

TOGAF™ and ITIL®

A White Paper by:

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TOGAF™ and ITIL®

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Executive Summary

This White Paper considers how the Information Technology Infrastructure Library (ITIL) and The Open Group Architecture Framework (TOGAF) can be used together, with a detailed comparison and mapping between the two. The approach taken is based on flagging all paragraphs in TOGAF 8.1.1 which may refer to one of the ITIL processes. As an annex, all chapters and paragraphs are numbered and refer to these processes and underlying concepts. When appropriate, explanations and diagrams have been included.

ITIL is a customizable framework outlining worldwide accepted best practices for IT Service Management (ITSM). ITIL addresses the organizational structure and skill requirements for an IT organization by presenting a comprehensive set of management procedures with which an organization can manage its IT operations. The concepts within ITIL support IT service providers in the planning of consistent, documented, and repeatable processes that improve service delivery to the business.

TOGAF is a framework and a method for performing enterprise architecture.

Introduction

ITIL and TOGAF are both architecture frameworks, but they address different concerns. ITIL is primarily focussed on the delivery of IT services, and TOGAF is a methodology and set of tools for developing an enterprise architecture. TOGAF should be considered as being on top of ITIL as it covers the product conception lifecycle, and ITIL as the way product services are managed for users and customers.

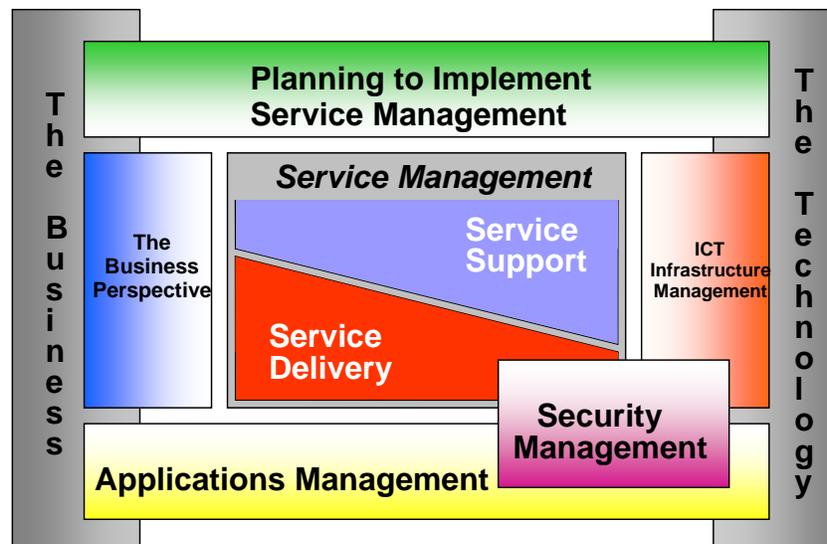
ITIL

The Information Technology Infrastructure Library (ITIL) is the most widely accepted approach to IT Service Management (ITSM) in the world. ITIL provides a cohesive set of best practices, drawn from the public and private sectors internationally. It is supported by a comprehensive qualifications scheme, accredited training organizations, and implementation and assessment tools.

ITIL facilitates the delivery of high-quality IT services. ITIL outlines an extensive set of management procedures that are intended to support businesses in achieving both quality and value – in a financial sense – in IT operations. These procedures are supplier-independent and have been developed to provide guidance across the breadth of IT infrastructure, development, and operations.

ITIL is published in a series of books (hence the term “Library”), each of which covers a core area within IT management. ITIL Version 2 consolidates the publications into logical “sets” that group related process guidelines into the different aspects of IT management, applications, and services.

While the service management sets (Service Support and Service Delivery) are by far the most widely used, circulated, and understood of ITIL publications, ITIL provides a more comprehensive set of practices as a whole. Proponents believe that using the broader library provides a comprehensive set of guidance to link the technical implementation, operations guidelines, and requirements with the strategic management, operations management, and financial management of a modern business.



TOGAF™ and ITIL®

The eight ITIL books and their disciplines are as follows.

The IT Service Management sets:

- Service Support
- Service Delivery

Other operational guidance:

- ICT Infrastructure Management
- Security Management
- The Business Perspective
- Application Management
- Software Asset Management

To assist with the implementation of ITIL practices, a further book was published providing guidance on implementation (mainly of service management):

- Planning to Implement Service Management



ITIL is built around a process-model-based view of controlling and managing operations. The ITIL recommendations were developed in the 1980s by the UK Government's CCTA in response to growing dependence on IT and a recognition that without standard practices, government agencies and private sector contracts were independently creating their own IT management practices and duplicating effort within their Information and Communications Technology (ICT) projects, resulting in common mistakes and increased costs. In April 2001, the CCTA was merged into the Office of Government Commerce (OGC), which is an office of the UK Treasury.

One of the primary benefits claimed by proponents of ITIL within the IT community is its provision of common vocabulary, consisting of a glossary of tightly defined and widely agreed terms. A new and enhanced Glossary has been developed as a key deliverable of ITIL Version 3 (also known as the ITIL Refresh Project).

For further details of the ITIL best practices, please refer to the books mentioned above.

TOGAF

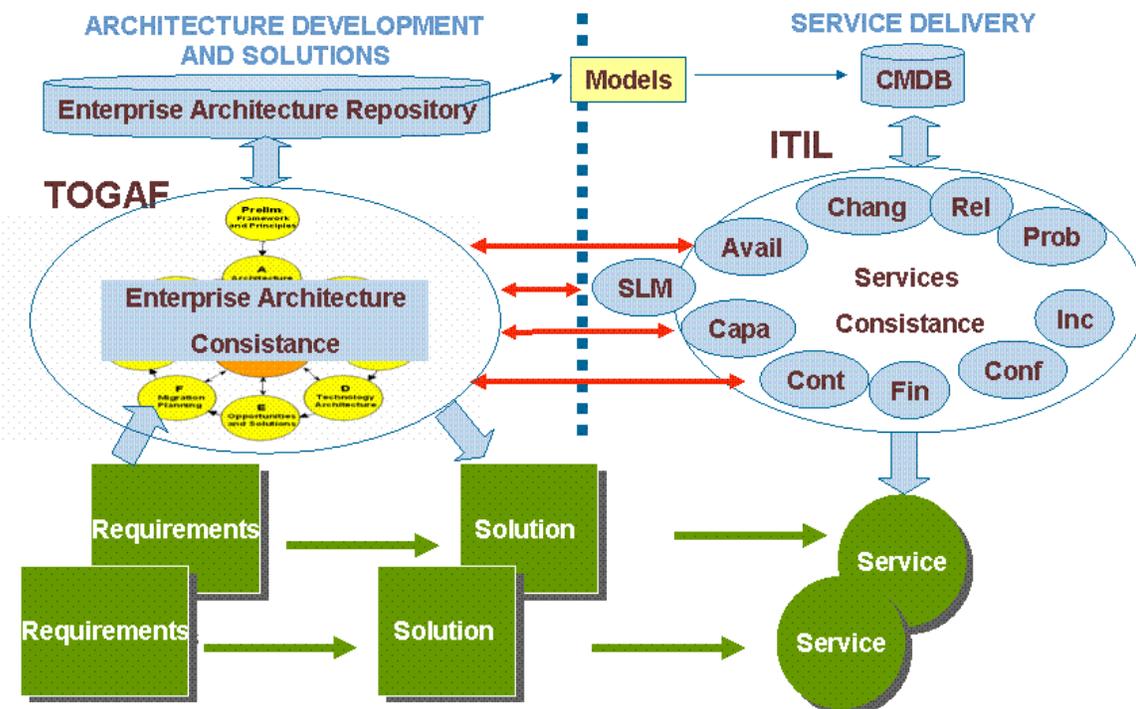
The Open Group Architecture Framework (TOGAF) is a framework – a detailed method and a set of supporting tools – for developing an enterprise architecture. It may be used freely by any organization wishing to develop an enterprise architecture for use within that organization.

TOGAF was developed by members of The Open Group, working within the Architecture Forum (www.opengroup.org/architecture). The original development of TOGAF Version 1 in 1995 was based on the Technical Architecture Framework for Information Management (TAFIM), developed by the US Department of Defense (DoD). The DoD gave The Open Group explicit permission and encouragement to create TOGAF by building on the TAFIM, which itself was the result of many years' development effort and many millions of dollars of US Government investment.

Starting from this sound foundation, the members of The Open Group Architecture Forum have developed successive versions of TOGAF each year and published each one on The Open Group public web site.

TOGAF and ITIL Positioning

TOGAF guarantees a consistency for the building of new products or services and addresses business requirements. ITIL guarantees the consistency of services between them through the use of standard processes, such as Change Management. TOGAF can be based on an enterprise architecture repository and ITIL can be based on a Configuration Management Database (CMDB).



This document is based on ITIL Version 2 and TOGAF 8.1.1. It is assumed that readers are familiar with the two frameworks and their various concepts.

The comparison is mainly done between ITSM (Service Support and Service Delivery) and the four main parts of the TOGAF document:

- PART I (Introduction): This part provides a high-level introduction to some of the key concepts behind enterprise architecture and in particular the TOGAF approach.
- PART II (Architecture Development Method): This is the core of TOGAF. It describes the TOGAF Architecture Development Method (ADM), a step-by-step approach to developing an enterprise architecture.
- PART III (Enterprise Continuum): This part describes the TOGAF Enterprise Continuum, a virtual repository of architecture assets, which includes the TOGAF Foundation Architecture, and the Integrated Information Infrastructure Reference Model (III-RM).
- PART IV (Resources): This part comprises the TOGAF Resource Base, a set of tools and techniques available for use in applying TOGAF and the TOGAF ADM.

The comparison starts from TOGAF and moves up into the ITIL best practices. When appropriate, definitions are included in order to facilitate the reading and to detail the relationship. Chapters that are not relevant to the comparison are not mentioned.

An annex is included at the end of the document which precisely maps the chapters and paragraphs to the various ITIL processes.

The ADM

The TOGAF Architecture Development Method (ADM) is the result of continuous contributions from a large number of architecture practitioners. It describes a method for developing an enterprise architecture, and forms the core of TOGAF. It integrates elements of TOGAF – as well as other available architectural assets – to meet the business and information technology needs of an organization.

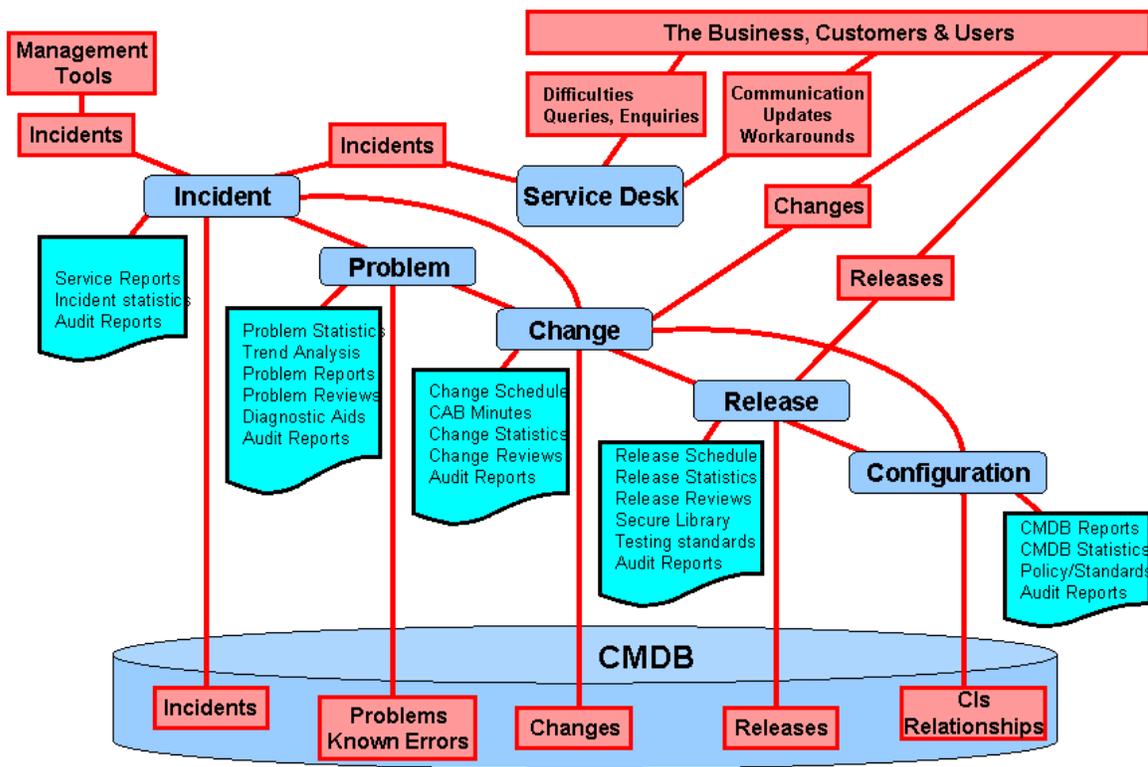
Architectural assets can also be software and hardware components, people, and even documentation. In ITIL, the Configuration Management Database (CMDB) is the database which holds a record of all Configuration Items (CIs) associated with IT infrastructure.

The infrastructure includes hardware, software, and any associated documentation.

A CI is a component of an infrastructure or item, such as a Request For Change (RFC), associated with an infrastructure that is (or is to be) under the control of Configuration Management.

According to ITIL, a CMDB manages:

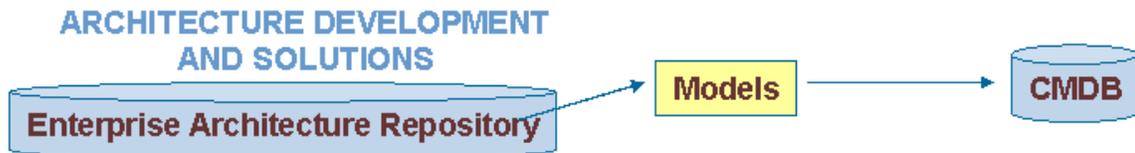
- Hardware, including network components, where relevant
- System software, including operating systems
- Business systems (custom-built applications)
- Software packages
- Database products
- Physical databases
- Environments
- Feeds between databases, applications, and EDI links
- Configuration baselines
- Software releases
- Configuration documentation (e.g., system and interface specifications, licenses, maintenance agreements, Service Level Agreements (SLAs), decommissioning statement)
- Change documentation, deviations, and waivers
- Other resources (e.g., users, suppliers, contracts)
- Other documentation (e.g., IT business processes, workflow, procedures)
- Network components
- Service management components and records (such as capacity plans, IT service continuity plans, incidents, problems, known errors, RFCs, etc.)



The CMDB is the repository which supports the ITIL services from an operational perspective. An Enterprise Architecture Repository is used to also store the reference patterns and the Architecture Building Blocks and is used during the architecture development process. From there, two different approaches could be taken into consideration depending on the IT Service Management (ITSM) and enterprise architecture maturity of the company and the tools already in place.

Scenario 1: The company owns an Enterprise Architecture Repository and a CMDB

As vendors, the CMDB does not really have a predefined meta-data model; the latest should be aligned with the Enterprise Architecture Repository existing models. This would guarantee consistency between the two domains.



Scenario 2: The company owns an Enterprise Architecture Repository (not mandatory) and a CMDB, and extends it with Architectural Views

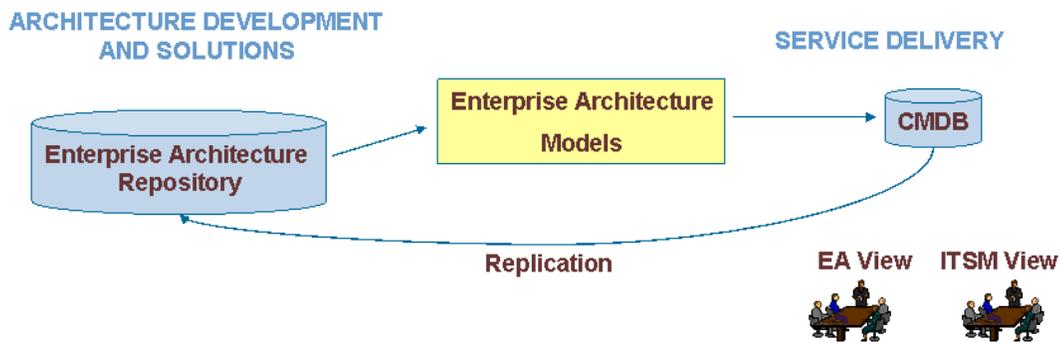
Some companies may be tempted to extend the meta-model of their CMDB. Some vendors provide tools to allow the CMDB model to be extended. This would allow adding new tables and views.

Therefore, a CMDB could be also used to store the architectural assets of the enterprise architecture. The meta-model of a CMDB being extended could integrate the missing information related to the enterprise architecture.

The goals of Configuration Management are:

- To identify, record, and report on all IT components that are under the control and scope of Configuration Management
- To provide a logical model of the infrastructure or a service by identifying, controlling, maintaining, and verifying the versions of CIs in existence in the CMDB

The ADM method could integrate the Configuration Management process in order to populate “the CMDB repository” with reference architecture, models, and patterns, and also architecture assets.



Enterprise Continuum

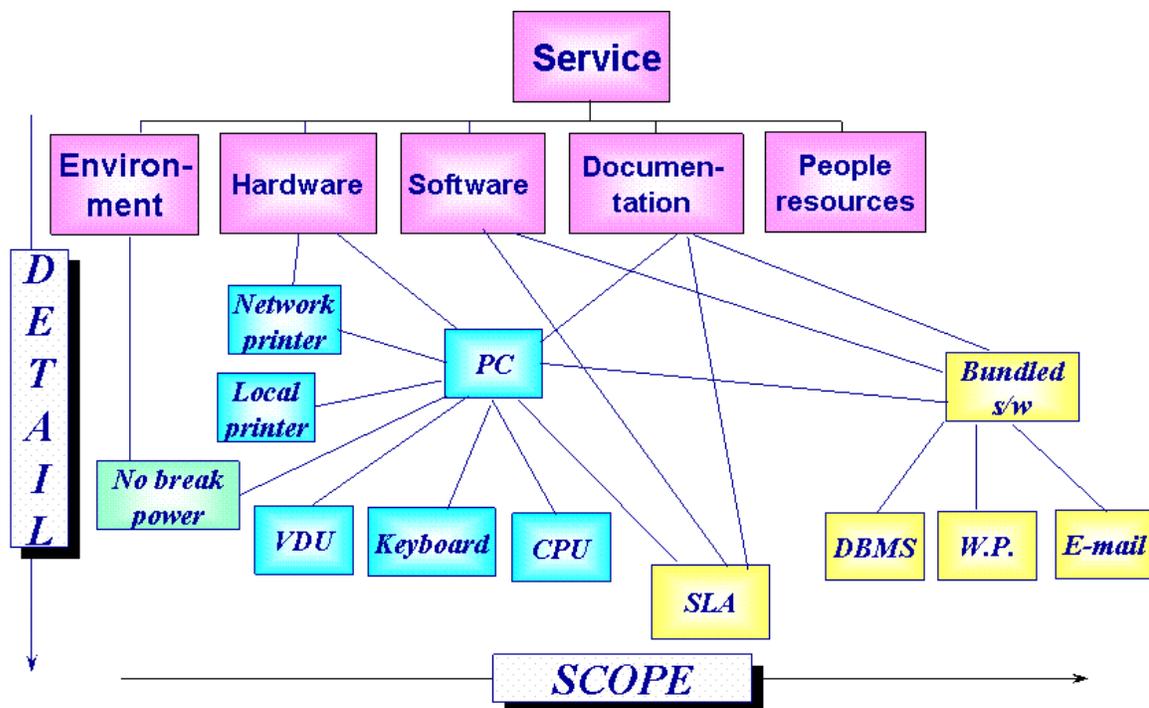
The TOGAF Enterprise Continuum provides a framework and context for the leveraging of relevant architecture assets in executing the ADM. These assets may include architecture descriptions, models, and patterns taken from a variety of sources. At relevant places throughout the ADM, there are reminders to consider which architecture assets from the Enterprise Continuum the architect should use, if any. In some cases – for example, in the development of a Technology Architecture – this may be TOGAF's own Foundation Architecture. In other cases – for example, in the development of a Business Architecture – it may be a reference model for e-Commerce taken from the industry at large.

The Enterprise Continuum with the architecture assets can be associated with the Configuration Management Database (CMDB) and be linked as previously said to the Configuration Management process. The work in-progress could be indicated in the Configuration Item (CI) as the status changes over time. The CMDB could also be considered as a virtual repository for an enterprise architecture.

The IT Governance process should refer to ITIL and support the Configuration Management process to update the Enterprise Continuum accordingly.

Building blocks could also be associated with groups of CIs.

The scoping of the architecture can be linked to the scoping exercise of the Configuration Management process which is the range of responsibility covered by the process. The scope and details of the CMDB should consider the vertical scoping of the architecture. The CI level, which is the degree of detail selected to describe each CI, could take into consideration architectural needs.



TOGAF Components

Preliminary Phase: Frameworks and Principles

The IT Governance Strategy as an Input (when pre-existing) should identify whether it includes IT Service Management (ITSM). IT governance can have different flavors. Ideally, ITSM should be considered.

Phase B: Business Architecture

Business Architecture is a formal documentation of the lines of business, their support functions, and their relationship to each other. After the architecture has been documented, it is systematically analyzed to examine the functions (services) required by business and to align the enterprise technology with those functions.

Service Level Management is the name given to the processes of planning, coordinating, drafting, agreeing, monitoring, and reporting on Service Level Agreements (SLAs), and on the ongoing review of service achievements to ensure that the required and cost-justifiable service quality is maintained and gradually improved.

The process goal is to maintain and improve IT service quality through a constant cycle of agreeing, monitoring, and reporting to meet the customer's business objectives.

The definition of new services or their elimination in a Business Architecture should be associated with the Service Level Management process.

Each business service should be mapped to the Service Catalog (the document where the IT services available to the customer are defined).

Each business service should be linked to an SLA, which is a written agreement between an IT service provider and the IT customer. SLAs are used for internal customers.

Phase C: Information Systems Architecture – Data Architecture

Information Systems Architecture programs are typically driven from the corporate or group level, and are often inspired by the need to consolidate information (e.g., customer, product, and employee) across the company.

Information Systems Architecture is the art and science of organizing information and interfaces to help information seekers solve their information needs efficiently and effectively, primarily within networked and web-based environments.

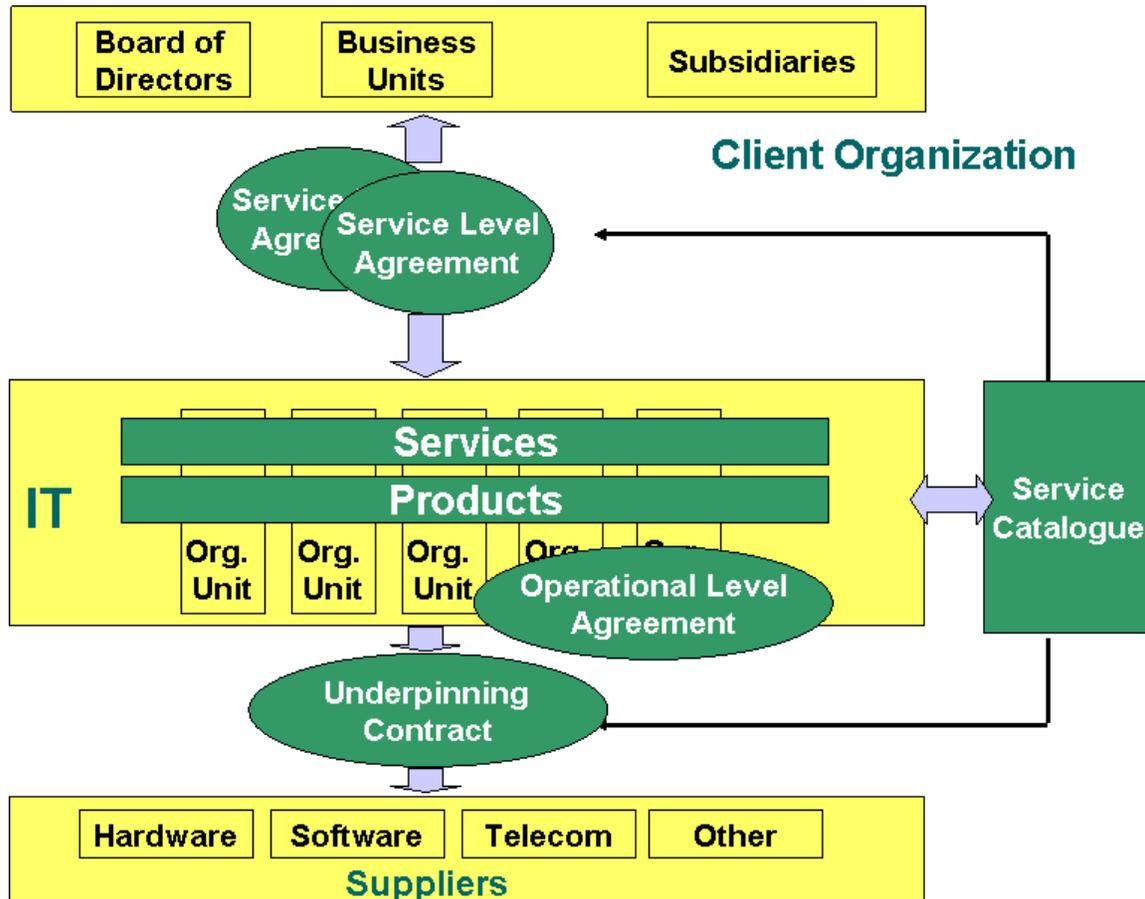
The qualitative criteria should also be associated with the Service Level Management process and be based on Operational Level Agreements (OLAs), which are agreements between two internal IT areas/departments; e.g., Network Management and Operations.

Phase C: Information Systems Architecture – Applications Architecture

Also called the Solutions Architecture, the Applications Architecture focuses on three separate dimensions – data, processes, and technology – and five sequential levels of detail or views – the corporate view (or ballpark), the process owner's view, the designer's view, the builder's view, and the programmer's view.

An Applications Architecture, at the conceptual level, gives us a set of well-defined and modularized applications, integrated through a set of common databases without redundancy that fully support the future business challenges of the integrated enterprise.

The qualitative criteria should also be associated with the Service Level Management process and be based on OLAs.



Phase D: Technology Architecture

The Technology Architecture is primarily concerned with enterprise-wide integration issues, describing in a vendor-independent manner the technology-related entities and relationships that need to be managed across the enterprise. (Technology-related entities may include platforms, information appliances, software applications or parts, information access and storage, networking, and the external and internal users of the information systems.)

The Baseline Technology Architecture could be contained in the Configuration Management Database (CMDB) and the activities associated related to the Configuration Management process. Architecture Building Blocks could be linked to business services using the IT Service Management (ITSM) notion of “relationships”, which is the description of the interfaces that exist between Configuration Items (CIs) in the infrastructure.

The Architecture Building Blocks could be new types of CI in the CMDB. If possible, the meta-model of the CMDB could be extended and a new category created.

Standard categories include:

- Programs/Projects
- Services
- Systems
- Hardware
- Software
- Documentation
- Environment
- People
- Data

A new category could be created named “Architecture Building Blocks”. An IT service could also have relationships with one-to-many Architecture Building Blocks. This will be managed through the Configuration Management process.

In the Target Technology Architecture, consideration will have to be given to the Service Catalog. Service Level Management will have to be taken into consideration (the TOGAF Technical Reference Model (TRM) service grouping and service portfolio) when the gap analysis of services (matrix) is done.

Documentation related to Architecture Building Blocks and documentation of services will become CIs. Target services will amend the Service Catalog when appropriate. There should be a strong relationship between the latter and the portfolio of services.

Change requests related to:

- The Architecture Continuum
- When the Business Architecture needs to be transformed
- Data or application

will be based on Requests For Change (RFCs) and the Change Management process.

The process should ensure that standardized methods and procedures are used for efficient and prompt handling of all changes to minimize the impact of change-related incidents and improve day-to-day operations. A change is an action that results in a new status for one or more IT infrastructure CIs.

Phase E: Opportunities and Solutions

This phase will refer to three processes:

- Change Management
- Release Management

- Financial Management

The move or the migration from a baseline environment to the target should be through the use of a Project Management methodology, but also the Release Management process.

Release Management takes a holistic view of a change to an IT service and should ensure that all aspects of a release, both technical and non-technical, are considered together. Among other activities, Release Management will consist of the release policy, the release (migration) planning, the design and build of the release, the testing, etc. This process should therefore be used for any new deployed business opportunities.

The costs will also have to be taken into consideration and Financial Management used as a process, the goal being to provide cost-effective stewardship of the IT assets and resources used in providing IT services.

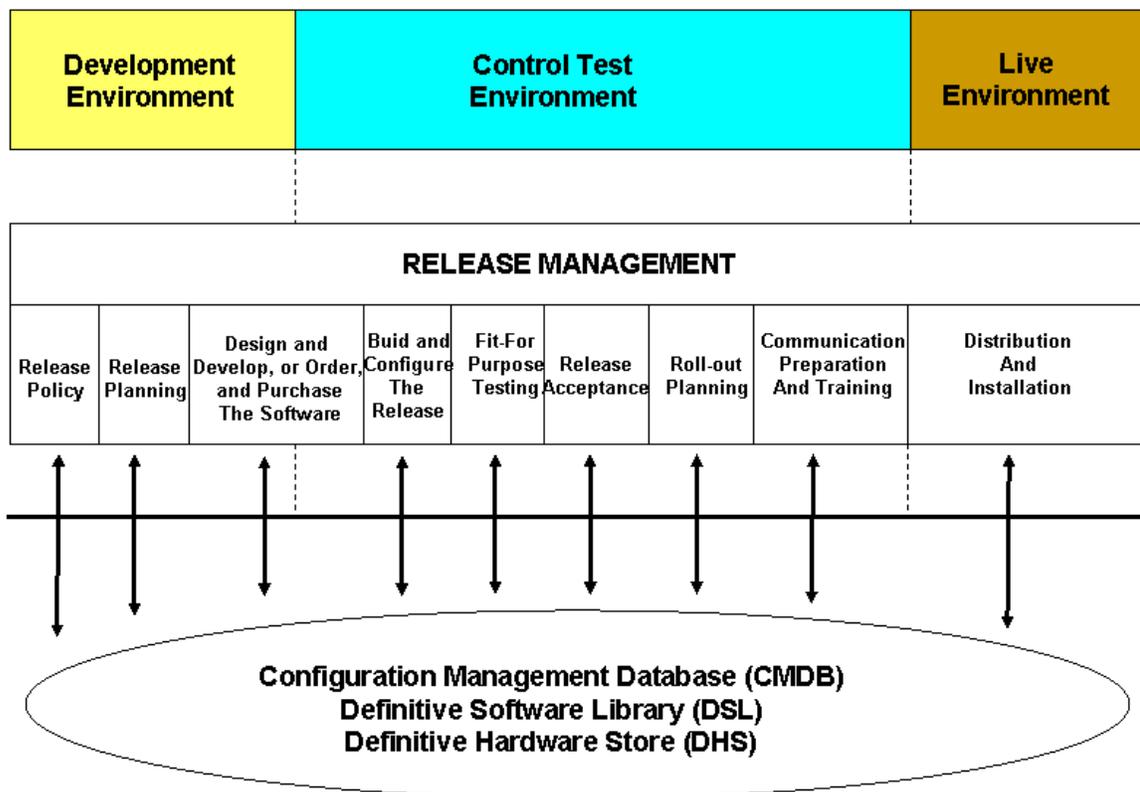
Phase F: Migration Planning

This phase is similar to the previous one and also refers to the same processes: Change Management, Release Management, and Financial Management. However, an additional process will have to be taken into consideration: Service Level Management.

Once the project implementation is defined, new services will be added or removed from the Service Catalog and, in parallel, SLAs-OLAs will be updated/added/removed.

Phase G: Implementation Governance

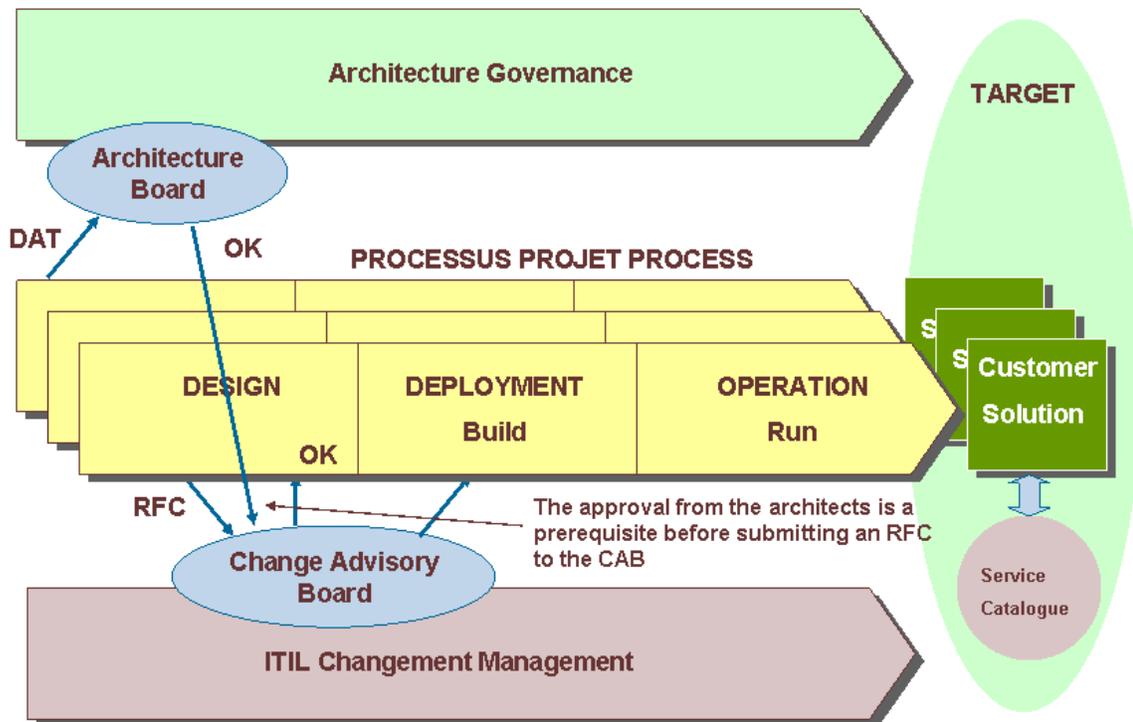
The implementation and deployment process should be done through the Release Management process.



Phase H: Architecture Change Management

As mentioned earlier, a change is an action that results in a new status for one or more IT infrastructure CIs. The concept can be also used for any architecture change and it would be recommended to use the same Change Management process which covers several activities such as:

- RFC, change logging, and filtering (acceptance)
- Allocation of priorities and categorization
- Change Advisory Board (CAB) meetings
(It should be noted that this committee should also have a member from the Enterprise Architecture team.) There should also be some synergies with the Architecture Board. **The approval from the architects should be a pre-requisite before submitting an RFC to the CAB.**
- Impact and resource assessment
- Change approval
- Change scheduling
- Change building, testing and implementation
- Change review
- Reviewing the Change Management process for efficiency and effectiveness



Architecture Requirements Management

Requirement Management is often associated with Change Management.

Requirements Management is the science and art of gathering and managing user, business, technical, functional, and process requirements within a product development project. The project could be for a new consumer product, a web site, a system, or a software application all requiring architecture modifications. Requirements should be managed by the Change Management process.

Input and Output Descriptions

The Request for Architecture Work containing budget information or financial constraints should refer to the Financial Management process.

Business Architecture, business system description, and product information should refer to the Service Level Management process; specifically the Service Catalog and/or the SLAs.

Baseline Architecture, IT system, and architecture descriptions can be found in the CMDB and refer to Configuration Management.

The Architecture Contract may refer to an SLA or an OLA.

The Enterprise Continuum

The constituents such as the Architecture and the Solutions Continuum will obviously be based on the CMDB and the Configuration Management process.

The common systems and industry architecture can refer to a generic problem domain. Problem Management is a process whose goal is to minimize the adverse impacts of incidents and problems on the business that are caused by errors in the IT infrastructure and to prevent recurrence of incidents related to these errors. The architecture requirements could be the results of the root cause and initiate action to remove the error.

Product and Services, System Solutions, and Industry Solutions should refer to the Service Level Management process.

Foundation Architecture: Technical Reference Model (TRM)

As previously stated, Configuration Management is a key process for the maintenance of the Enterprise Continuum and its constituents. The Technical Reference Model (TRM) should be updated through that process and could be considered as a view of the CMDB. A TRM component could be an aggregation of CIs. Also, it would be a good idea to align the taxonomy whenever possible to the ITIL Glossary.

Application Software, Business Applications, Infrastructures Applications, Application Platform Taxonomy, and Service Categories should refer to the Service Level Management process and specifically the Service Catalog, SLAs, and OLAs.

Communication Infrastructure, Application Platform Interface, and Communication Infrastructure Interface will refer to Configuration Management.

It needs to be specified that Service Categories is highly detailed and could be the source for the definition of a Service Catalog at the IT department level. Some operational departments develop a catalog of services

related to their support to other IT units. OLAs can therefore refer to this departmental catalog of services such as described in the Application Platform Service Categories.

The service qualities presently identified in the TRM taxonomy should refer to the following processes:

- Availability Management for availability
- Capacity Management for performance
- IT service continuity for recoverability

Detailed Platform Taxonomy

System and Network Management Services:

- Configuration Management should refer to the ITIL process.
- Performance Management should refer to Capacity Management, which is the process which ensures that all the current and future capacity and performance aspects of the business requirements are provided cost-effectively.
- Availability and Fault Management should refer to Availability Management, which is the process that optimizes the capability of the IT infrastructure services and supporting organization to deliver a cost-effective and sustained level of availability enabling the business to meet its objectives.
- Accounting Management should refer to Financial Management.
- Security Management can refer to the dedicated volume on ITIL Security Management.
- Backup and Restore should be covered by IT Service Continuity.
- Online disk management is an activity from Capacity Management.
- Capacity Management should refer to the ITIL process.
- Software Installation should refer to Release Management.
- Trouble Ticketing should refer to Incident Management, which is the process which restores normal service operation as quickly as possible and minimizes the adverse impact on business operations.

Object Oriented Provision of Services:

- Change Management should refer to the ITIL process.

Foundation Architecture: Integrated Information Infrastructure Reference Model (III-RM)

As this is a derivation of the TRM, Configuration Management will also be the main process used. Here again Application Platform will refer to Service Level Management and quality to SLAs.

Architecture Board

In the agenda, the reference to RFCs should also be part of the Change Management process. When a CAB exists for that process, members of the Architecture Board should be added when applicable. Compliance and assessment should be taken into consideration in the Service Level Management process.

Building Blocks

The creation of the Architecture Building Blocks should be in the Configuration Management process as already described above.

Glossary

Alignment with the ITIL Glossary would be appropriate.

Annex: TOGAF/ITIL Mapping

In this annex, all chapters and paragraphs in TOGAF 8.1.1 are listed with reference to the relevant ITIL process and/or underlying concept.

| TOGAF | | | | Comments | ITIL | Comments |
|--|-----|-------|---|---------------------|-------------------------------|-----------------|
| 3. Introduction to the ADM | | | | | | |
| | | 3.1.2 | The ADM and the Enterprise Continuum | Architecture Assets | Configuration Management | |
| | | | Repository that includes reference architecture, models, and patterns | | Configuration Management | CMDB |
| | | | Work-in-progress | | Configuration Management | CI's status |
| | | | IT Governance process | | Configuration Management | |
| | | | Enterprise Continuum with all assets | | Configuration Management | Documentation |
| | | | Re-usable Building Blocks | | Configuration Management | |
| | 3.5 | | Process Management | Repository | Configuration Management | |
| | 3.6 | | Scoping the Architecture | Vertical Scope | Configuration Management | CMDB scoping |
| | | 3.6.3 | Vertical Scope/ Level of Detail | | Configuration Management | CMDB scoping |
| 4. Preliminary Phase: Frameworks and Principles | | | | | | |
| | 4.3 | | IT Governance Strategy | | Service Management Governance | |
| 6. Business Architecture | | | | | | |
| | 6.2 | 6.2.5 | Eliminated or New Services | | Service Level Management | Service Catalog |
| | 6.4 | 3.d | Business Services | | Service Level Management | Service Catalog |
| | | 6 | SLAs | | Service Level Management | SLAs |
| | 6.5 | | Business Services | | Service Level Management | SLAs |
| 8. Information Systems Architecture – Data Architecture | | | | | | |
| | 8.4 | 6 | Review Qualitative Criteria | | Service Level Management | SLAs, OLAs |
| 9. Information Systems Architectures – Applications Architecture | | | | | | |

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| TOGAF | | | | Comments | ITIL | Comments |
|---------------------------------|------|-----------|-----------------------------|---|--------------------------|--|
| | 9.4 | 6 | Review Qualitative Criteria | | Service Level Management | SLAs, OLAs |
| 10. Technology Architecture | | | | | | |
| | 10.4 | | Baseline Description | | Configuration Management | CMDB content |
| | 10.6 | 10.6.3.2 | Approach | Architecture Building Blocks | Configuration Management | Could be integrated in a CMDB. Links between ABB and Services. |
| | | 10.6.3.4 | Activities | TOGAF TRM service groupings | Service Level Management | Service Catalog |
| | | 10.6.5.2 | Approach | TOGAF TRM-based model | Service Level Management | Service Catalog |
| | | 10.6.6 | Step 4 | Services Portfolio | Service Level Management | Service Catalog |
| | | 10.6.6.2 | Approach | Services Portfolio | Service Level Management | Service Catalog |
| | | 10.6.6.4 | Activities | Grouping and documentation of services | Service Level Management | Service Catalog |
| | | | | Change Request | Change Management | RFC |
| | | 10.6.6.5 | Outputs | Target Services | Service Level Management | Service Catalog |
| | | | | Change Request | Change Management | RFC |
| | | 10.6.9.2 | Approach | Portfolio of Services | Service Level Management | Service Catalog |
| | | | | Architecture Building Blocks | Configuration Management | Could be integrated in a CMDB. Links between ABB and Services. |
| | | 10.6.9.4 | Activities | Architecture Building Blocks | Configuration Management | CMDB |
| | | | | Business, Data, Applications Architecture Changes | Change Management | RFC |
| | | 10.6.10.2 | Approach | Gap Analysis of Services | Service Level Management | Service Catalog |
| | | 10.6.10.4 | Activities | Gap Matrix | Service Level Management | Service Catalog |
| 11. Opportunities and Solutions | | | | | | |
| | 11.2 | | Approach | | Change Management | |
| | | | | | Release Management | |
| | | | | | IT Financial Management | |
| 12. Migration Planning | | | | | | |
| | 12.2 | | Approach | | Change Management | |

| TOGAF | | | | Comments | ITIL | Comments |
|--|--------|--|-------------------------------|---|--------------------------|--------------------------------|
| | | | | | Release Management | |
| | | | | | IT Financial Management | |
| | | | | | Service Level Management | |
| 13. Implementation Governance | | | | | | |
| | 13.2 | | Approach | | Release Management | |
| | 13.4 | | Steps | | Change Management | |
| 14. Architecture Change Management | | | | | | |
| | 14.2 | | Approach | | Change Management | |
| | 14.2.2 | | The Change Management Process | | Change Management | ITIL Change Management chapter |
| | 14.3 | | Inputs | Request for Architecture Change | Change Management | RFC |
| | 14.4 | | Steps | Architecture Board | Change Management | Change Advisory Board |
| 15. Architecture Requirements Management | | | | | | |
| | 15.2 | | Approach | Requirements Management | Change Management | |
| | 15.4 | | Steps | | Change Management | ITIL Change Management chapter |
| 16. ADM Input and Output Descriptions | | | | | | |
| | 16.2.1 | | Request for Architecture Work | Budget Information | IT Financial Management | |
| | | | | Business System Description | Service Level Management | |
| | | | | Baseline Architecture/IT System Description | Configuration Management | CMDB |
| | 16.2.4 | | Product Information | Functional Description | Service Level Management | SLA |
| | | | | Architectural Description | Configuration Management | CMDB |
| | 16.3.3 | | Business Architecture | | Service Level Management | |
| | | | | | Configuration Management | CMDB |
| | 16.3.4 | | Technology Architecture | | Configuration Management | CMDB |
| | 16.3.6 | | Architecture Contract | | Service Level Management | SLA/OLA |
| 17. Enterprise Continuum | | | | | | |

| TOGAF | | | | Comments | ITIL | Comments |
|---|------|----------|--|------------------------|--------------------------|-------------------------|
| | 17.1 | | Overview | | Configuration Management | CMDB |
| | | | Consistent Language | | | ITIL Terminology |
| | 17.2 | | Enterprise Continuum and Architecture Re-Use | Virtual Repository | Configuration Management | CMDB |
| | 17.4 | | Constituents of the Enterprise Continuum | Architecture Continuum | Configuration Management | CMDB |
| 18. The Enterprise Continuum in Detail | | | | | | |
| | 18.1 | 18.1.3 | Common Systems Architectures | Problem Domain | Problem Management | |
| | | 18.1.4 | Industry Architectures | Problem Domain | Problem Management | |
| | | 18.2.2 | Products and Services | | Service Level Management | |
| | | 18.2.3 | Systems Solutions | | Service Level Management | |
| | | 18.2.4 | Industry Solutions | | Service Level Management | |
| 19. Foundation Architecture – Technical Reference Model | | | | | | |
| | 19.1 | 19.1.1 | Role of the TRM in the Foundation Architecture | | Configuration Management | CMDB |
| | | 19.1.2 | TRM Components | TRM Components | Configuration Management | CMDB |
| | | | | Taxonomy | | ITIL Terminology |
| | 19.3 | | The TRM in Detail | | Configuration Management | CMDB |
| | | | | | Service Level Management | Service Catalog/SLA/OLA |
| | | 19.3.3 | Application Software | | Service Level Management | Service Catalog/SLA/OLA |
| | | 19.3.3.1 | Business Applications | | Service Level Management | Service Catalog/SLA/OLA |
| | | 19.3.3.2 | Infrastructure Applications | | Service Level Management | Service Catalog/SLA/OLA |
| | | 19.3.5 | Communication Infrastructure | | Configuration Management | |
| | | 19.3.5 | Application Platform Interface | | Configuration Management | |
| | | 19.3.7 | Communication Infrastructure Interface | | Configuration Management | |
| | 19.4 | | Application Platform Taxonomy | | Service Level Management | Service Catalog/SLA/OLA |
| | | 19.4.2 | Application Platform Service Categories | | Service Level Management | Service Catalog/SLA/OLA |
| | | 19.4.3.2 | Taxonomy of Service Qualities | Availability | Availability Management | |

| TOGAF | | | | Comments | ITIL | Comments |
|---|-------|--------|--|-----------------------------------|--------------------------|-------------------------|
| | | | | Performance | Capacity Management | |
| | | | | Recoverability | IT Service Continuity | |
| 20. Detailed Platform Taxonomy | | | | | Service Level Management | Service Catalog/SLA/OLA |
| | 20.12 | | System and Network Management Services | Configuration Management (CM) | Configuration Management | |
| | | | | | Change Management | |
| | | | | Performance Management | Capacity Management | |
| | | | | Availability and Fault Management | Availability Management | |
| | | | | Accounting Management | IT Financial Management | |
| | | | | Security Management | Security Management | |
| | | | | Backup and Restore | IT Service Continuity | |
| | | | | Online Disk Management | Capacity Management | |
| | | | | Capacity Management | Capacity Management | |
| | | | | Software Installation | Release Management | |
| | | | | Trouble Ticketing | Incident Management | |
| | 20.13 | | Object-Oriented Provision of Services | Change Management | Change Management | |
| | | | | Collections | Configuration Management | |
| 22. Foundation Architecture – Integrated Information Infrastructure Reference Model | | | | | | |
| | | 22.2.1 | Derivation of the III-RM from the TRM | | Configuration Management | CMDB |
| | | 22.3.4 | Application Platform | | Service Level Management | |
| | | 22.3.4 | Qualities | | Service Level Management | SLA |
| 23. Architecture Board | | | | | | |
| | | 23.4.3 | Agenda | RFC | Change Management | RFC |
| | | | | Compliance Assessments | Service Level Management | Service Catalog/SLA/OLA |
| 32. Building Blocks | | | | | Configuration Management | CMDB |
| 36. Glossary | | | | | | ITIL Glossary |

About the Author

At Merck Serono International, Serge Thorn is in charge of IT Research and Innovation (a function which consists of motivating, encouraging creativity, and innovation in the IT Units), with a mission to help to deploy an Enterprise Architecture, taking into account the company IT Governance Framework and the IT Pharma Communication.

He was previously in charge of the reorganization of the IT Department, implementing Service Management based on ITIL Best Practices and deploying new processes such as Change, Configuration, and Release Management, and was responsible for the Disaster Recovery Plan and for the System Management team.

Prior to this, Serge was responsible for the Architecture team in an international bank, having a wide experience in the deployment and management of information systems in Private Banking, and also in IT architectures domains such as the Internet, dealing rooms, inter-banking networks, and Middle and Back-office.

Serge Thorn is also the Chairman of the itSMF (IT Service Management Forum) Swiss chapter.

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