ICT Project Guidance

Glossary of ICT Specific Terms:   
Solution Design

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Version:

0.3

## Description

A Glossary of common ICT Terms related to system design, to establish a common understanding, while reducing duplication of effort in downstream documents.

## Synopsis

Included are the meanings of acronyms and industry terms used to describe aspects of solution design.

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## Introduction

## Objective

To develop a common understanding of terms used to deliver services with an ICT component.

# Terms & Acronyms

## System Design Terms & Acronyms

#### 4+1

: a term to describe the deprecated 90’s structure for *SAD* documents. A 4+1 *SAD* was comprised of:

* *Logical View*, describing the logical functionality made available by a system
* *Process View*, describing dynamic sequence flows between system aspects
* *Development View*, describing how the system logic is packaged into discrete elements
* *Physical View*, describing how the system packages are deployed to target devices
* *User Scenarios*, describing a series of indicative examples of how the service is used.
* *Note: superseded by the structure advocated within ISO:42010:2011, popularised by Rozanski & Woods seminal industry book.*

#### Layer

* : to improve maintainability correctly designed services are developed into isolated layers. The most common stack of layers is Presentation, Interface/Validation, Logic, Technical Integration (a subset of which is Data Storage). See *Tier*. See *DDD*.

#### DDD

* : acronym for *Domain Driven Design*.

#### Domain Driven Design

* : a design approach to develop moderate to complex systems (most enterprise services fall in this category) using mature design decisions to deliver a service that remains modular, modifiable, enhancable and maintainable.

#### Rozanski & Woods

* : the authors of a seminal industry book on how to structure *SAD*s in accordance with *ISO-42010*. They popularised SADs comprised of the following views:
* [Service] Context View, describing the business context of the service,
* Functional View, describing the functions provided by the system,
* Information View, describing the HL entities the system is managing,
* Integration View, describing systems the system integrates with, and messages transmitted to and from,
* Infrastructure View, describing the target devices and zones the system components are deployed to,
* The following Perspectives could be appended as sub sections within the above Views -- or developed as additional Views:
* Security
* Privacy

#### SAD

: see *Solution Architecture Description*.

#### Solution Architecture Description (SAD)

: a coherent set of Views describing aspects of a complex model, as described within *ISO-42010*. Depending on the scale of the project expected Views will include several or all the following:

* [System] Context View, covering Background, Objectives, Constraints (Regulations), Obligations (Agreements, Principles, Requirements and Governance)
* Delivery View, covering Deliverables, Expectations, Methods of Working, etc.
* Functional View, covering how the service meets its functional requirements, illustrated by Use Cases by various Stakeholder Roles
* Integration View, covering Components and their integration
* Interoperability View, covering how Components are accessible to other services
* Qualities View, covering how the system meets its Quality Requirements
* Development View, covering expected development practices,
* Quality Assessment View, covering how quality is assured,
* Privacy View, covering how the service adheres to its (legal) privacy obligations
* Security View, covering how the service adheres to its security obligations
* Deployment View, covering automation of quality assurance and delivery

Note that a *Description* does not have to be a *Document*. A SAD can be developed in Word or Confluence, or any medium that provides both sufficient access to contributors and consultants, and versioning sufficient to support the accountability required of an *Accreditation* process.

#### UML

: acronym for *Unified Modelling Language*.

#### Unified Modelling Language

: an *ISO* defined diagramming standard for modelling structural, behavioural, architectural aspects of systems. See *ISO-19505*-2.

Appendices

Appendix A - Document Information

### Versions

* 1. Initial Draft
  2. Minor corrections
  3. Minor changes

### Images

### Tables

### References

**There are no sources in the current document.**

### Review Distribution

The document was distributed for review as below:

|  |  |
| --- | --- |
| Identity | Notes |
| Sandy Britain, Enterprise Architect |  |
| Amy Orr, Data Architect |  |
| Roger Govind, Security Architect |  |
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| Vincent Weirdsma, Lead Developer |  |

### Audience

The document is technical in nature, but parts are expected to be read and/or validated by a non-technical audience.

### Diagrams

Diagrams are developed for a wide audience. Unless specifically for a technical audience, where the use of industry standard diagram types (ArchiMate, UML, C4), is appropriate, diagrams are developed as simple “box & line” monochrome diagrams.