be free of vulnerabilities, either intentionally or unintentionally designed or inserted as part of the software.

Bandwidth. Bandwidth is a measure of the volume of data that can be transmitted or received via a device or network in a given period of time, typically expressed as some multiple of bits per second. (*e.g. Ethernet is 10 Megabits/second, while the Wireless 802.11 g standard is 54 Megabits/second.*)

Best Value. A qualitative measure that factors price and performance into the decision process. Best value" means the expected outcome of an acquisition that, in the Government's estimation, provides the greatest overall benefit in response to the requirement. A Best Value Toolkit including a Best Value Roadmap is available at www.esi.mil/bestvaluetoolkit

BPA (Blanket Purchase Agreement). A Blanket Purchase Agreement is a process for simplifying the filling a recurring need for supplies and services, while leveraging buying power by taking advantage of quantity discounts, saving administrative time, and reducing paperwork. DoD ESI offers a BPA Toolkit for KOs and SPMs involved with software purchases.

Bug. An error or flaw in a software program that prevents it from accomplishing the desired function, or that provides an incorrect output. The impacts of software bugs, and of the software fixes or patches needed to remedy them, are important considerations in software licensing.

Database. A collection of information (*data*) stored in an organized manner that allows a user to access it in meaningful ways. Enterprise database software is a classification of software that functions as the foundation of a corporate or organizational management system.

Channel Conflict. This business pressure exerted on various sales channels—direct sales vs. resellers vs. distributors vs. system integrators—is based on how a Publisher offers sales compensation and manages sales practices, discounts, and competition among those channels.

Click-wrap License. A term derived from the license-agreement screen that requires a user to click the “Agree” button before being able to access and use newly acquired software. It is commonly used in consumer applications with shrink-wrapped software or software purchased via the Internet. However, when the customer is a corporation or other large entity, there is often a negotiated written license agreement stating that it precludes the license terms associated with the on-screen click-through process.

Cloud Computing. This is both a conceptual and structural approach to providing powerful, cost-effective access to a variety of computing solutions—typically via the Internet or other network—independent of devices or resources available at the user’s location. The hardware and processing power resides in the “Cloud” which can be a publicly accessible resource, a privately controlled resource, or a hybrid combination of the two. Cloud computing flourishes based on its flexibility to ramp up to varying levels of IT processing demands quickly. The use of “virtualization” technology to allocate hardware and software resources is an important enabler of Cloud Computing. The [National Institute of Standards and Technology \(NIST\)](#) has established a definition of Cloud Computing based on five essential characteristics, three service models, and four deployment models.

CMDB (Configuration Management Database). A comprehensive inventory of IT assets within an organization—the ultimate objective of an IT Asset Management program.

Commercial Software License. This contractual arrangement defines the terms and conditions under which a Publisher provides the use of its copyrighted proprietary software to a customer.

COTS. “Commercial-Off-The-Shelf” solutions, as opposed to custom-developed solutions, are typically readily available and ready for use as purchased. COTS software is frequently prepackaged (*shrink-wrapped*) and fully functional without need for custom programming additions or system integration.

Database Software. An important category of software used to organize and store information that is used by application software, middleware, and enterprise system software.

Delivery Model. This is the process by which software functionality is made available to the end users. It can include purchased software running on in-house hardware, or running in an external hosted environment. Or it can include software accessed on a pay-as-you-go basis from an Application Service Provider, a Managed Service Provider or through a public, private, or hybrid Cloud Computing solution.

Distributor. A type of reseller in the software distribution chain that typically provides commercial software “as is” to other parties in the chain, unlike system integrators or VARs that also manage the installation process or add extra value.

DoD ESI (Department of Defense Enterprise Software Initiative). DoD ESI is an official DoD initiative sponsored by the DoD Chief Information Officer (CIO) to save time and money on commercial software, IT hardware, and services across the entire department.

Ecosystem. In the context of the software industry, this includes the software publishers, various levels of their software reseller partners (*distributors, system integrators, etc.*), their hardware, software, or hosting partners, industry analysts, and software customers.

EULA (End User License Agreement). A comprehensive license agreement between the government and a Publisher or Reseller that spells out the terms under which the buyer is authorized to use the Software Publisher's product. Also known as a Software License Agreement or a Product Use Rights Agreement.

Enterprise. The organization served by an information technology system. It can be a private commercial entity, a governmental body, or military organization or other institution. Enterprise software supports the overall IT operation of an organization, as opposed to application software that typically supports just isolated specialized functions.

FAR. The Federal Acquisition Regulation (FAR) is the primary regulation used by all Federal Executive agencies in their acquisition of supplies and services with appropriated funds. It is issued under Title 48 of the Code of Federal Regulations. There is also a **DFARS** Defense Federal Acquisition Regulation Supplement specification that is used by the DoD as an addendum to the contractor requirements of FAR, specifically for defense applications.

Fiduciary. To hold in trust, for another party, or to have financial responsibility to another party, as in the CEO of a Software Publisher having a *fiduciary responsibility* to the shareholders of the company.

Fixed Price. A contract with a set dollar amount for creating specific deliverables in a defined period of time.

GNU GPL. The terms of this General Public License—the most frequently used license format for open source software—were developed as a result of the GNU Project (*an effort to develop the GNU operating system as a "free software" version of a complete Unix-like operating system*). The GPL addresses the freedom to run, adapt, improve, and redistribute software, based on providing complete and open access to the source code.

Hardware. The term hardware applies to the broad range of physical equipment—such as computers, servers, communications networking, infrastructure, etc.—that serves as the engine of an IT system.

Hosting. The process of one party providing a computing function for the benefit of another party. One example is a software hosting company that will run and maintain a software application on their own hardware, but provide outside organizations with access to use the program.

IaaS (Infrastructure as a Service). This shared-services approach is one of the three service models of Cloud Computing. It mirrors the shared-resource concept of Software as a Service, but focuses on the provision of on-demand hardware resources—such as servers, CPU processing power, memory, storage space, and network equipment.

Industry Analyst (or System Analyst). An individual experienced in the information technology ecosystem, who can inform customers on how to deal with the technologies and suppliers needed to solve their complex information processing needs.

Infrastructure. The interconnected resources on which an IT system operates—including computers, networks, routers, data storage systems, and their attendant operating systems and utility software programs.

Intellectual Property. A "creation of the mind", such as a software program, an invention, an artistic or literary work, a revolutionary process, etc.

ITIL (IT Infrastructure Library). A comprehensive set of disciplines and processes for orderly management of IT assets and services within an organization.

KPI (Key Performance Indicator). A measurement of performance. For example, Software Publishers use growth in revenues and profits, the share price for company stock, and earnings per share as KPIs of company performance.

Legacy System or Application. A long-established hardware or software capability that still has utility for a current use, despite not utilizing the latest technology. Legacy systems often persist because they would require a large capital investment and/or a significant disruption in organizational operations in order to upgrade or change them.

License. A set of rights granted by a Publisher to a buyer for use of the Publisher's software.

License Pricing Model. The metrics by which software selling prices are established. For example, the price can be based on the number of individuals in the user population or the maximum number of users at any given point in time, by the number of computers (CPUs) on which the software is installed, by subscription (*a lump sum payment for a fixed period of use*), or for use throughout an entire enterprise.

Limited Source Justification and Approval. This special purchasing situation allows for purchases where only one source is deemed acceptable (*e.g. due to the unique or specialized nature of the requirement, or where an urgency and compelling need exists and following the ordering procedures would result in unacceptable delays*). It requires special approval of an appropriately documented request following particular guidelines.

Maintenance (i.e. Software Maintenance). A set of services a Publisher can sell to a Customer for the on-going development and delivery of software bug fixes and product upgrades.

Middleware. Software that connects applications using different data structures or architectures.

MSP (Managed Service Provider). An MSP administers the delivery of network-based services and computing applications to end users on a contract basis. While an Application Service Provider (ASP) typically provides access to centrally hosted and managed software applications, an MSP can also provide a broader scope of products and services such as an industry-specific database accessible through the software, or other networking and communications capabilities.

Object Code (as opposed to "Source Code"). The machine-readable-only format of a software program that is licensed to an individual or organization to run on their computer(s) in order to accomplish a specific function or application.

Open Source Initiative. According to its Web site, "*The Open Source Initiative (OSI) is a California public benefit corporation, with 501(c)3 tax-exempt status, founded in 1998. The OSI are the stewards of the [Open Source Definition \(OSD\)](#) and the community-recognized body for reviewing and approving licenses as OSD-conformant.*"

Open-Source Software. As a practical definition, open source software provides open access to source code, and the freedom to modify it or create derivative works, without imposing technical restrictions on subsequent users. A complete technical description of the term is found on the [Open Source Initiative](http://opensource.org/docs/osd) Web site at <http://opensource.org/docs/osd>.

Operating System. The fundamental programming that enables computer hardware to function, in order to execute application or utility software programs.

PaaS (Platform as a Service). A shared-resource concept where a hosting company invests, manages, and maintains the computing hardware, software, and development tools needed to create new applications, providing access to those resources on a pay-as-you-go basis. It differs from the other major service models of Cloud Computing in that it provides application development resources beyond the dedicated applications software of SaaS and the raw hardware solutions of IaaS.

Perpetual License. This type of license provides the user with the right to retain and use electronic files of the original program, and any appropriately acquired updates, indefinitely.

Release Event. A contractually specified condition under which software source code held in escrow by an independent third party can be released to the software customer.

Reseller. A middleman in the software sales and distribution channel. A reseller who packages a Publisher's software with some added value of their own (*hardware, software, or implementation service, etc.*) is known as a Value-Added Reseller (VAR).

Revenue Recognition. The terms under which revenue from a multi-component sale is recognized and accrued to the Publisher's ledger sheet—especially when certain components, such as maintenance or service are not delivered immediately. These terms can affect how a Publisher sales representative views the value of such a multi-component transaction.

SaaS (Software as a Service). This cloud computing service model is an increasingly popular method of application software use that provides pay-for-use access to the functionality of software hosted and maintained by the provider on a centrally located server. Access is typically controlled through a secure Internet connection and Web browser. SaaS frees the user from the administrative details of having to acquire, install, maintain, and update the program on their own IT hardware.

Sarbanes-Oxley. The Sarbanes-Oxley Act of 2002 is a Federal statute governing auditing accountability.

SAM (Software Asset Management). A methodology that allows for a complete and accurate inventory of software assets. Software can also be accounted for under IT Asset Management (ITAM).

Self-Audit. A software audit is the Publisher's way of ensuring that a software customer is not exceeding the usage limitations of a Software License Agreement. The Publisher prefers to conduct the audit with Publisher personnel and tools. In DoD applications, particularly those closed to outside personnel, the government can construct the license agreement so that internal personnel can conduct a self-audit under pre-established processes and methods, and report the results to senior management who will certify to the Publisher that the audit was conducted properly and accurately.

Service Level Agreement. A collection of terms related to a software services contract, usually structured as a combination of conditions and performance. *(For example: “All reported high priority performance issues will be addressed within 4 hours.”)*

Shrink-wrap Software. Prepackaged, self-sufficient software that is ready to implement without requiring customized programming or system integration. It is frequently sold through standard retail channels—storefront, Internet, or tele-sales.

SLA (Software License Agreement). This contract between the software end user and the Publisher (*i.e. the owner of the Intellectual Property rights of the software*) spells out the rights and responsibilities of each party and the terms and conditions under which the end user can use that software—whether acquired as an outright purchase or on a subscription basis.

SmartBUY. The GSA’s SmartBUY program combines software requirements at the Federal level to act as one customer, reduce costs, and eliminate redundant software purchases. DoD ESI serves as the implementation agent for SmartBUY throughout the DoD to aggregate requirements for Federal-wide purchases.

Software. Computer programming-language files consisting of operating systems, utilities, and applications that enable the computer hardware to function and produce results.

Software Publisher. The company that holds the rights to the software program—whether developed by them or acquired from another individual or organization—that reproduces and distributes the software and supporting documentation, and that updates the source code for that software to fix bugs or provide upgrades.

SOP 97-2. A standard for Software Revenue Recognition established by the Accounting Standards Executive Committee of the American Institute of Certified Public Accountants.

Source Code (*as opposed to “Object Code”*). Computer program commands consisting of specific instructions, functions, and routines that are presented in a human readable format. All machine-readable object code is translated from source code written in specified programming languages.

Source Code Escrow. Using an independent third party to hold the Publisher’s Intellectual Property (*source code*) in reserve, until a “release event” qualifies the software purchaser to receive that property. *(See “Release Event.”)* In the context of a proprietary software purchase, Source Code Escrow is an important protection against the loss of continued software availability for modification in the event of problems within the Publisher organization.

Subscription License. A type of software license that enables you to “pay as you go”, instead of making a full outright purchase. It typically involves a fee for a rated volume of usage or a designated time period, whether that is a monthly, quarterly, or annual basis.

Support. A set of Publisher services for receiving reports of software malfunctions, analyzing their causes, creating fixes and delivering them to Customers within agreed upon time frames.

System Integrator. An individual or organization that takes responsibility for assembling a collection of hardware, software and infrastructure into a functioning information processing system.

T&M (Time & Materials). A type of contract by which an estimate of time and price is provided for the defined task, but where all time is reimbursed at the agreed-upon rates.

Ts & Cs. Terms and Conditions under which a software contract is established. They include requirements and expectations on both the part of the seller and the buyer.

TCO (Total Cost of Ownership). This is a concept for evaluating the true value of an IT investment by taking into account all the costs related to its acquisition and use—hardware, software, implementation, maintenance, training, special license conditions or support services, etc.

Transferability. The technical ability to relocate a software program, residing and running on one computer or hardware platform, from that system to another environment. Also, the legal ability to reassign the license rights to use that software, from one owner to another.

Utility. A specialized type of software program that helps manage specific aspects of system resources to help IT systems function more efficiently. Utility program functions include encryption, virus protection, file compression, data backup and recovery, drivers for peripheral communications, and more.

VAR (Value Added Reseller). A company that packages a product or service of their own along with a software Publisher's products, to provide added value.

Virtualization. A process of subdividing or reallocating the capabilities of a single resource—server, network, memory device, storage system, etc.—into multiple, functionally independent operating versions.

Virtual Machine. Multiple “virtual” machines can be created within a single computer housing by using a layer of software—called a virtual machine manager or hypervisor—to segment the functionality of the hardware resources into several independent environments. Each virtual machine environment can run its own unique operating system and applications, unaffected by any of the other virtual machines set up within the same unit.

VSOE (Vendor-Specific Objective Evidence). This is a generally accepted accounting practice that allows a company to recognize revenue from a multi-item sale based on evidence that specific components of the sale have been delivered satisfactorily.

Warranty. The contractual duty of a Publisher to correct product defects, usually limited to certain kinds of defects and for a specific time period.

Acronyms and Abbreviations

ASP Application Service Provider	LOL Limitation of Liability
BPA Blanket Purchase Agreement	MSP Managed Service Provider
BPR Business Process Reengineering	OOB Out-Of-the-Box
CEO Chief Executive Officer	OS Operating System
CMDB Configuration Management Database	OSD Office of the Secretary of Defense
COO Chief Operating Officer	PaaS Platform as a Service
COTS Commercial Off-the-Shelf	P/E Price/Earnings Ratio
CPU Central Processing Unit	P&L Profit and Loss
CTO Chief Technology Officer	QASP Quality Assurance Surveillance Plan
DCAA Defense Contract Audit Agency	RICE Reports, Interfaces, Customizations, Enhancements
DFARS Defense Federal Acquisition Regulation Supplement	ROA Return on Assets
EPS Earnings Per Share	ROS Return on Sales
ERP Enterprise Resource Planning	ROI Return on Investment
ESI Enterprise Software Initiative	SaaS Software as a Service
EULA End User License Agreement	SAM Software Asset Management
FFP Firm Fixed Price	SLA Service Level Agreement
FAR Federal Acquisition Regulation	SOO Statement of Objectives
GPL General Public License	SOW Scope of Work
GSA General Services Administration	SOX Sarbanes-Oxley Act
IaaS Infrastructure as a Service	SPM Software Product Manager
IDIQ Indefinite Delivery/Indefinite Quantity	Ts & Cs Terms and Conditions
IP Intellectual Property	T&M Time & Materials
IT Information Technology	TCO Total Cost of Ownership
ITIL IT Infrastructure Library	VAR Value Added Reseller
KO Contracting Officer	VSOE Vendor Specific Objective Evidence
KPI Key Performance Indicator	