

Danish IT Society Architecture Certification™

The education for IT Architects

Glossary

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Danish IT Society Architecture Glossary

This Glossary is part of the curriculum for all certifications under Danish IT Society's Architecture Certification.

The Glossary defines basic words and concepts within IT and architecture, which may not be defined in any of the sources in the list of references for the curriculum.

Concept/word	Description
Agile	A method of project management, used especially for software development, that is characterized by the division of tasks into short phases of work and frequent reassessment and adaptation of plans.
ArchiMate®	The ArchiMate® modelling language is an open and independent Enterprise Architecture standard that supports the description, analysis and visualisation of architecture within and across business domains - suggested used to all domains by FDA. ArchiMate is a standard from The Open Group™ and is based on the concepts in ISO/IEC/IEEE 42010:2011.
Architecture Development Method (ADM)	ADM is the core part of TOGAF in how to develop an architecture in a structured way.
Business Case	<p>A Business Case documents the justification for carrying out a project, as seen from a business perspective. A Business Case documents the business benefits, and compares these with the costs involved. A Business Case is typically prepared before the project is initiated, and at this stage it constitutes a basis for making decisions about initiating the project. Later on, during the project, the Business Case should be kept updated to reflect any changes that may occur. The Business Case should be closely linked to the project plan, and may identify major milestones. At project completion, the Business Case will provide essential information for the Benefits Realisation activities.</p> <p>The business benefits could be things like improved customer experience, shorter delivery times, improved service quality, etc.</p> <p>The costs involved include the money, resources and time etc. which will be needed in order to carry out the project.</p> <p>A Business Case should address the economic aspects, as well as other important factors, such as assumptions, prerequisites, risks and dependencies.</p> <p>A Business Case may contain a number of alternative future scenarios, and look at these over a certain time period, e.g. a few years. One of the scenarios may be BAU (Business As Usual), i.e. do nothing.</p>
Business Process Model and Notation (BPMN™)	BPMN is a graphical representation for specifying business processes in a business process model
CIS® Critical Security Controls (CIS Controls)	CIS stands for Center for Internet Security® (CIS®). The CIS Controls are an international security standard, containing a prescriptive, prioritized, and simplified set of best practices that can be used to mitigate cybersecurity risks. The latest version, version 8, is structured into some main controls, each with a number of safeguards, and grouped into three Implementation Groups.

Cloud Architecture	Cloud architecture is an architecture, where parts of, or the entire solution is delivered as a service via the internet ('X'-as-a-Service), where 'X' depending on service model can be infrastructure, platform, software, or similar
COBIT®	COBIT was previously an abbreviation for 'Control Objectives for Information and Related Technology', but is now only used as an acronym. COBIT is a widely used and recognised framework for Governance and Management of IT in the entire organisation. COBIT is issued by ISACA®, and the latest version is COBIT 2019. COBIT is business focused and defines a set of generic processes for the management of IT, with each process defined together with process inputs and outputs, key process-activities, process objectives, performance measures and an elementary maturity model. A corresponding framework within financial control is COSO.
Consequence	Consequence is one of the factors for calculating risk when making a decision. One makes a calculation of the probability of something occurring, multiply it with the consequence if it occurs, and this gives the weighted risk.
Content Management System (CMS)	A Content Management System is a piece of software to organise websites and facilitate the cooperation when establishing documents and other information, and through which individuals and groups can manage a volume of electronic content, for instance documents, files and images.
Contract	A legally enforceable agreement that governs the mutual rights and obligations between its parties. In the event of a breach of contract, the injured party may seek judicial remedies through the courts. Is used for agreements between different companies or organisations.
Danish National Procurement Agency - SKI (Danish: Statens og Kommunernes Indkøbs Service)	Listed under "SKI"
Danish Sale of Goods Act (Danish: Købeloven)	The Danish Sale of Goods Act contains basic principles, which give the consumer and the seller certain rights and obligations. The law protects the consumer when purchasing goods.
DevOps	DevOps is a set of practices that combine software development (Dev) and IT operations (Ops). It aims to shorten the systems development life cycle and provide continuous delivery with high software quality. This is done by facilitating communication and collaboration, Continuous Integration, Quality Assurance and delivery through automated test and release. DevOps is complementary with Agile software development; several DevOps aspects have come from Agile methodologies.

DORA	<p>The Digital Operational Resilience Act (DORA) is an EU Regulation. The aim of DORA is to achieve a common and harmonised high level of digital operational resilience in the financial sector across the EU. To achieve this, DORA establishes a Information and Communication Technology (ICT) risk management framework for the EU financial entities and their third-party technology service providers.</p> <p>DORA consists of five main areas: ICT Risk Management, Incident Reporting, Operational Resilience Testing, ICT Third-party Risk, and Information sharing.</p> <p>DORA was finalised in December 2022, and must be implemented by 17. January 2025.</p>
Enterprise Resource Planning (ERP) System	A complete suite of integrated applications that support the major business functions of an organisation; e.g. Financial, HR, Payroll, Stock, Order Processing and Invoicing, Purchasing, Logistics, Manufacturing, etc. Often an ERP system is based on one common database for the organisation.
Enterprise Service Bus (ESB)	Enterprise Service Bus is within Computer Science the name for a construction in the software architecture, which makes fundamental services available for complex architectures, which is event-driven and based on standards. Is often used for integration.
Extensible Markup Language (XML)	XML is a markup language and file format for storing, transmitting, and reconstructing arbitrary data. It defines a set of rules for encoding documents in a format that is both human-readable and machine-readable. A range of formats are extensions of XML, e.g. XHTML and XSL, but also for example Microsoft Word 2007 and OpenOffice.org Writer store documents in formats which are extensions of XML.
Extract Transform and Load (ETL)	Extract, transform and load is the general procedure for copying of data from one or more sources to a destination system, which represents data differently from the source, or in another context than the source. The ETL-process became a popular concept in the 1970's and is often used for data storage.
FDA - The Common Public-sector Digital Architecture (Danish: FDA - Fællesoffentlig Digital Arkitektur)	FDA (The Common Public-sector Digital Architecture) is the Danish Agency for Digital Government's Architecture Framework. FDA is a common agreed approach to deliver public business- and IT services in a coherent way. FDA is an EA framework based on elements from TOGAF, with Law and Security as added areas. For modelling, ArchiMate is recommended.
FDA Bookcase	The FDA Bookcase is part of the FDA. The FDA Bookcase is used to organise the architectural products vertically in the 8 Foundation Perspectives, and horizontally in 3 levels (Conceptual, Logical and Physical). Responsibility for the architecture products in the bookcase is defined by the governance of the organisation so that the responsibility follows the ownership.
FEAF - a Federal Enterprise Architecture Framework	FEAF (Federal Enterprise Architecture Framework) is reference Enterprise Architecture of a Federal Government, used in the U.S. FEAF can be considered a U.S version of the Danish equivalent, the FDA.

File transfer	Transfer of files. There are many ways to transfer files; most of them take place by means of moving/transferring according to an agreed manner and agreed location. Previously often done by tape, CD-ROM or other physical media. Nowadays typically done via a network/Internet.
Freedom of Information Act (Danish: Offentlighedsloven)	The law about public disclosure in the administration is a Danish law, which regulates the right to access governmental documents for citizens, who are not part of the case.
Functional requirements (Danish: Funktionelle krav)	Functional requirements are those requirements, which define functionality of a system or its subsystems, e.g. print possibility.
FURPS+	<p>FURPS is an acronym for: Functionality, Usability, Reliability, Performance and Supportability. FURPS had a + added, when it was adopted for Agile. FURPS+ represents a model for classifying software quality attributes:</p> <ul style="list-style-type: none"> • Functionality: Capability, Connectivity, Interoperability, Portability, Reusability, Security • Usability: UX, Human Factors, Ergonomics, Aesthetics, Consistency, Documentation • Reliability: Availability, Robustness, Predictability, Resilience, Recoverability, Survivability, Stability, Accuracy • Performance: Capacity, Throughput, Speed, Efficiency, Resource Consumption, Scalability • Supportability: Serviceability, Maintainability, Testability, Modifiability, Configurability, Modularity, Installability, Logging <p>The above lists are not exhaustive, but cover the main areas. FURPS was developed at Hewlett-Packard, and FURPS+ is now widely used in the software industry.</p>
GDPR - General Data Protection Regulation (Danish: EU-databeskyttelsesforordningen / Persondatafordningen)	<p>GDPR means General Data Protection Regulation, and was introduced by EU. Its purpose is to regulate how organisations handle personal data, and regulate individual's rights over their own personal data. The regulation went into effect on 25. May 2018, as all organisations from this date had to comply with the GDPR rules.</p>
General Public License (GPL)	General Public License is a software license, and is the most common one for free software- and open source-programs. The license has been developed by the Free Software Foundation for use in the GNU-project. The background for GPL is to give the user a range of freedoms, and to ensure, that these freedoms also apply to derived works.
Information Technology Infrastructure Library (ITIL®)	ITIL means 'Information Technology Infrastructure Library'. ITIL is a framework containing a set of best-practice processes and capabilities within IT Service Management (ITSM). ITIL is a very widely used framework and de facto standard, and used world wide, to help organisations ensure their IT services are fully aligned to the organisation's key goals. The latest version is ITIL4, which was released in 2019.

IPMA®	International Project Management Association (IPMA) is an internationally recognized and widespread project management standard with a multi-level certification model. The certification model assesses the candidates on the basis of both their practical skills and their theoretical knowledge.
ISO/IEC 27000	The ISO/IEC 27000-series (also known as the 'ISMS Family of Standards' or 'ISO27K' for short) comprises information security standards published by ISO/IEC. The series provides best practice recommendations on information security management—the management of information risks through information security controls—within the context of an overall Information Security Management System (ISMS).
IT4IT™	The Open Group's IT4IT™ Reference Architecture is a standard reference architecture for managing the business of IT. It uses a value chain approach to create a model of the functions that IT performs to help organisations identify the activities that contribute to business competitiveness.
K01	See "Standard Contracts"
K02	See "Standard Contracts"
K03	See "Standard Contracts"
K04	See "Standard Contracts"
Key Performance Indicator (KPI)	A measure/indicator for a particular activity. Typically, KPI's are established initially as a target, and subsequently one can check whether the target has been reached. A KPI should refer to a 'higher' element, e.g. a Critical Success Factor.
Load Balancer	A method for distributing Workload. This can take place in physical boxes, or in virtual boxes, such that the workload is distributed in a uniform manner, and is typically used to prevent bottlenecks in the infrastructure of a solution.
Managed Service Provider (MSP)	A managed service provider (MSP) delivers services, such as network, application, infrastructure and security, with ongoing and regular support and active administration. This may take place on customers' premises, in their MSP's data center (hosting), or in a third-party data center. MSPs may deliver their own native services in conjunction with other providers' services (for example, a security MSP providing sys admin on top of a third-party cloud IaaS). Many MSPs include services from other types of providers. The term MSP traditionally was applied to infrastructure or device-centric types of services but has expanded to include any service with continuous, regular monitoring, management, maintenance and support.
Message broker	A Message Broker is a middleware program, which translates a message from the sender's formal message protocol to the formal message protocol of the receiver.
Messaging gateway	Hardware or Software which converts from one message protocol to another. A Gateway offers an interface between two systems / agents.

Microsoft Solutions Framework (MSF)	MSF is a set of principles, models, disciplines, concepts, and guidelines for delivering IT services, issued by Microsoft. The focus for MSF is Software Engineering. MSF is not limited to developing applications only; it is also applicable to other IT projects like deployment, networking or infrastructure projects.
Model-View-Controller (MVC)	Model-View-Controller (MVC) is a recognised method within software development to separate the data model from presentation information and control information. “Model” represents data “View” is the User interface “Controller” is the Request handler
MoP®	Management of Portfolios (MoP) is a set of principles, techniques and practices, that can support the organisations with a successful implementation of Portfolio Management.
MSP®	Managing Successful Programmes (MSP) is a best practice programme management framework, designed to align programmes and projects to organisational strategy and enable enterprise agility. MSP focuses on the delivery of outcomes of benefit, while mitigating risk and actively engaging stakeholders. MSP consists of a set of principles, themes, and processes that provide a clear roadmap for the programme lifecycle.
NIS2	NIS2 stands for Directive on Security of Network and Information Systems 2. EU’s NIS2 directive has been passed, and must be implemented in Danish law by 17. October 2024. With this directive the original NIS directive is expanded to include more sectors, and tightened requirements. In NIS2 the sectors that are critical to society are expanded to include sectors, which deliver products and services essential to the running of society, e.g. postal- and courier services, financial companies, some food companies, and waste disposal. NIS2 also contains tightened requirements, e.g. to corporate management, risk management, supply security, business continuity and reporting to authorities.
NIST	National Institute of Standards and Technology (NIST). A US based organisation, which publishes standards, guidelines and reference material, e.g. within IT-security. For example, NIST has published Cybersecurity Framework, Privacy Framework and Risk Management Framework.
Non-Functional Requirements (Danish: Ikke-funktionelle krav)	Requirements regarding system properties, such as security, capacity, availability, scalability etc.
Open Source	About software: Software, where source code, documentation etc. is freely available.
Open Source Initiative (OSI)	A global non-profit organisation, founded in 1998, which promotes Open Source software.

Open Systems Interconnection (OSI)	The OSI reference model is a conceptual model that characterises and standardises the communication functions of a telecommunication or computing system without regard to its underlying internal structure and technology. Its goal is the interoperability of diverse communication systems with standard communication protocols. The model operates with a 7 layer division of communications- and network protocols.
Payment Card Industry Data Security Standard (PCI DSS)	The Payment Card Industry Data Security Standard (PCI DSS) is an information security standard used to handle credit cards from major card brands. The purpose of the standard is to provide protection for card issuers and card holders. The standard is administered by the Payment Card Industry Security Standards Council, and its use is mandated by the card brands. It was created to better control cardholder data and reduce credit card fraud. Validation of compliance is performed annually or quarterly. PCI DSS is used worldwide.
PRINCE2®	PRINCE2 (PRojects IN Controlled Environments) is a structured project management method and practitioner certification programme. PRINCE2 emphasises dividing projects into manageable and controllable stages. PRINCE2 contains a number of principles, themes and processes.
Public Procurement Law (Danish: Udbudsloven)	The Public Procurement law implements the EU Directive on Public Procurement in Denmark, and covers procedures to be followed when procuring goods, services, and building- and construction works.
PaaS – Platform as a Service	Platform as a Service (PaaS). The concept is typically used about a Cloud service where the Platform is offered as a Service.
Rational Unified Process (RUP)	See Unified Process (UP)
Remote Procedure Call (RPC)	Remote Procedure Call is a popular network protocol, which implements the client/server paradigm. RPC works like this: A system (client) calls a system on another machine (Server) to get a procedure executed. Together with the call, possible parameters are transferred. The server executes the request and returns a response.
Risk	Risk denotes the uncertainty about future events, often with a focus on negative consequences - damage, loss, ability to achieve goals, etc. Risk is often calculated as the probability of an event occurring times the consequences of this event.

SAFe®	<p>The Scaled Agile Framework (SAFe) is a framework and knowledge base of integrated principles, practises and competencies, with the aim of achieving IT and business agility.</p> <p>SAFe integrates the power of Agile software development, Lean and DevOps; and promotes alignment, collaboration, and delivery across large numbers of agile teams. SAFe also incorporates a number of other elements, e.g. Design Thinking, Customer Centricity, Scrum, Continuous Delivery, etc.</p> <p>SAFe defines a number of roles, e.g. Product Owner, Business Owner, Enterprise Architect, Scrum Master, etc.</p> <p>SAFe is a very flexible framework, which must be adapted by each individual organisation.</p>
Scrum	<p>Scrum is a framework within project management, for developing, delivering, and sustaining products in a complex environment, with an initial emphasis on software development. It is designed for teams of ten or fewer members, who break their work into goals that can be completed within time-boxed iterations, called sprints, no longer than one month and most commonly two weeks. The scrum team assess progress in time-boxed daily meetings of 15 minutes or less, called daily scrums (a form of stand-up meeting, often led by a Scrum Master). At the end of the sprint, the team holds two further meetings: the sprint review which demonstrates the work done to stakeholders to elicit feedback, and sprint retrospective which enables the team to reflect and improve.</p>
Service Level Agreement (SLA)	<p>A documented agreement between a service provider and a client, specifying the services to be delivered, and the expected level of service. It is often used for internal agreements within the same organisation.</p>
Service-Oriented Architecture (SOA)	<p>Service oriented architecture is a way of structuring an IT architecture. A service oriented architecture makes the framework available for services to be exhibited, used, combined and managed in a consistent manner. The most common form of SOA-communication between services is XML-based web services.</p>
SKI – Danish National Procurement Agency (Danish: Statens og Kommunernes Indkøbs Service)	<p>Statens og Kommunernes Indkøbsservice (SKI) is publicly owned central purchasing body. SKI aims at achieving better procurement results through the aggregation of demand. Its framework agreements are open on a voluntary basis to all levels of government. The SKI agreements ensure the public sector gets goods and services of good quality, on good conditions, and at the best possible price. SKI manages approximately 50 framework agreements divided into 15 main product categories.</p> <p>Municipalities are SKI's main clients.</p>

SMART	S.M.A.R.T. is a mnemonic acronym, meaning Specific, Measurable, Achievable, Realistic and Time-related. SMART then gives concrete criteria to guide in the setting of goals and objectives for better results, for example in project management and employee performance management. SMART is a simple and widely used model, which can be used in many situations.
Standard Contracts; K01, K02, K03 and K04 (Danish: Standard kontrakter; K01, K02, K03 og K04)	<p>The Danish State, by the Agency for Digital Government, has 4 standard contracts that aim to ensure a common contract paradigm in connection with the procurement and development of IT systems across the public sector. The 4 standard contracts and their use are as follows:</p> <ul style="list-style-type: none"> • K01 is for shorter IT projects with delivery of standard products, for which special adjustments only need to be made to a limited extent. • K02 is for larger and complex IT projects, with a high degree of development and adjustments, and possible phased sub-deliveries. • K03 is for IT projects in which agile development methods are used. • K04 is for the operation of IT systems. <p>The Agency for Digital Government draws attention to the fact that K01, K02 and K03 in several areas are no longer up to date. Use of these contracts therefore presupposes that the authority makes a number of adjustments to the individual contract.</p>
The Common Public-sector Digital Architecture - FDA	Listed under FDA
The Open Group Architecture Framework (TOGAF®)	TOGAF®, The Open Group Architecture Framework Standard, is a proven Enterprise Architecture methodology and framework, used by the world's leading organisations to improve business efficiency. TOGAF is also used as a general reference, as many newer frameworks use TOGAF as the foundation.
Unified Modelling Language™ (UML)	The Unified Modelling Language (UML) is a general-purpose, developmental, modelling language in the field of software engineering. It is intended to provide a standard way to visualize the design of a system. Using UML, one can show diagrams to describe structures and flow within Object Oriented software systems. UML has graphical notations for most concepts and possible connections between concepts within Object Oriented software development. For the FDA Application Architecture it is suggested to use UML.

Unified Process (UP)	<p>UP (Unified Process) is a generalised version of RUP (Rational Unified Process), which was originally developed by Rational Software. UP is an iterative and incremental software development process framework. UP is not a single concrete prescriptive process, but rather an adaptable process framework, intended to be tailored by the development organisation and software project teams.</p> <p>The process divides the project into four phases: Inception, Elaboration, Construction, and Transition.</p> <p>Each phase will generally contain multiple iterations. The number of iterations in each phase depends on the nature of the project, but each iteration should not take too long time. At the beginning of an iteration, one defines which things to include, and when the iteration has finished, you have a program, which the end user can test and evaluate.</p>
Zachman (The Zachman Framework™)	Zachman is a framework for Enterprise Architecture.

Contact details and questions

Questions about the education can be addressed to the trainer(s) or to Danish IT Society / IT-professional certifications at certificering@dit.dk or tel. +45 33 11 15 60.

The certification and Danish IT Society Architecture Competence Framework – DIT ACF (the continuation and update of the OIO Architecture Guide's Architecture roles and competencies) are developed and maintained by Danish IT Society's Advisory Board.

Read more about

- Danish IT Society's Advisory Board <https://dit.dk/Kurser-Certificeringer/Arkitektur/DIT-Arkitektur-Certificering/Arkitektur-Advisory-Board>.
- Danish IT Society Architecture Certification™ www.dit.dk/ark.
- Danish IT Society Architecture Competence Framework www.dit.dk/acf.