

## Consolidated Definitions and References

A consistent set of terms, process framework definitions and references apply across all the IT Planning and Management Guides. An initial set of resources such as templates, samples, checklists, and other items are also provided to implement the activities defined by the process framework for each guide. These items are described below.

### Glossary

This contains the consolidated vocabulary used throughout the [IT Planning and Management Guides](#). Terms that are specific to the process framework elements are consolidated in the Consolidated [Artifact](#) or [Role](#) lists.

### Abbreviations and Acronyms

This is the consolidated list of special terms and abbreviations used across the IT Planning and Management Guides.

### Consolidated Artifact Definitions

Artifacts are units of information input and output by the activities described in the process framework of the guides. This page consolidates the definitions from across all the activities in the guides. Some artifacts are formal products that have specific content (e.g., the HS IT Strategic Plan). Others are placeholders for categories of information that are usually context dependent, such as External Conditions.

Artifacts can be realized in many different ways depending on the context in which an activity is performed. The [resources](#) provides a growing list of templates, samples, checklists, or other items to help identify, format, and use some of these artifacts.

### Consolidated Role Definitions

The roles (i.e., organizations) in the model are virtual. They may be implemented differently in each State. They may exist as a single organization or have their function dispersed across many entities within a State or local Government. See the Guidelines for Applying for information on mapping these roles to individuals or groups within your State.

### Consolidated References

This is the set of references that are external to the Guides. This includes electronic as well as traditionally published material. Some publication dates for items available on the Web were not available; therefore, the date of publication reflects the date the item was first accessed.

## Glossary

This contains the consolidated vocabulary used throughout the [IT Planning and Management Guides](#). Terms that are specific to the process framework elements are consolidated in the [Roles](#) or [Artifact](#) lists.

<a href="#">Adaptation</a>	See: <a href="#">Maintenance (Adaptive)</a>
<a href="#">Application</a>	A set of software that provides functionality to the business process or is necessary to operate and maintain the automated information systems.
<a href="#">Application architecture</a>	The model(s) that describes how a set of applications will be structured and the interfaces and design rules for each of its parts (e.g., isolating graphical user interface code from business logic).
<a href="#">Application platform</a>	A collection of tightly integrated computing hardware, peripherals, operating system, and middleware upon which an application is built. The application provides some of its functionality by accessing services residing on the application platform through an Application Program Interface.
<a href="#">Application platform entity</a>	The set of resources, including hardware and software, that provides all the services to application software executing on that platform, including the ability to have application-to-application services.
<a href="#">Application portfolio</a>	The aggregation of applications required to support the HS Agency.
<a href="#">Application Service Provider</a>	Organizations that provide application programs or services for a fee over the Internet. These programs or services were previously made available from the Enterprise's server or personal computers.
<a href="#">Automated information system</a>	A combination of computer hardware and software, data, and telecommunications that performs functions for an organization.
<a href="#">Baseline</a>	A set of items that have been formally reviewed and agreed upon. The agreement is between key stakeholders, such as the item's producer and consumer (user). A baseline establishes a fixed point for further development or use. Items in a baseline can be modified only through formal change control procedures in which the stakeholders participate.
<a href="#">Baseline data</a>	Initial collection of data to establish a basis for comparison. (National Performance Review)
<a href="#">Benchmark</a>	A standard or point of reference used in measuring and/or judging quality or value. (National Performance Review)
<a href="#">Business</a>	Any Enterprise that provides a type of offering. The organizational entity being studied, regardless of its size or purpose either private or public sector.

<a href="#">Business process</a>	A set of interacting activities and decisions that produce one or more products or services for customers of the business Enterprise.
<a href="#">Business process reengineering</a>	The significant redesign and restructuring of an organization's business operations and management practices to achieve a significant change in performance, such as cost, cycle time, service, and quality. Traditional organizational boundaries are eliminated and replaced by an emphasis on core business processes.
<a href="#">Business rule</a>	An expression of the business policies and procedures (e.g, Agency or HS Program), often embedded within the logic of an application program.
<a href="#">Capacity</a>	A measure of an organization's output, for example participation rates in an HS program or other Federal reporting requirements. For the IT organization, this may resolve into measures of efficiency or effectiveness of meeting HS IT evolving needs.
<a href="#">Component</a>	A software item that can be independently developed, distributed (provided and/or sold), and used in its binary form separable from the original context. Components can be used to develop distributed applications in which the components can communicate with one another. A component is based on a component model, such as COM or JavaBeans. Component models support runtime interface exposure and discovery, component properties, persistence, event handling, application builder support, distribution (location transparency), and component packaging. Components have two distinct parts: specifications (or interfaces) and implementations. Components are typically generated with object-oriented approaches, but this is not essential, as long as they can be used as objects.
<a href="#">Core competency</a>	A bundle of skill sets or capabilities that significantly contribute to an organization's ability to satisfy the customer, offer unique services, or have future value.
<a href="#">Core process</a>	The fundamental activities, or group of activities, so critical to an organization's success that failure to perform them in an exemplary manner will result in deterioration of the organization's mission.
<a href="#">Critical success factors</a>	Those few areas where things must go right for the Enterprise to be considered successful in achieving its mission. CSFs are internal and external states and events that can have significant impact on perceived results.
<a href="#">Cultural filter</a>	A concept that describes how one delivers, views, or interprets information in different regions. For instance, telephone interviews or face-to-face interviews may be necessary given the interviewee's circumstances.
<a href="#">Culture</a>	The sum of individual opinions, shared mindsets, values, and norms.

<a href="#">Data</a>	Information absent its context. A representation of facts, concepts, and instructions in a defined format and structure that permits the processing of interpretation by humans or machines.
<a href="#">Environment</a>	Circumstances and conditions that interact with and affect an organization. These can include economic, political, cultural, and physical conditions inside or outside of the organization. See the <a href="#">Roles</a> for additional information. (National Performance Review)
<a href="#">Enterprise</a>	The whole (or portion) of the State HS Agency (or additional Agencies) that is affected by change in the IT infrastructure. This scope is necessary to establish the boundaries, within which the HS Agency decision makers can manage the interoperability and integration within and across this boundary.
<a href="#">Enterprise application integration</a>	The application of technology to consolidate and coordinate disparate legacy applications and databases to extend their useful lifetime across the enterprise. The interoperability generally relies on message-oriented middleware with adaptors and or connectors that allow for existing applications to interact by moving, routing, and transforming data between them in real time.
<a href="#">Entity</a>	A discrete, identifiable element of technology. An entity may be made up of subsidiary entities and also may be part of a larger entity. As an element of technology, an entity is a "thing" and can be characterized in part by the technology used to implement it. For example, a candle and a light bulb are both implementations of a "light source" entity.
<a href="#">Function (business)</a>	A collection of resources (equipment, networking, individuals) in a single area of operations, such as finance, accounting, personnel, production, engineering, operations, development, or support.
<a href="#">Goal</a>	A general target the HS Agency or organization wishes to reach in a specific area. It is a broad direction for managerial decision making, often stated in terms of qualitative measures. Goals need to be achieved for the HS Agency or organization to achieve its mission.
<a href="#">Guiding principles</a>	The shared values and management or technical style of the Enterprise. They articulate the ethical standards by which the organization makes decisions and conducts activities.
<a href="#">Information</a>	Data that has been given meaning by human reference. Data becomes information only when it is placed into a meaningful context or relationship.
<a href="#">Information appliance</a>	Combines the application software and application platform entities into one entity. This term is used when the presence of configurable and/or separately procurable software is not visible to the user of a particular information technology. Examples: set-top cable TV boxes, video cassette recorders,

	television sets, fax machines, cell phones.
<b>Information technology</b>	The processing equipment, interconnecting (networking) equipment, and the software entities that operate within this equipment.
<b>Integration</b>	Combining separately developed parts into a whole so that they work together. The means of integration may vary, from simply mating the parts together at an interface, to radically altering the parts or providing something to mediate between them.
<b>Interface</b>	A boundary between two or more entities such as human-computer or application program to application.
<b>Interoperability</b>	The ability of independently developed and fielded applications that execute on heterogeneous computer platforms to communicate with one another and to exchange and use information (content, format, and semantics).
<b>Legacy system</b>	Jargon for an AIS (or set of applications) that is currently in use, and initially deployed many years ago, using a computing infrastructure that is several generations old. These systems tend to be critical to the business and cannot be easily replaced or cost-effectively maintained. They are approaching or have reached the end of their practical operational life span.
<b>Maintenance</b>	The process of modifying a system or component after delivery to correct faults, improve performance or other attributes, or adapt to a changed environment, with the purpose of maintaining the value of the existing system.
<b>Maintenance (adaptive)</b>	Maintenance performed to make a system usable in a changing environment.  Adaptation refers to evolutionary changes (usually involves a progressive modification of some structure or structures), which a system makes in order to cope with the changes in the environment, while still keeping the essential attributes of the system's structure and processes constant.  For example: responding to increased enrollment by hiring more teachers; adjusting the clothing to suit the weather
<b>Maintenance (Corrective)</b>	Maintenance performed to correct faults (defects) in hardware or software.
<b>Maintenance (perfective)</b>	Maintenance performed to improve the performance, maintainability, or other attributes of a system.
<b>Measure</b>	One of several measurable values that contribute to the understanding and quantification of a key performance indicator.
<b>Metrics</b>	The elements of a measurement system consisting of key performance indicators, measures, and measurement methodologies.
<b>Migration</b>	The process of transferring all or part of an AIS's

functionality, data, or communications to another technical infrastructure. The original application code may be ported or replaced. The business data (and its schema) is usually retained in a significant way.

<a href="#">Mission</a>	An enduring statement of purpose; the organization's reason for existence. The mission describes what the organization does, who it does it for, and how it does it. (National Performance Review)
<a href="#">Noncompliance</a>	An instance where performance of a task or a resultant work product does not follow the agreed upon procedures, descriptions, standards, or other requirements. A noncompliance is generally found through QA reviews and audits and formally tracked until it is resolved.
<a href="#">Objective</a>	A broad, general direction or intent.
<a href="#">Open system (environment)</a>	An AIS that is built to a set of specifications that are nonproprietary, allowing the system to better interoperate, scale, or allow for porting of applications across heterogeneous, multivendor computing platforms.
<a href="#">Organization</a>	A logical grouping of people and resources (including information) for accomplishing some aspect of the mission of an Enterprise. See the <a href="#">Roles</a> for the generic organizational entities assumed by the guides.
<a href="#">Packaged solution</a>	An integrated collection of software, hardware, or other parts provided by vendors as a basis for developing solutions to common business domain functions. A packaged solution is often highly tailorable at the design level to meet Enterprise-unique needs. Systems transferred from one State and adapted for another are also in this category.
<a href="#">Performance measure</a>	A quantitative or qualitative characterization of performance. (National Performance Review)
<a href="#">Plateau (evolution planning)</a>	An incremental level of capability at which the HS Agency operates, as it moves to achieve its vision in accordance with the strategy. It is a point where the HS Agency can reevaluate the progress being made; note significant changes in the HS Agency's external, internal, or IT Division conditions; and readjust plans. Plateaus can be represented in the IT Evolution Plan as intermediate milestones.
<a href="#">Platform</a>	See: <a href="#">Application platform</a>
<a href="#">Plug-in</a>	A program that can be downloaded and installed on demand to be used as part of a Web browser. A plug-in is generally a small program that is activated by the Web browser to perform special processing of objects within the HTML document, such as viewing Portable Document Format (PDF) or streaming video objects.
<a href="#">Portability (porting)</a>	Portability is a characteristic of a system (or part) that describes the ease with which the system (or part) can run on multiple, heterogeneous platforms. There are two general

levels of portability: the binary-program level and the source-code level. Binary portability is exemplified by the Java language, whose byte codes are capable of executing on any computer that supports its runtime environment (Java Virtual Machine). Source code portability is generally achieved by coding to a recognized standard (e.g., ANSI C++) and APIs to facilitate program compilation in multiple target environments.

- Portal** A (Web) application that provides a single means of access to many information sources and applications. Portals typically provide personalization, collaboration, content management, security, and other services to users. A portal may serve one or more types of users within or across HS Agency boundaries, such as clients, case workers, or service providers.
- Process** A sequence of activities that transforms or uses inputs to produce outputs.
- Profile** A profile is a collection of specifications developed to meet a set of requirements. Elements of a profile may consist of either formal standards (i.e., those developed within a voluntary standards organization such as ANSI or IEEE) or de facto standards (i.e., those accepted within the marketplace). Each element of a profile may be a specification in its entirety or a specification with certain options or parameters to be chosen. The NIST APP organizes the standards into several services areas: Operating System, Human Computer Interface, Software Engineering, Data Management, Data Interchange, Graphics, and Network Services.
- Program** An organizational structure within an Enterprise. The program maintains expertise and resources in a particular area (e.g., the TANF program) and may allocate these resources to specific projects. The program exists for a significant period of time because it is associated with a business or other long-term and evolving objective. The program may be part or all of an HS Agency department, center, or IT Division.
- Project** An effort, directed toward achieving a specific goal, that has been assigned specific resources and duration (for contrast, see [Program](#)). Projects are the context in which all development work is done for the program.
- Quality assurance** A planned and systematic set of actions to provide adequate confidence that work products and the processes used to produce them conform to established requirements.
- Reengineering** The examination of a system to extract inherent knowledge and functionality followed by the implementation of equivalent capability in a new system. The new implementation may include modifications for changed requirements not part of the original system. Also known as renovation and reclamation.

Resource	That which is used or consumed by the Enterprise in fulfillment of its objectives.
Restructuring	A process to reorganize a system in another form, preserving the original system's external behavior (functional and semantics).
Return on investment (IT)	The gains achieved from spending on IT for the HS Agency.
Reverse engineering	The examination of a system to extract inherent knowledge and functionality with the express purpose of creating an abstract model or specification of the system (does not involve changing the subject system).
Role	A unit of defined responsibility that may be assumed by one or more individuals (e.g., a team that fulfills the planner responsibilities). Roles are defined for the framework in a Role model.
Scalable	A scalable application system is one that can increase its throughput without significantly increasing its cost per user (or cost per transaction). The system should also be able to scale down as well.
Service	A capability that a provider entity makes available to a user entity at the interface between those entities (e.g., a Web service)
Standard	A special case, or type of specification, that has been through a formal ballot in a group open to wide participation, and have a known community of consensus. These formal standards may be considered U.S. national standards.
Standard (de facto)	A proprietary specification that becomes widely adopted in the marketplace based on marketplace success, made available by the developer of the technology in a public or private domain (e.g., for a fee).
Standard (formal)	Standards that have been agree upon by a group open to wide participation. These standards have been through a defined balloting process.
Standard (international)	A standard developed and successfully balloted outside the U.S., using an approach that may vary greatly from the U.S. approach. The scope of ballot is global (e.g., ISO/IEC).
Standard (private or proprietary)	Specification developed within an organization; may be protected by intellectual property restrictions or agreement prior to use.
Standard (public)	Any specification that has established some consensus but has not been formally balloted. Usually a proprietary specification that became widely adopted in the marketplace.
Standard (regional)	A standard developed and successfully balloted outside the U.S., using an approach that may vary greatly from the U.S. approach. Regional is when the scope of ballot is limited to a specific part of the world (e.g., European, Pacific Rim, or North American) as opposed to international.



<a href="#">Standard (U.S. national)</a>	A standard developed and successfully balloted inside the U.S., usually by a voluntary standards organization subject to basic ANSI guidelines.
<a href="#">Strategic planning</a>	Those actions that lead to the definition of the IT organization's mission, the formulation of its goals, and the definition of the essential action to be implemented to meet those goals.
<a href="#">Strategy</a>	Strategies are the "hows" of pursuing a mission and achieving goals. A strategy is a managerial action plan for achieving targeted outcomes, mirrored in the pattern of moves and approaches devised to produce desired results.
<a href="#">Strategy project</a>	A managed set of activities that generate the HS IT Strategic Plan.
<a href="#">System architecture</a>	The model(s) that describes how the major IT elements (equipment, data sources, applications, and networking) are arranged to provide or exchange services between the elements and external entities (people or automated systems).
<a href="#">Target Application Platform</a>	A Target Application Platform is the realization of an application platform described in the Target Architecture, using appropriately adapted custom or vendor provided frameworks (software and hardware products). The Target Application Platform is the physical environment upon which the applications for an AIS are built, executed, and maintained.
<a href="#">Target Architecture</a>	The Target Architecture is the design for an instance of elements defined in the Technical Architecture. A Target Architecture elaborates the Technical Architecture by binding specific versions of software, hardware, data stores, and networking implementations to abstract Technical Architecture descriptions. A target Application Platform, for example, is a realization of an application platform described in the Technical Architecture, using appropriately adapted vendor provided frameworks (software and hardware products).
<a href="#">Task</a>	In the context of project management, this is a well defined unit of work that can be assigned to individuals to perform, and tracked to completion.
<a href="#">Technical Architecture</a>	A Technical Architecture identifies and describes the types of applications, platforms, and external entities; their interfaces; and their services; as well as the context within which the entities interoperate. A Technical Architecture is based on a Technical Reference Model (TRM) and the selected standards that further describe the TRM elements (the profile). The Technical Architecture is the basis for selecting and implementing the infrastructure to establish the target architecture.
<a href="#">Technical Reference</a>	A taxonomy of services arranged according to a conceptual model, such as the Open System Environment model. The

<b>Model</b>	enumerated services are specific to those needed to support the technology computing style (e.g., distributed object computing) and the industry/business application needs (e.g., Human Services, financial).
<b>Tier (n-tier)</b>	A physical partitioning of an application across three or more networked computer platforms, such as user interface, business logic, and data access and storage functions.
<b>Transcoding</b>	The process of dynamically transforming data as it is delivered so that it is optimally formatted for the destination environment. Transcoding can be applied in many situations: character encoding (internationalization), addressing differences in link speed or display screen form factors (wireless), or converting between video compression formats.
<b>Value chain</b>	The collection of activities within a company that allow it to compete within an industry. The activities in a value chain can be grouped into two categories: primary activities, which include inbound logistics, outbound logistics and after-sales service, and support activities, which include human resources management, HS Agency infrastructure, procurement, and technology development.
<b>Vision</b>	A guiding theme that articulates the nature of the organization's operation (business) and the intent for its future. It is a description of what senior management wants to achieve, usually refers to the mid- to long-term, and often is expressed in terms of a series of goals.
<b>Web service</b>	A unit of application logic providing data and services to other applications via ubiquitous Web protocols and data formats such as HTTP, XML, and SOAP. The service implementation (and physical location) is generally hidden from the user of the service.

## Abbreviations and Acronyms

This is the consolidated list of special terms and abbreviations used across the IT Planning and Management Guides

ACF	Administration for Children and Families, an HHS Agency
ADO	ActiveX Data Objects
AIS	Automated Information System
AHRQ	Agency for Healthcare Research and Quality, an HHS Agency
ANSI	American National Standards Institute
AOA	Administration on Aging, an HHS Agency
APD	Advanced Planning Document
API	Application Program Interface
ASP	Application Service Provider
A-TARS	Agency Technical Architecture Reference Set
ATA	Agency Technical Architecture
ATSDR	Agency for Toxic Substances and Disease Registry, an HHS Agency
CCB	Change Control Board
CD	Compact Disk
CDC	Centers for Disease Control and Prevention, an HHS Agency
CD-RW	Compact Disk - ReWritable
CIO	Chief Information Officer
CICS	Customer Information Control System
CM	Configuration Management
CMP	Contractor Management Plan
CMS	Centers for Medicare and Medicaid Services, an HHS Agency
COBOL	Common Business Oriented Language
COM	Component Object Model
CORBA	Common Object Request Broker Architecture
COTS	commercial-off-the-shelf
CPU	Central Processing Unit
CSE	Child Support Enforcement
DASD	Direct Access Storage Device
DBMS	Database Management System
DOM	Document Object Model
DNS	Domain Name System

DSL	Digital Subscriber Line
DTD	Document Type Definition
DVD	Digital Versatile Disk
DVD+RW	DVD-Rewriteable
EAI	Enterprise Application Integration
EBT	Electronic Benefit Transfer
EJB	Enterprise JavaBean
EoS	Estimate of the Situation
FAMIS	Family Assistance Management Information System
FAR	Federal Acquisition Regulation
FDA	Food and Drug Administration, an HHS Agency
FFP	Federal Financial Participation
GQM	Goal, Question, Metric approach to measurement
HHS	Department of Health and Human Services
HRSA	Health Resources and Services Administration, an HHS Agency
HS	Human Services
HTML	HyperText Markup Language
IHS	Indian Health Service, an HHS Agency
IDE	Integrated Development Environment
IDEFO	Integrated Computer-Aided Manufacturing (ICAM) DEFinition for function modeling
IDEF1X	Integrated Computer-Aided Manufacturing (ICAM) DEFinition for data modeling
IDL	Interface Definition Language
IEEE	Institute of Electrical and Electronics Engineers
IEP	IT Evolution Plan
IETF	Internet Engineering Task Force
IPv6	Internet Protocol Version 6
IS	information system
ISO/IEC	International Organization for Standardization
ISP	Internet Service Provider
IT	Information Technology
IV&V	independent verification and validation
J2EE	Java 2 Platform, Enterprise Edition
LAN	Local Area Network

MOU	Memorandum of Understanding
MPEG	Motion Picture Experts Group
MP3	MPEG-1 Audio Layer-3
NHSITRC	National Human Services Information Technology Resource Center
NIH	National Institutes of Health, an HHS Agency
NIST	National Institute of Standards and Technology
OLAP	On-Line Analytical Processing
OMA	Object Management Architecture
OMG	Object management Group
OS	The Secretary of Health and Human Services, an HHS Agency
OSI	Open Systems Interconnection
PAPD	Planning Advanced Planning Document
PBX	Private Branch Exchange
PC	personal computer
PDA	Personal Digital Assistant
PEP	Plan for the IT Evolution Plan
PROWRA	Personal Responsibility and Work Opportunity Act
PSC	Program Support Center, an HHS Agency
QA	quality assurance
QFD	quality function deployment
RAID	Redundant Array of Independent Disks
RFI	Request for Information
RFP	Request for Proposal
ROI	Return on Investment
RMP	Risk Management Plan
SACWIS	State Automated Child Welfare Information System
SAE GOA	Society of Automotive Engineers Generic Open Architecture
SAMHSA	Substance Abuse and Mental Health Services Administration, an HHS Agency
SAX	Simple API for XML
SLOC	source lines of code
SOAP	Simple Object Access Protocol
SOW	Statement of Work
SQL	Structured Query Language
	Technical Architecture Framework for Information

TAFIM	Management
TANF	Temporary Aid to Needy Families
TRM	Technical Reference Model
UML	Unified Modeling Language
UPS	Uninterruptible Power Supply
USB	Universal Serial Bus
VBA	Visual Basic for Applications
VPN	Virtual Private Network
WAN	Wide Area Network
WBS	Work Breakdown Structure
Win32	Windows 32-bit interface
WRIT	Welfare Reform Information Technology
W3C	World Wide Web Consortium
XML	Extensible Markup Language
Y2K	Year 2000 Date Problem

## Consolidated Artifact Definitions

Artifacts are units of information input and output by the activities. This page consolidates the definitions from across all the activities in the guides. Some artifacts are formal products that have specific content (e.g., the [HS IT Strategic Plan](#)). Others are placeholders for categories of information that are usually context dependent, such as [External Conditions](#).

Artifacts can be realized in many different ways depending on the context in which an activity is performed. The Resources provides a growing list of templates, samples, checklists, or other items to help identify, format, and use some of these artifacts.

Guidance on applying the processes defined by the guides is available in the Customizing the IT Planning and Management Guides page.

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### A

**Advance Planning Document (APD).** This document records information for the APD process, which is designed to: (1) Describe in broad terms the State's plan for managing the design, development, implementation, and operation of a system that meets Federal, State, and user needs in an efficient, comprehensive, and cost-effective manner; (2) Establish system and HS program performance goals in terms of projected costs and benefits; and (3) Secure Federal financial participation (FFP) for the State.

**Advance Planning Document Update (APDU).** There are two types of APD Updates (APDUs), which are used to keep HHS informed of the project status, and to obtain continued funding throughout the life of the project:

- *Annual APDUs*, which are used for providing the official project status reports and requesting continued project funding; and
- *As Needed APDUs*, which are used if significant changes occur in the project approach, procurement, methodology, schedule or costs.

**Activity Status.** This represents the reporting of information about the state of a managed set of activities, such as those for to Plan the Course of Action. The type of status varies depending on the activity.

**Agency Technical Architecture Reference Set (A-TARS).** This is a virtual document that organizes all the Technical Architecture descriptions and accompanying technical guidelines. The A-TARS content can be rendered in any format that furthers its direct use by system designers, such as type libraries for service interface definitions, online HTML help files, or embedded compound document files.

**A-TARS: Agency-Wide System Properties.** This portion of the A-TARS describes the essential characteristics that all the Agency's automated systems (or parts) should possess (e.g., availability, privacy, maintainability). These properties guide the architects design decisions and tradeoffs, such as selecting architectural styles (e.g., central host or distributed). These properties act as criteria for determining the adequacy of the technical architecture elements in whole or part. The properties should account for unanticipated changes in the business or technology environment over the duration established for the IT vision. These properties must conform to the principles in the HS IT Strategic Plan.

**A-TARS: Data Sources and Business Rules Reference Set.** This portion of the A-TARS describes the common data stores, message formats, business rules, and related data, message, and rule processing technologies and guidelines. The goal is to ensure data

interoperability and its validity across the Agency.

**A-TARS: Integrated Technology Descriptions.** This portion of the A-TARS describes the way the technology elements are assembled to form a set of interacting computing platforms. The top-level entities that are described are the platforms or specialized equipments, data sources, and their interconnections.

**A-TARS: Networking Reference Set.** This portion of the A-TARS describes essential characteristics, assumptions, and guidelines for networking the Enterprise computing platforms within and external to the HS Agency.

**A-TARS: Platform, Equipment, and Solutions Reference Set.** This portion of the A-TARS describes the significant hardware and/or software configurations that are to be used across the Agency (e.g., existing legacy systems, functional user desktop or application servers configurations, and prepackaged solutions).

**A-TARS: Services Reference Set.** This portion of the A-TARS describes the elementary services that are defined for the Agency. The definition includes the service interfaces, execution behavior, reference implementations and other information essential to consistently procuring, building, and deploying common, reusable services. The services are organized according to service areas in accordance with the Agency Technical Reference Model.

**A-TARS: Agency Standards Reference Set.** This portion of the A-TARS consolidates the list of Agency standards and how they have been adapted. These can be consolidated into one place or distributed across the other parts of the A-TARS, as needed.

**A-TARS: TRM Description.** This portion of the A-TARS describes the Agency's Technical Reference Model. This model categorizes and describes the services and their relationship to one another in accordance with a conceptual model, such as the Open Software Environment.

**A-TARS: Technology Boundaries Descriptions.** This portion of the A-TARS describes the external entities and their interaction across the Agency's technology boundaries. This establishes the essential characteristics for the interaction platforms and devices.

**A-TARS: Technology Element Descriptions.** This represents the aggregation of four portions of the A-TARS: Data Sources and Business Rules Reference Set; Network Reference Set; Platform, Equipment, and Solutions Reference Set; and Services Reference Set. These describe the basic building blocks from which the Agency systems are constructed.

**A-TARS: Technology Guidelines Reference Set.** This portion of the A-TARS provides technical and management guidelines to the developers and users of the A-TARS. Architects and developers will apply these guidelines to promote consistent definition, presentation, and implementation of the Agency technical elements. This may include process or product guides, such as engineering guides (coding, design, testing), configuration management guides (configuration identification), and vendor qualification (evaluating compliance to the ATA).

**AIS Design and Implementation Information.** This represents descriptions of the existing automated systems. This information accurately reflects the state of the existing technology. This may include process (e.g., engineering practices such as tools and methodologies), as well as products (e.g., existing software products or components) information.

**Ancillary Design Information.** This represents the additional design information available to users of the A-TARS. This information is not necessarily a formal part of the A-TARS. This additional data may include design notes, trade studies, reference



implementations, simulations, prototypes, analytical models, or additional descriptive material. That information can be retained within a Technical Architecture Team repository and referenced from the A-TARS, as needed.

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## C

**Critical Factors.** This represents statements about the few things that must be in place to achieve a set of goals.

**Change Requests.** This represents requests to change description in the A-TARS (e.g., a service description). These requests can originate from any source, such as an HS program (e.g., TANF), the IT project, or the Technical Architecture process. These changes represent the need for corrective, perfective, or adaptive maintenance of the architecture descriptions.

**Changes.** This information denotes a formal or informal request to change an output of an activity. If the work product to be changed has been formally released by that activity (e.g., completed a peer review), it may require a formal change request. Work products that are in process do not need a formal change request.

**Change Requests.** This represents the documentation of requests to change the deployed technology assets. Requests can be initiated from any source, such as new or changing needs, maintenance actions, or changes occurring outside the HS Agency. The requests are analyzed and the user issues changes to the technical assets or the HS Agency technology related processes (those defined in the IT Planning and Management Guides)

**Configuration Management Plan.** This represents the detailed plans for each project's CM activities. In addition to the CM resources and schedules, it identifies the CM procedures and practices, such as the identification scheme and products to be managed.

**Contracting Strategy Document.** This document defines which of the products will be built internally, by contractors, or purchased, and the rationale that was used in the make or buy decision.

**Contract Management Plan.** This document describes the process that will be used by the HS Agency personnel to manage a specific contract.

**Contractor Management Plan.** This document describes the process that a specific contractor will use to manage their activities.

**Contractor and Procurement Documentation.** This is the collection of legal and binding documentation that has been agreed to for a specific contract.

**Contractor Status Reports.** This represents information a contractor provides to the HS Agency regarding performance progress or issues for a specific contract.

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## D

**Decision Papers.** Major decisions (such as from formal reviews) are officially recorded and used as a basis for adjusting or showing commitment to plans and progress. The decision can concern the overall IT evolutionary path, a specific plateau, or a specific project.

**Descriptions of the Current Situation.** This information summarizes the most important characteristics of the current environment. It describes the current internal, external, and IT conditions (opportunities, threats, strengths, or weaknesses) that bear on the HS IT Division's strategic choices. Example items to be described include statutes, orders, and rulings; values and priorities of external organizations as expressed in policies, plans, and budgets; existing HS IT models and summary data. Plans that give insight into the current intentions or direction of IT and IT-related activities as also examined (HS Agency strategic, acquisition, staffing, training, project, maintenance or other plans). These plans may be formally or informally documented.

**Deployed Configuration.** This represents the total set of hardware, software, associated documentation, and data that is configured and placed into the business, developmental, or operational environment.

**Deployment Project Plan.** This represents the detailed plans for each deployment project's activities. Each project is tracked against its plan. These plans are integrated and coordinated in the IT Evolution Plan. These plans document all deployment project activities necessary to coordinate with the recipients of the deployed products.

**Developmental Configuration.** This represents the total set of hardware, software, associated documentation, and data that is integrated and ready for deployment to the business, developmental, or operational environments.

**Directives for Mid-Course Adjustments.** This represents higher-level guidance to the architecture and planning activities to make adjustments to those activities, as needed. For large deviations, the HS IT Strategic Plan will be revised.

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## E

**Estimate of the Situation.** This document contains the current goals, stakeholders, objectives and constraints for the IT evolution, plateau, or project. Initially, it is documented as a part of the Define Context process, and kept up to date as the IT evolution progresses.

**External Conditions.** This represents the sources from which the Strategy Team can learn about the various circumstances outside the HS Agency. These are situations and forces usually beyond the HS Agency's control that, nevertheless, can bear on the HS Agency's success, causing it to adapt in some way. From outside, come inhibitors and facilitators such as government regulations, economic conditions, various trends (technology, industry, society, etc.) and behaviors of "competitor" or "partner" organizations. Overarching constraints are also considered to be included in this information.

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## G

**Goals.** A statement of the IT Division or HS Agency's strategic goal is a broad area of endeavor that must be addressed if the IT Division is to make progress toward its vision.

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## H

**HS IT Conditions.** This represents the sources from which the IT Strategy Team can

learn about the various circumstances within the IT Division, as well as the IT Division's interactions with other entities. This includes the obligations, responsibilities, and interfaces within and outside the IT Division. Included in the information is data about the inventory of IT assets and the life-cycle processes used to produce, operate, and retire these assets. HS Agency models that are used to describe the IT systems or their use are also considered part of this information set (e.g., process or logical data models), including the IT-related plans (e.g., current system development or upgrade plans).

**HS IT Initiatives.** This part of the HS IT Strategic Plan represents the definition of the highest-level organization of actions taken to achieve the goals.

**HS IT Strategic Plan.** This work product describes the strategy for the HS IT Division. It is the overarching document (or set of documents) that defines the vision, mission, goals, initiatives, and other information necessary to establish and maintain the strategic alignment of the HS IT Division with the State HS Agency. This plan is used as the basis for defining and implementing further detailed actions within the HS IT Division as well as supporting actions outside it.

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## I

**Internal Conditions.** This represents the sources from which the IT Strategy Team can learn about the various circumstances and forces inside the HS Agency. These conditions bear on the success of the HS Agency. The HS Agency has some measure of control over these conditions, so tradeoffs can be made when trying to improve them. These conditions can either facilitate or inhibit the HS Agency's ability to adapt to changing external conditions. Internal conditions may represent competencies that might need to be improved. Overarching constraints are also considered to be included in this information. This information may include summary descriptions of the HS IT strategic needs captured and encoded into either summary lists or formal models and statements. Examples are subject area diagrams, high-level process/function diagrams, lists of reporting requirements, or geographic or organizational models.

**IT Archive.** This represents the retention of IT products or data items after they are removed from the usage environment. The HS Agency cannot immediately destroy them and may need to refer to them for legal or other reasons.

**IT Baseline and Assessment.** This represents summarization of information about the current IT inventory and its qualities. This contains information about the number and types of IT assets (e.g., applications, platforms, data sources, and networking), as well as a subjective quick-look into some of the asset's essential properties (e.g., maintainability, usability, and reliability). This can include process aspects as well (cycle time for processing change requests).

**IT Evolution Plan.** This represents those plans that define the evolutionary path for the HS IT infrastructure and applications. This plan defines each plateau that will be achieved over time. Each plateau may include updates to the current functionality for specific HHS programs and/or updates to the HS IT infrastructure. All HS IT Project Plans are components of the IT Evolution Plan.

**IT Products and Data.** This represents individual or aggregate IT products and associated by-products produced or used during the fabrication, deployment, or operation of the HS Agency's automated information systems. Products may include any technology element, such as applications, computer platforms, networking infrastructure and devices, data stores, or miscellaneous equipment. Data includes any documentation needed to create, maintain, or use the products, such as design, user, or maintenance documentation and training materials.

**IT Project Plan.** This represents the detailed plans for each IT project's activities. Each IT project is tracked against its plan. The set of all IT project plans is integrated and coordinated in the IT Evolution Plan. There can be many types of IT projects depending on the approach taken to produce the technology products, such as development, prototyping, maintenance, acquisition, or contracting with vendors.

**Internal Conditions.** This represents the sources from which the Strategy Team can learn about the various circumstances and forces inside the HS Agency. These conditions bear on the success of the HS Agency. The HS Agency has some measure of control over these conditions, so tradeoffs can be made when trying to improve them. These conditions can either facilitate or inhibit the HS Agency's ability to adapt to changing external conditions. Internal conditions may represent competencies that might need to be improved. Overarching constraints are also considered to be included in this information. This information may include summary descriptions of the HS IT strategic needs captured and encoded into either summary lists or formal models and statements. Examples include subject area diagrams, high-level process/function diagrams, lists of reporting requirements, or geographic or organizational models.

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## J

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## L

**Lessons Learned.** This represents project technical and management information that is kept after a project completes. It is analyzed and used to improve the technical and management processes.

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## M

**Mandates.** This represents the current and new regulations that the HS Agency must follow. Some of these mandates may flow from court rulings or State and Federal legislation and regulations.

**Maintenance Requests.** This represents requests from stakeholders in the business, development, or operational environments to correct, perfect, or adapt the deployed IT to meet needs.

**Measurements.** This represents activity measurements. The measurements taken depend on the context for the activity, such as strategic measures.

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## N

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## O

**Operational Configuration.** This represents a snapshot of a set of hardware, software, associated documentation, and data that exists in the business, developmental or technical operational environment at any particular time. This configuration changes as the IT products are used and maintained.

**Operations Status.** This represents the collection, analysis, and dissemination of performance, defect, cost of operations, and other data for the operational systems.

**Operations Project Plan.** This represents the detailed plans for administering, operating, and sustaining the technical assets once released for use. Each project is tracked against its plan. These plans are integrated and coordinated in the IT Evolution Plan. These plans document all deployment project activities necessary to coordinate with the recipients of the deployed products.

**Overarching Constraints.** This represents overall organizational obligations imposed on the HS IT Division by Federal, State, or the HS Agency. These obligations can generally be found in the policies, standards, plans, budgets, architectures, or guidelines. They generally are non-negotiable. Examples are State strategic goals and Enterprise system architectures of State and/or county HS Agencies, related Agencies or departments, and related IT Divisions, as well as Federal reporting requirements.

Some of these constraints may originate within the HS Agency, perhaps in reaction to the HS Agency external conditions. The HS Agency has control over the decisions that lead to these constraints and conditions, and it is possible that one can make tradeoffs.

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## P

**Performance Measures.** This represents key measurements for insight into progress against a goal or subgoal. The measures provide management the ability to take action if actual performance deviates from planned. These measures can be process-related (e.g., effort, schedule, cost) or product-related (e.g., lines of code, number of requirements, and number of entities).

**Plan for Evolution Planning.** This represents the detailed plan to guide the development of the HS IT Evolution Plan. It defines the individuals that are responsible for providing detailed portions of the HS IT Evolution Plan.

**Planning Advance Planning Document (PAPD).** A PAPD is a written plan of action to determine the need for, feasibility of, and projected costs and benefits of an automatic data processing equipment or services acquisition. PAPDs are used by States that will be reimbursed for the costs of planning for the implementation of a system, including acquisition of equipment or services.

**Plateau Plan.** This represents the set of plans that guides an increment or step in the overall IT Evolution Plan. A plateau generally includes a change in the functionality for specific HS Programs and a modification to the HS IT infrastructure as the next logical in the IT evolution. A plateau is generally scheduled every three to six months. A plateau may focus on evolving IT capabilities in the development, business, or operational environments.

**Process and Product Evaluations.** This represents the results of any review or audit of project activities or products by the Quality Assurance team.

**Project Archives.** This represents project technical and management information that is kept after a project completes. It is analyzed and used to improve the technical and management processes.

**Project Charter.** A charter defines the authorities, responsibilities, and constraints that the overarching HS Agency IT organization delegates to a specific project management team. The charter can establish the portion of the A-TARS that is applicable to the project, the project's cost and schedule constraints, specific requirements or requirements source (if the project supports a specific mandate or program), and the interdependencies between this project and other projects in the IT Evolution Plan.

**Project or Product Requirements.** This represents the complete set of technical and nontechnical requirements that a project and its products must satisfy. Technical requirements may include A-TARS allocated design constraints, functional capabilities, quality factors, performance, and other characteristics. Nontechnical requirements can include deadlines, budget, interfaces with other projects, processes and practices to be used, and other constraints. Requirements are allocated through the project's plans.

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## Q

**Quality Assurance Plan.** This represents the detailed plans for each project's AQ activities. In addition to the QA resources and schedules, it identifies the QA procedures and practices. This includes the products or processes to be reviewed or audited and how noncompliance issues are handled.

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## R

**Risk Management Plan.** This document describes the risk analysis and management processes that will be used. The current risks, their priority, and the planned mitigation strategies are included.

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## S

**Status.** This represents status that is reported to track progress (e.g., cost, schedule, quality, or technical progress). The type of status varies for each reporting activity.

**Status Against the HS IT Strategic Plan.** This represents the compilation and analysis of actual results against the HS IT Strategic Plan.

**Strategic Analysis and Data.** This represents the set of available data and analysis compiled during the Strategic IT Planning and Management Activities. That information is assumed to be retained and available as needed by other activities.

**Strategic Directives.** This represents higher-level guidance to the architecture and planning activities. This allows strategic adjustments, when necessary.

**Strategic Foundations.** This represents the purpose of the HS Agency or IT Division, as described by their mission, vision, and guiding principles.

**Strategy Project Plan.** This represents the collection of plans that are used to control the strategy project. This may include cost, schedule, effort, risk, and other elements.

**Study Results.** This information is a placeholder to denote the results of an architectural study. The results are summarized in study papers that may be referenced from the A-TARS. The type of results will differ based on the goals and conduct of the study.

**Study Work Plan.** This information is a placeholder for the plans governing the architectural studies. These plans relay the goals of the studies and ensure that the appropriate resources and controls are in place. These plans are a part of the overall Technical Architecture Work Plans and Direction.

**Subgoals.** A subgoal is a statement of what the HS Agency or IT Division expects to achieve over a specific period of time, generally 1 to 3 years, in order to move forward toward the organization's mission and vision. Subgoals flow logically from goals, and each subgoal can be linked to at least one of the higher-level goals.

**Support Plans.** This represents the set of plans for each project's support activities. This

includes Configuration Management and Quality Assurance Plans, among others.

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## T

**(HS Agency) Technical Architecture.** This represents descriptions of the types of applications, platforms, and external entities; their interfaces and services; and the context within which the entities interoperate. This is the blueprint for the technology within the HS Agency. The Technical Architecture is the basis for selecting and implementing the infrastructure and the applications it supports. It is described in the [HS Agency Technical Architecture Reference Set](#).

**(HS Agency) Technical Architecture Work Plans and Direction.** This represents the work-level plans and accompanying management direction necessary to establish and control the Technical Architecture activities. This plan includes by reference the applicable portions of any higher-level plans, such as the HS IT Strategic Plan. Requirements from those higher-level plans are allocated to the architecture activities and assumed to be levied through the Technical Architecture Work Plans and Direction, as necessary.

**Technical Capability.** This represents the capability of the IT Division and the HS Agency to deliver and use the needed IT technology efficiently and effectively.

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## W

**Waiver or Design Approvals.** This represents oversight by the architects for project-level IT decisions. This includes granting (or denying) waiver requests and formal review and approval of system designs. Engineering and management practices, also under the jurisdiction of the Architecture Team are also subject to review (e.g., guidelines published in the Technical Guidelines portion of the A-TARS).

**Waiver or Design Requests.** This represents requests by the IT projects for approval of architecture-related design and implementation decisions. These may include exceptions to a part of the Technical Architecture or notification of project technology choices when they must be coordinated with the architects.

## Consolidated References

This is the set of consolidated references that are external to the [NHSITRC](#) Web site. This includes electronic as well as traditionally published material. Some publication dates for items available on the Web were not available; therefore, the date of publication reflects the date the item was first accessed.

The date the item was added to this list of references is shown. Most external references throughout this Web site are hyperlinked to this page. References that are specific to a Resource are not included here. Hyperlinks on this page were last verified on the date shown.

	<b>Reference/Comments</b>	<b>Date</b>
<a href="#">ACF 2000</a>	Welfare Reform Information Technology: A Study of Issues in Implementing Information Systems for the Temporary Assistance for Needy Families (TANF) Program, U. S. Department of Health and Human Services, Administration for Children and Families, October 2000	2/8/01
<a href="#">AIT 1997</a>	The IT Reference Model (ITRM) and its integration Platform, AIT-IP2, Version 1.3, November 1997  Describes a model to enable the use of common building blocks and software modules to support an integrated platform.	9/18/01
<a href="#">AOC 2001</a>	Web site for the Office of the Architect for the U.S. Capital <a href="http://www.aoc.gov/homepage.htm">http://www.aoc.gov/homepage.htm</a>	10/01/01
<a href="#">ANSI/ISO/IEC 9075-x, 1999</a>	DATABASE LANGUAGES - SQL, ANSI/ISO/IEC 9075 (part 1 through 5) available from: <a href="http://global.ihs.com/">http://global.ihs.com/</a>	9/18/01
<a href="#">ASP 2001</a>	Home page of the Application Service Provider Consortium <a href="http://www.aspindustry.org/">http://www.aspindustry.org/</a>	2/14/01
<a href="#">Beck, Kent 1999</a>	Extreme Programming Explained. Reading Massachusetts: Addison Wesley	03/01/02
<a href="#">Booch, Grady, J. Rumbaugh, and I. Jacobson 1999</a>	The Unified Modeling Language User Guide, Addison Wesley	9/18/01
<a href="#">Bradner, S. 1996</a>	The Internet Standards Process -- Revision 3, RFC 2026, October 1996  Documents the process used by the Internet community for standardization of protocols and procedures  <a href="http://www.ietf.org/">http://www.ietf.org/</a>	7/7/00
<a href="#">Bradner, S 1997</a>	Key words for use in RFCs to Indicate Requirement Levels, RFC 2119, March 1997	7/12/02



	Defines key reserved words as they should be interpreted in IETF documents.	
	<a href="http://www.ietf.org/">http://www.ietf.org/</a>	
CIO Council 1999	Federal Enterprise Architectural Framework, Chief Information Officers Council, Version 1.1, September 1999	9/18/01
	Collects approaches, models and definitions to develop and maintain an overall U.S. Federal Enterprise Architecture.	
	<a href="http://www.cio.gov/">http://www.cio.gov/</a>	
CMU SEI 1995	The Capability Maturity Model: Guidelines for Improving the Software Process, Carnegie Mellon University Software Engineering Institute, Addison-Wesley Publishing Company Integrates and elaborates the descriptions of the CMM for software and provides guidance on interpreting its practices.	9/18/01
DISA 1999	Department of Defense Technical Reference Model (TRM), Version 1.0, 5 November 1999	9/18/01
	The underlying foundation for DoD and U.S. Government agencies to specify their technical infrastructure	
	<a href="http://www-trm.itsi.disa.mil/document.htm">http://www-trm.itsi.disa.mil/document.htm</a>	
DoD 1996	Technical Architecture Framework for Information Management, Version 3.0, Defense Systems Agency Center for Standards, Department of Defense, 30 April 1996.	9/18/01
	Provides enterprise-level guidance for the evolution of the DoD Technical Infrastructure. Identifies the services, standards, concepts, components, and configurations that can be used to guide the development of technical architectures that meet specific mission requirements. TAFIM has been cancelled as a stand alone document. See the DoD TRM (DISA 1999)	
	<a href="http://www-library.itsi.disa.mil/tafim/tafim3.0/pages/tafim.htm">http://www-library.itsi.disa.mil/tafim/tafim3.0/pages/tafim.htm</a>	
e.Gov 2001	Government Technology Magazine, for news, trends and best practices for e-government.	8/26/02
	<a href="http://www.govtech.net/">http://www.govtech.net/</a>	
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	Sample of a standard being withdrawn, link to withdrawn Federal standards	

	<a href="http://www.itl.nist.gov/fipspubs/withdraw.htm">http://www.itl.nist.gov/fipspubs/withdraw.htm</a>	
HHS 2001	The United States' Department of Health and Human Services web site <a href="http://www.os.hhs.gov/">http://www.os.hhs.gov/</a>	2/7/01
IEEE 1996b	information technology -- Portable Operating System Interface (POSIX) -- Part 1: System Application Program Interface (API) [C Language], IEEE Std 1003.1, 1996 Edition  One of the family of IEEE Std 1003.1x, describing the POSIX, a basis for many of the Technical Reference models and the OSE approach.  <a href="http://standards.ieee.org/">http://standards.ieee.org/</a>	9/18/01
ISO/IEC 9126, 1991	Information technology - Software product evaluation - Quality characteristics and guidelines for their use, ISO/IEC 9216, International Standard, 12-15-1991. A framework for the evaluation of software quality (later versions are also available)  <a href="http://www.iso.ch/iso/en/ISOOnline.frontpage">http://www.iso.ch/iso/en/ISOOnline.frontpage</a>	10/01/01
ISO/IEC 7498-1 1994	Information technology -- Open Systems Interconnection -- Basic Reference Model: The Basic Model.	9/18/01
ISO/IEC-14750 1999	ISO/IEC 14750:1999 Information technology -- Open Distributed Processing -- Interface Definition Language. The OMG IDL adopted as an ISO/IEC Standard  <a href="http://www.iec.ch/webstore/">http://www.iec.ch/webstore/</a>	9/18/01
McConnell, Steve 1996	Rapid Development, Microsoft Press	10/01/01
Murhammer, Martin W, Kok-Keong Lee, Payam Motallebi, Paolo Borghim, and Karl Wozalbal 1999	IP Network Design Guide, International Technical Support Organization, SG24-2850-01, IBM <a href="http://www.redbooks.ibm.com/">http://www.redbooks.ibm.com/</a>	9/18/01
NASIRE 1998	Welfare Reform, Information Systems and the States <a href="https://www.nascio.org/publications/welfare1998.cfm">https://www.nascio.org/publications/welfare1998.cfm</a>	2/8/01
NASIRE 2000a	State Human Service Information Systems: Measuring the Impact of Welfare Reform. NASIRE <a href="http://www.nascio.org/publications/digital_government_report_2000.pdf">http://www.nascio.org/publications/digital_government_report_2000.pdf</a>	1/30/01
NASIRE 2000b	Issue Focus Report: The Role of the State Chief Information Officer, July 2000 <a href="http://www.nascio.org/publications/The_Role_of_the_State_CIO_July_2000.pdf">http://www.nascio.org/publications/The_Role_of_the_State_CIO_July_2000.pdf</a>	2/7/01

Newkirk, James and Robert Martin 2001	Extreme Programming in Practice. Reading Massachusetts: Addison Wesley	03/01/02
NIST 1996	Application Portability Profile (APP), the U.S. Governments Open Systems Environment Profile. Version 3.0. NIST Special Publication 500-230. February 1996. <a href="http://www.nist.gov/">http://www.nist.gov/</a>	9/18/01
OMG 1997	A discussion of the Object Management Architecture, January 1997  Overview of the Object Management Group's Object Management Architecture.  <a href="http://www.omg.org/technology/./documents/formal/object_management_architecture.htm">http://www.omg.org/technology/./documents/formal/ object_management_architecture.htm</a>	9/18/01
Open Group 1998	The Open Group Architectural Framework (TOGAF) - Version 5. Open Group, Dec 1999.  The TOGAF is a tool to help define an architecture for a current or planned information system.  <a href="http://www.opengroup.org/public/arch/">http://www.opengroup.org/public/arch/</a>	9/18/01
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PRWORA 1996	Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (Enrolled Bill), H.R.3734,  available from: <a href="http://www.acf.hhs.gov/programs/ofa/">http://www.acf.hhs.gov/programs/ofa/</a>	2/13/01
SAE AIR5315 1998	April 1998 Overview and Rationale for GOA Framework, As-5 Embedded Computing Systems, SAE AIR5315, April 1998  Companion to (SAE 4893, 1996) provides an overview and rationale of the GOA framework.  <a href="http://www.sae.org/">http://www.sae.org/</a>	9/18/01
SAE AS4893 1996	Generic Open Architecture (GOA) Framework, SAE AS5 GOA Task Group, SAE AS4893, January 1996.	9/18/01

Standard defining a generic technical reference model identifying functional layers and interface types.

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NIST Special Publication 500-232, Open System Environment (OSE): Architectural Framework for Information Infrastructure, National Institute of Standards and Technology.

10/2/01

Overview of the OSE Reference Model

TPC 2001

Transaction Processing Performance Council Home page

9/18/01

A non-profit corporation founded to define transaction processing and database benchmarks and to disseminate objective, verifiable performance data to the industry.

<http://www.tpc.org/>

W3C 2001

Web Services Description Language (WSDL) 1.1 15 March 2001

A submission to the World Wide Web Consortium as a suggestion for describing network services using an XML format.

<http://www.w3.org/TR/wsdl>