The TOGAF® Standard — 10th Edition

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REFERENCE CARDS

The TOGAF® Standard — 10th Edition

The TOGAF® Standard, 10th Edition

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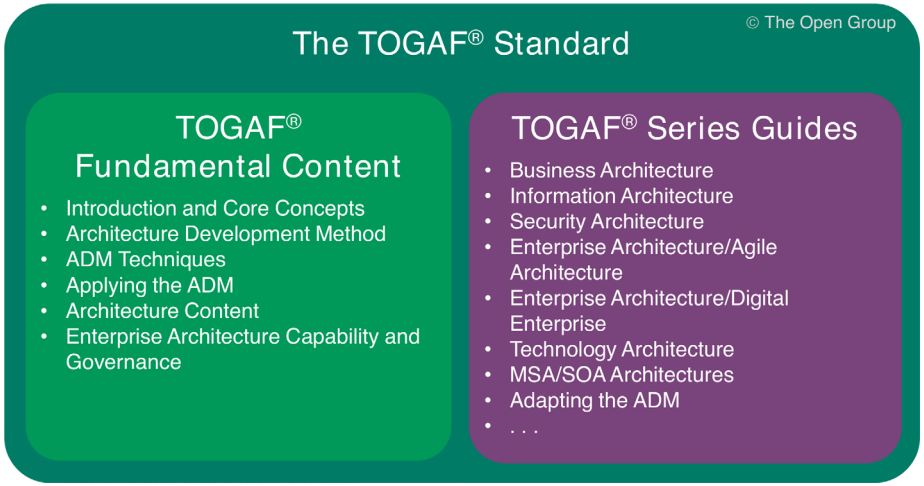
The TOGAF Standard, 10th Edition makes adoption of best practices easier. It will show you where to find enduring and universal concepts and proven best practices, and it will also underscore where to look for new emerging ideas.

Together, the universal concepts, best practice guidance, and emerging ideas enable you to adopt the TOGAF Standard for your configured Enterprise Architecture practice:

- The TOGAF Standard is used by small, medium, and large commercial businesses, as well as government departments, non-government public organizations, and defense agencies
- With greatly expanded guidance, and how-to material, it enables organizations to operate in an efficient and effective way across a broad range of use-cases, including Agile enterprises and Digital Transformation
- The TOGAF Standard is designed for the dichotomy of common universal concepts and variable detailed configurations
- The structure focuses on what most architects want – more, better, and topical guidance on how to deliver the best Enterprise Architecture that supports their stakeholders and their organization
- The TOGAF Standard is divided into the TOGAF Fundamental Content and the TOGAF Series Guides; the TOGAF Fundamental Content provides the core concepts and practices and the TOGAF Series Guides advise on configuration of the Fundamental Content



The TOGAF® Standard — 10th Edition

About the TOGAF® Standard, 10th Edition

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The TOGAF Standard, 10th Edition builds on previous versions of the TOGAF Standard, and expands the material available to architecture practitioners to make the adoption of best practices easier. It represents today's stable, scalable, best practice.

The TOGAF Standard applies to all Enterprise Architecture practices. It does not matter whether your architecture will support strategy, portfolio, project, or solution delivery, or whether it is about embarking on a Digital Transformation or legacy simplification – the TOGAF Fundamental Content and the TOGAF Series Guides provide enduring, stable, universal concepts, and proven best practices.

- **Enterprise Architecture Practitioner**
  For Enterprise Architects, the TOGAF Standard provides an integrated, holistic view of an organizational landscape which enables strategic decision-making, providing best practices for business and technology trend adoption.

- **Enterprise Architecture Consultant**
  For Consultants, the TOGAF Standard provides a modular, scalable framework that enables organizational transformation for different use-cases and architecture styles.

- **Enterprise Architecture Tool Vendors**
  For tool vendors, the TOGAF Standard provides a reference model for architecture views, an Enterprise Architecture repository and deliverables, as well as the TOGAF Architecture Development Method (ADM) and governance framework to support the practice in an automated way.

- **Enterprise Architecture Trainers**
  For authorized trainers and TOGAF Certification candidates, the TOGAF Certification Program is a worldwide recognized Certification Program designed to provide up-to-date and relevant practices that demonstrate competency in the TOGAF Standard, and the TOGAF Body of Knowledge.

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The TOGAF® Documentation Set

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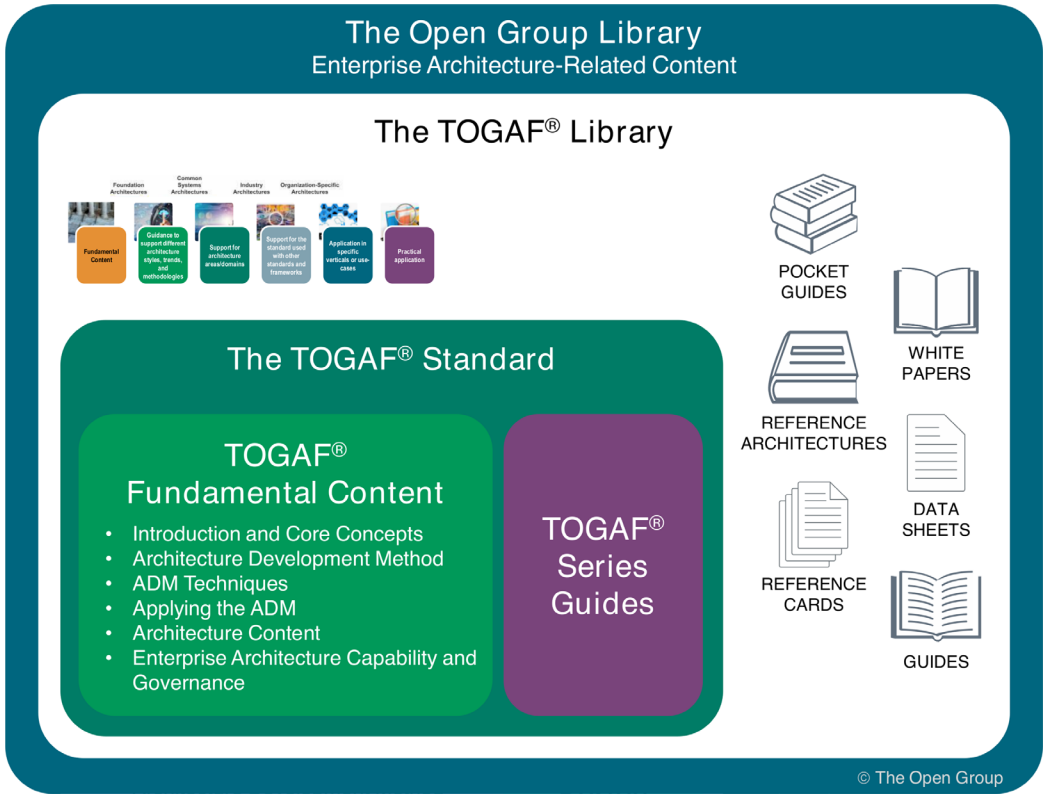
The TOGAF documentation set is stored in the TOGAF Library and contains:

- The TOGAF Standard:
  - TOGAF Fundamental Content
  - TOGAF Series Guides
- Supporting material:
  - Pocket Guides
  - White Papers
  - Guides
  - Data Sheets
  - Reference Cards

The TOGAF Library is a curated collection of emerging and proven ideas, plus additional useful materials such as guidelines, templates, patterns, and other forms of reference material to accelerate the creation of new architectures for the enterprise.

The TOGAF Library is a section of The Open Group Library, which contains many materials useful to Enterprise Architects, such as the IT4IT™ Standard, the Digital Practitioner Body of Knowledge™ (also known as the DPBoK™ Standard), the Open Agile Architecture™ Standard (also known as the O-AA™ Standard), and the Open Business Architecture Standard (O-BA).



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Structure of the TOGAF® Standard, 10th Edition

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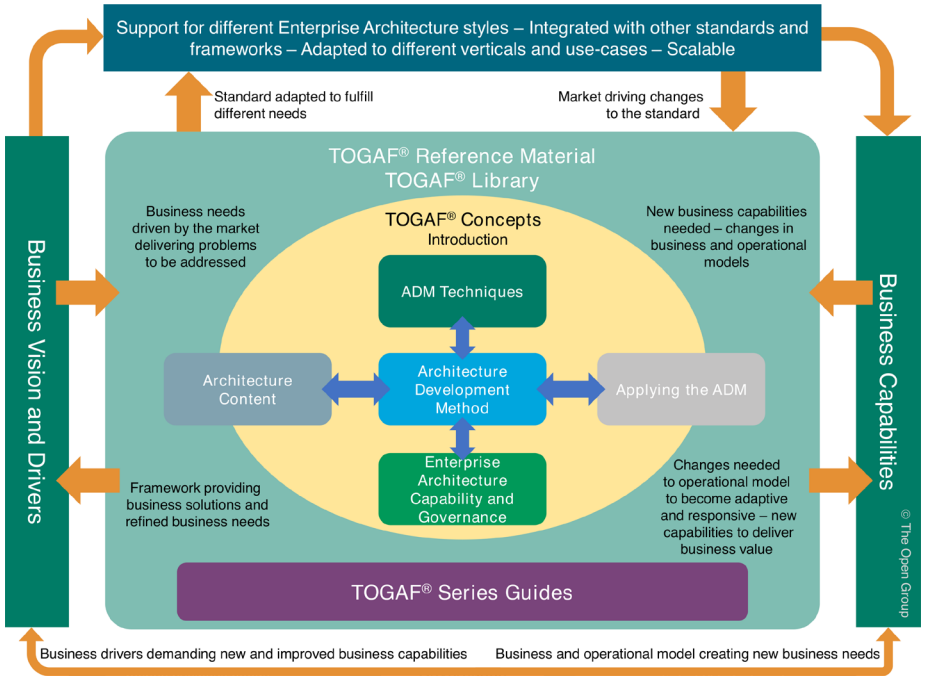
The TOGAF Standard, 10th Edition comprises:

- **TOGAF Fundamental Content**
- **TOGAF Series Guides**

The TOGAF Fundamental Content is organized into six separate documents:

- **Introduction and Core Concepts**
  Introduces the TOGAF Standard, provides an executive overview, describes the TOGAF documentation set, outlines core concepts, and includes common definitions for the standard
- **Architecture Development Method (ADM)**
  Describes the TOGAF ADM, which is an iterative approach to developing an Enterprise Architecture
- **ADM Techniques**
  Contains a collection of techniques available for applying the TOGAF approach and the TOGAF ADM
- **Applying the ADM**
  Contains guidelines for adapting the TOGAF ADM to address the specific style of architecture required in a practical context
- **Architecture Content**
  Describes the TOGAF Content Framework and a structured metamodel for architectural artifacts, as well as an overview of typical architecture deliverables
- **Enterprise Architecture Capability and Governance**
  Discusses the organization, processes, skills, roles, and responsibilities applicable to an Enterprise Architecture team, and describes an Enterprise Architecture governance framework



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Structure of the TOGAF® Standard, 10th Edition (cont.): The TOGAF Series Guides

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The TOGAF Series Guides give advice on how to configure and, at times, extend the TOGAF Fundamental Content to suit a given context.

The TOGAF Series Guides cover a range of topics, from general how-to and guidance on establishing an Enterprise Architecture team, to domain-specific material for Business and Security Architecture, and application with Agile methods and Agile software development.

- A Practitioners' Approach to Developing Enterprise Architecture Following the TOGAF ADM
- Using the TOGAF Standard in the Digital Enterprise
- Digital Technology Adoption: A Guide to Readiness Assessment and Roadmap Development
- The TOGAF Leader's Guide to Establishing and Evolving an EA Capability
- Enabling Enterprise Agility
- Applying the TOGAF ADM using Agile Sprints
- Business Capabilities, Version 2
- Business Models
- Business Scenarios
- Information Mapping
- Organization Mapping
- Value Streams
- Information Architecture: Customer Master Data Management (C-MDM)
- Integrating Risk and Security within a TOGAF Enterprise Architecture
- Architecture Maturity Models
- Architecture Project Management
- Architecture Skills Framework
- Digital Business Reference Model (DBRM)
- Government Reference Model
- Microservices Architecture (MSA)

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ADM Overview

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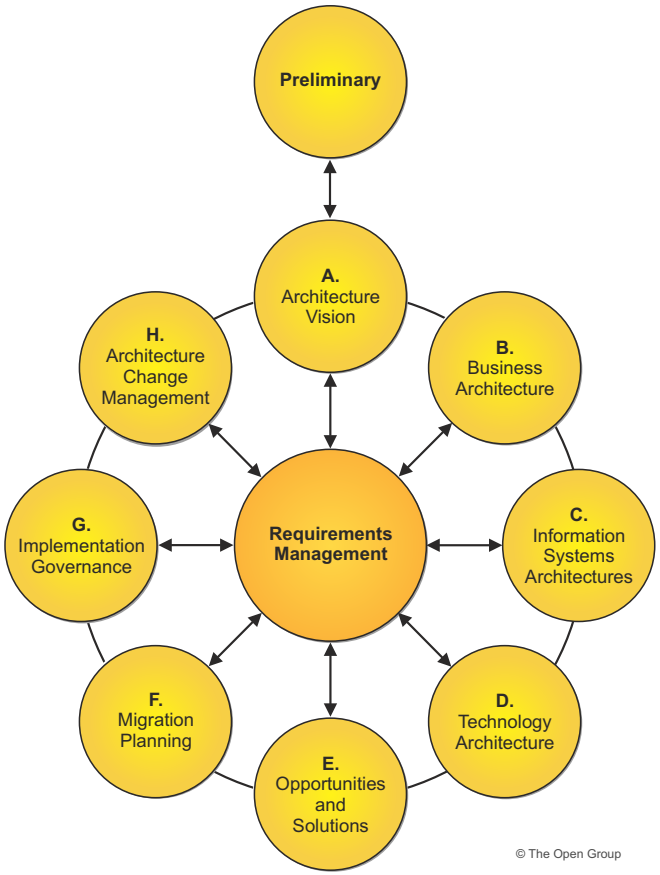
The TOGAF® ADM describes a method for developing and managing the lifecycle of an Enterprise Architecture, and forms the core of the TOGAF Standard.

It integrates elements of the TOGAF Standard, as well as other available architectural assets, to meet the business needs of an organization.



Name	Description
Preliminary	Describes the preparation and initiation activities required to meet the business directive for a new Enterprise Architecture, including the definition of an organization-specific architecture framework and the definition of principles.
Requirements Management	Operates the process of managing architecture requirements throughout the ADM.
Phase A: Architecture Vision	Describes the initial phase of an architecture development cycle. It includes information about defining the scope, identifying the stakeholders, creating the Architecture Vision, and obtaining approvals.
Phase B: Business Architecture **Phase C: Information Systems Architectures** **Phase D: Technology Architecture**	Describes the development of four architectures, commonly accepted as subsets of an overall Enterprise Architecture: — Business — Data — Application — Technology
Phase E: Opportunities and Solutions	Conducts initial implementation planning and the identification of delivery vehicles (projects, programs, or portfolios) that effectively deliver the Target Architecture identified in previous phases.
Phase F: Migration Planning	Addresses how to move from the Baseline to the Target Architectures by finalizing a detailed Implementation and Migration Plan.
Phase G: Implementation Governance	Provides architectural oversight of the implementation.
Phase H: Architecture Change Management	Establishes procedures for managing change to the new architecture.

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ADM Steps

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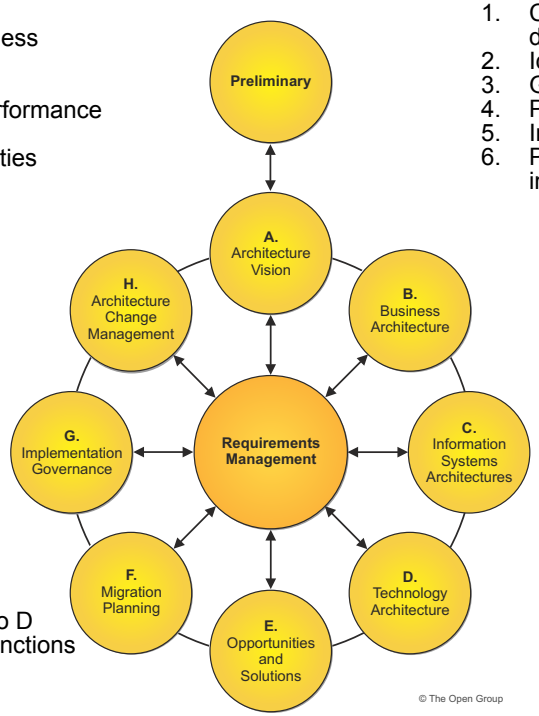
Preliminary
1. Scope the enterprise organizations impacted
2. Confirm governance and support frameworks
3. Define and establish the Enterprise Architecture team and organization
4. Identify and establish Architecture Principles
5. Tailor the TOGAF® framework and, if any, other selected architecture frameworks

Phase A: Architecture Vision
1. Establish the Architecture Project
2. Identify stakeholders, concerns, and business requirements
3. Confirm and elaborate business goals, business drivers, and constraints
4. Evaluate capabilities
5. Assess readiness for business transformation
6. Define scope
7. Confirm and elaborate Architecture Principles, including business principles
8. Develop Architecture Vision
9. Define the Target Architecture value propositions and Key Performance Indicators (KPIs)
10. Identify the business transformation risks and mitigation activities
11. Develop Statement of Architecture Work; secure approval

Phase B: Business Architecture
Phase C: Information Systems Architectures
Phase D: Technology Architecture
1. Select reference models, viewpoints, and tools
2. Develop Baseline Architecture Description
3. Develop Target Architecture Description
4. Perform gap analysis
5. Define candidate roadmap components
6. Resolve impacts across the Architecture Landscape
7. Conduct formal stakeholder review
8. Finalize the architecture
9. Create / update Architecture Definition Document

Phase E: Opportunities and Solutions
1. Determine / confirm key corporate change attributes
2. Determine business constraints for implementation
3. Review and consolidate gap analysis results from Phases B to D
4. Review consolidated requirements across related business functions
5. Consolidate and reconcile interoperability requirements
6. Refine and validate dependencies
7. Confirm readiness and risk for business transformation
8. Formulate Implementation and Migration Strategy
9. Identify and group major work packages
10. Identify Transition Architectures
11. Create the Architecture Roadmap & Implementation and Migration Plan



Phase F: Migration Planning
1. Confirm management framework interactions for Implementation and Migration Plan
2. Assign a business value to each work package
3. Estimate resource requirements, project timings, and availability / delivery vehicle
4. Prioritize the migration projects through the conduct of a cost / benefit assessment and risk validation
5. Confirm Architecture Roadmap and update Architecture Definition Document
6. Complete the Implementation and Migration Plan
7. Complete the architecture development cycle and document lessons learned

Phase G: Implementation Governance
1. Confirm scope and priorities for deployment with development management
2. Identify deployment resources and skills
3. Guide development of solutions deployment
4. Perform Enterprise Architecture Compliance reviews
5. Implement business and IT operations
6. Perform post-implementation review and close the implementation

Phase H: Architecture Change Management
1. Establish value realization process
2. Deploy monitoring tools
3. Manage risks
4. Provide analysis for architecture change management
5. Develop change requirements to meet performance targets
6. Manage governance process
7. Activate the process to implement change

Requirements
1. Identify requirements and document them
2. Baseline requirements
3. Monitor baseline requirements
4. Identify changed requirement; remove, add, modify, and re-assess priorities
5. Identify changed requirement and record priorities; identify and resolve conflicts; generate requirements impact statements
6. Assess impact of changed requirement on current and previous ADM phases
7. Implement requirements arising from Phase H
8. Update the Architecture Requirements Repository
9. Implement change in the current phase
10. Assess and revise gap analysis for past phases

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ADM Iteration

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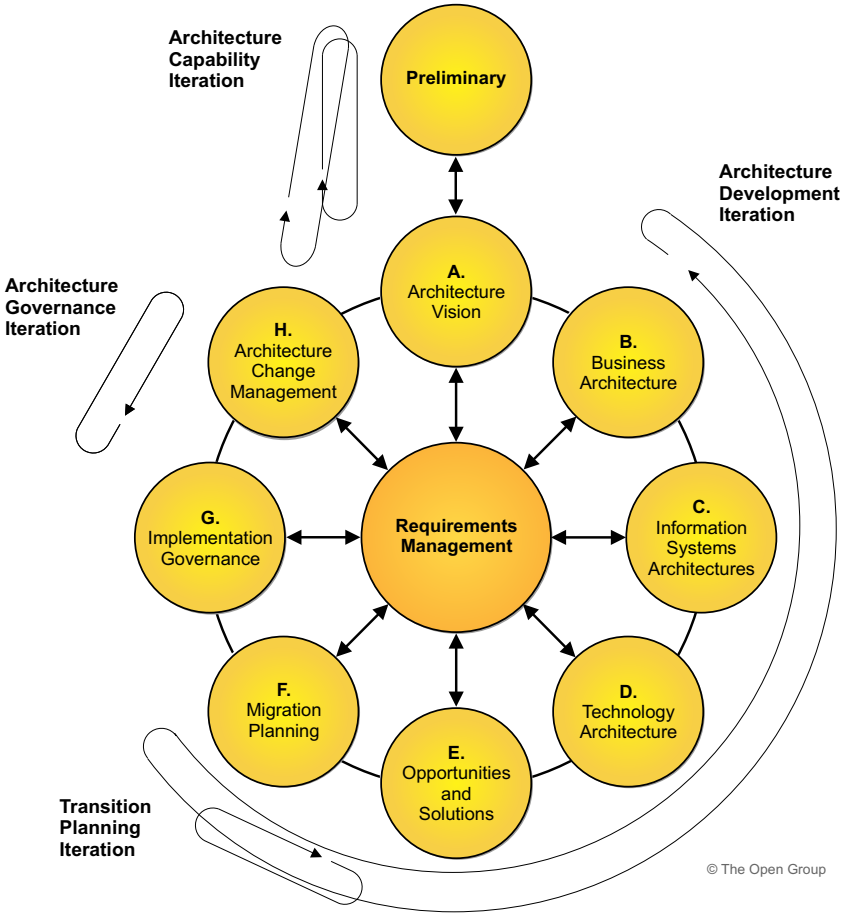
You are not expected to step through each phase sequentially, from start to finish.

You <u>are</u> expected to configure the ADM in the Preliminary Phase, to meet the needs of your organization's culture.



BASELINE FIRST ARCHITECTURE DEFINITION

		Architecture Development			Transition Planning		Architecture Governance	
TOGAF Phase		Iteration 1	Iteration 2	Iteration *n*	Iteration 1	Iteration *n*	Iteration 1	Iteration *n*
Preliminary		Informal	Informal	Informal				Light
Architecture Vision		Informal	Informal	Informal	Informal	Informal		Light
Business Architecture	Baseline	Core	Light	Core	Informal	Informal		Light
	Target	Informal	Core	Core	Informal	Informal		Light
Application Architecture	Baseline	Core	Light	Core	Informal	Informal		Light
	Target	Informal	Core	Core	Informal	Informal		Light
Data Architecture	Baseline	Core	Light	Core	Informal	Informal		Light
	Target	Informal	Core	Core	Informal	Informal		Light
Technology Architecture	Baseline	Core	Light	Core	Informal	Informal		Light
	Target	Informal	Core	Core	Informal	Informal		Light
Opportunities and Solutions		Light	Light	Light	Core	Core	Informal	Informal
Migration Planning		Light	Light	Light	Core	Core	Informal	Informal
Implementation Governance					Informal	Informal	Core	Core
Change Management		Informal	Informal	Informal	Informal	Informal	Core	Core

Core: primary focus activity for the iteration
Light: secondary focus activity for the iteration
Informal: potential activity for the iteration, not formally mentioned in the method

TARGET FIRST ARCHITECTURE DEFINITION

		Architecture Development			Transition Planning		Architecture Governance	
TOGAF Phase		Iteration 1	Iteration 2	Iteration *n*	Iteration 1	Iteration *n*	Iteration 1	Iteration *n*
Preliminary		Informal	Informal	Informal				Light
Architecture Vision		Informal	Informal	Informal	Informal	Informal		Light
Business Architecture	Baseline	Informal	Core	Core	Informal	Informal		Light
	Target	Core	Light	Core	Informal	Informal		Light
Application Architecture	Baseline	Informal	Core	Core	Informal	Informal		Light
	Target	Core	Light	Core	Informal	Informal		Light
Data Architecture	Baseline	Informal	Core	Core	Informal	Informal		Light
	Target	Core	Light	Core	Informal	Informal		Light
Technology Architecture	Baseline	Informal	Core	Core	Informal	Informal		Light
	Target	Core	Light	Core	Informal	Informal		Light
Opportunities and Solutions		Light	Light	Light	Core	Core	Informal	Informal
Migration Planning		Light	Light	Light	Core	Core	Informal	Informal
Implementation Governance					Informal	Informal	Core	Core
Change Management		Informal	Informal	Informal	Informal	Informal	Core	Core

Core: primary focus activity for the iteration
Light: secondary focus activity for the iteration
Informal: potential activity for the iteration, not formally mentioned in the method

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Content Framework Overview

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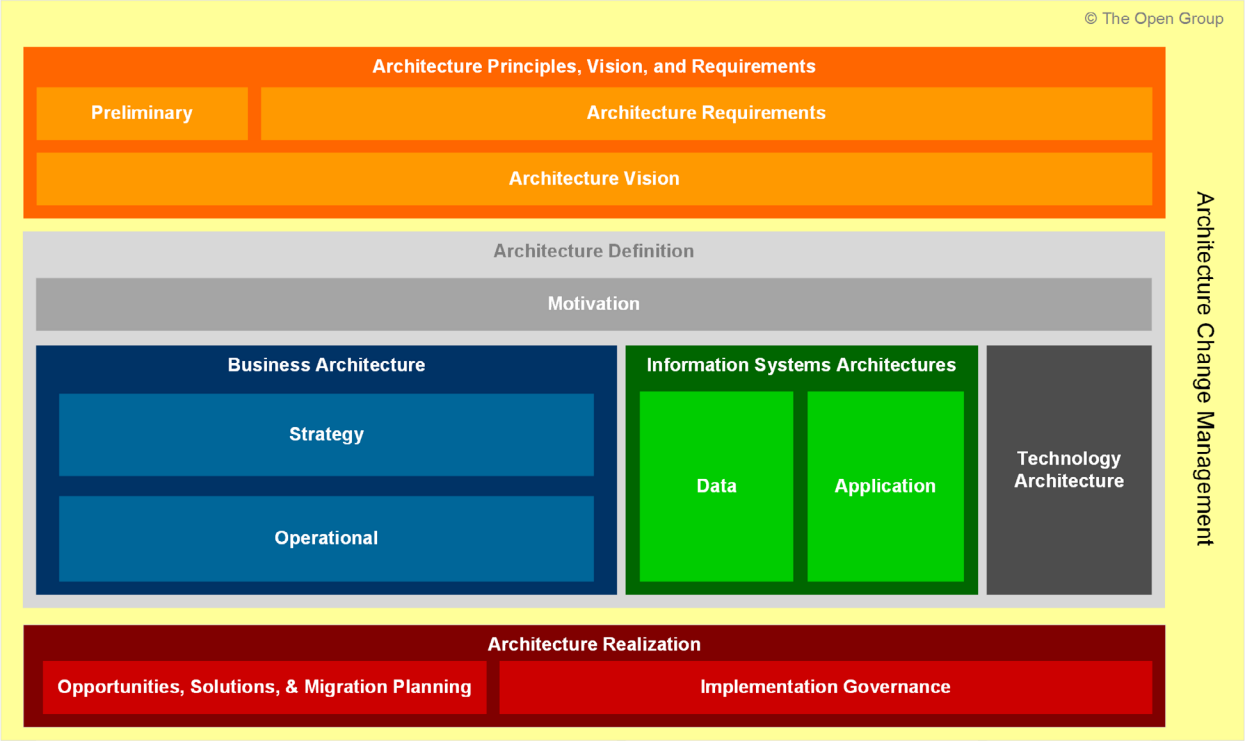
The TOGAF® Content Framework is intended to:

- Provide a detailed model of architectural work products
- Drive consistency in the outputs created when following the ADM
- Provide a comprehensive checklist of architecture output that could be created
- Reduce the risk of gaps within the final architecture deliverable set
- Help an enterprise to mandate standard architecture concepts, terms, and deliverables

At the highest level, the TOGAF Content Framework is structured in line with the phases of the ADM.



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Foundation Enterprise Metamodel

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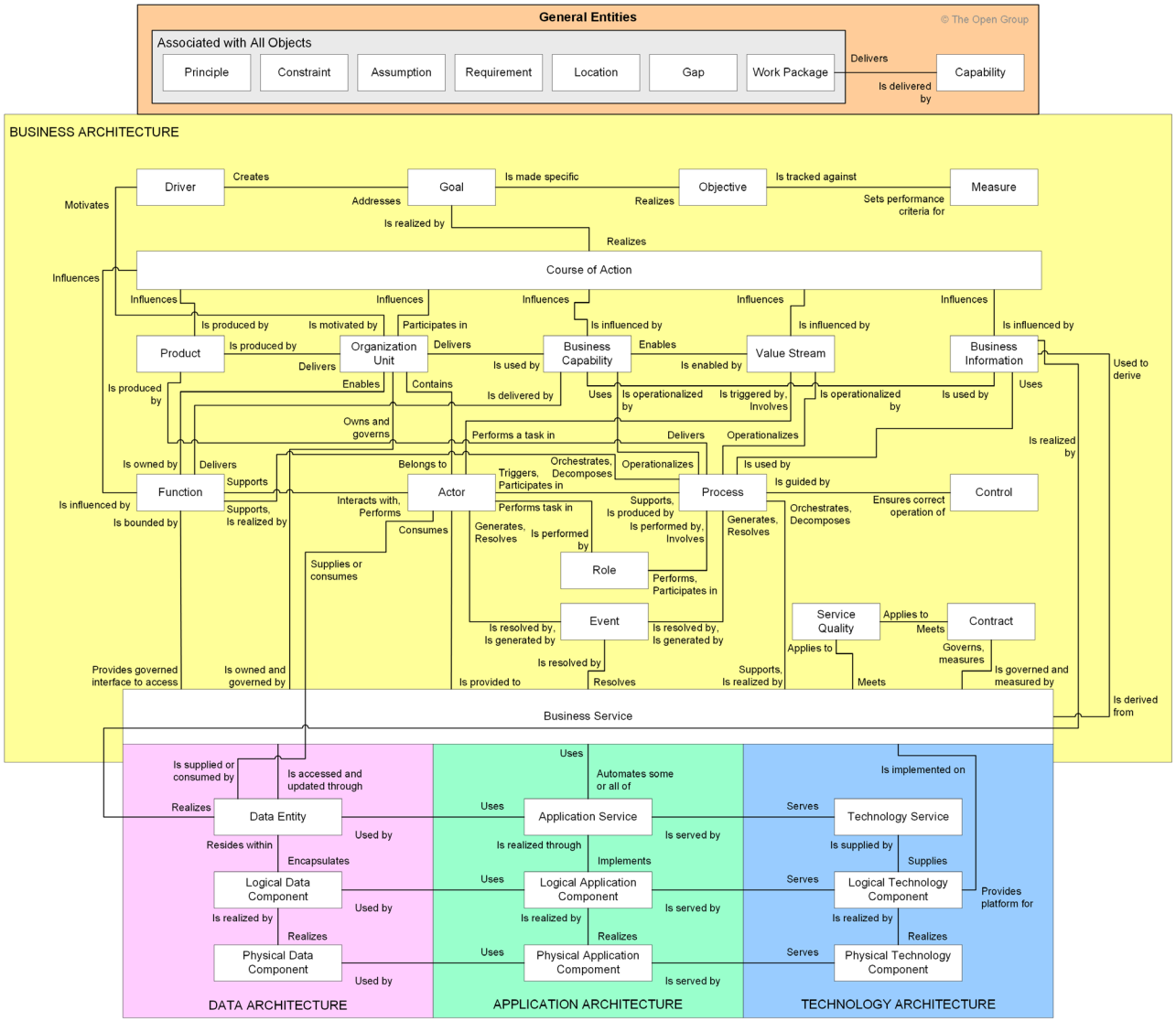
The TOGAF® Standard includes the TOGAF Enterprise Metamodel. This captures the entities and relationships that are likely to be encountered in the majority of enterprises.

This may be used as the basis for developing an Organization-Specific Metamodel when establishing the Enterprise Architecture Capability in the Preliminary Phase.



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Artifacts Associated with the Enterprise Metamodel

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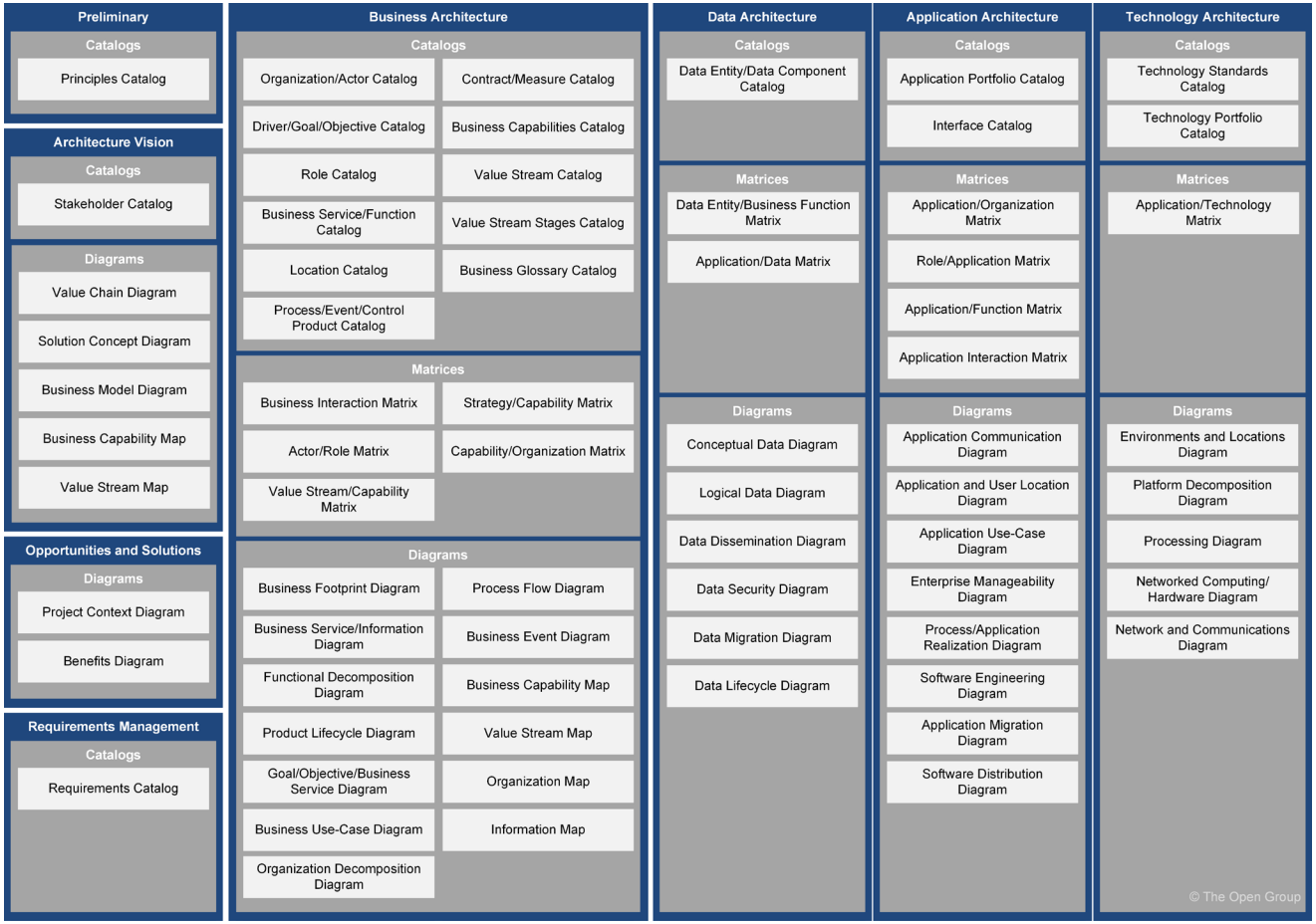
The Enterprise Metamodel is used as a technique to structure architectural information in an ordered way so that it can be processed to meet stakeholder needs.

The majority of architecture stakeholders do not actually need to know what the architecture metamodel is, and are only concerned with specific issues, such as:

- "What functionality does this application support?"
- "Which processes will be impacted by this project?"

In order to meet the needs of these stakeholders, the TOGAF concepts of **building blocks, catalogs, matrices**, and **diagrams** are used.



The TOGAF® Standard — 10th Edition

The TOGAF® Standard, 10th Edition from The Open Group has been built upon over 25 years of development and constant input from The Open Group Architecture Forum's global community of Enterprise Architecture thought leaders.

The TOGAF Standard, 10th Edition expands the material available to architecture practitioners to make adoption of best practices easier. With greatly expanded guidance and "how-to" material, it enables organizations to operate in an efficient and effective way across a broad range of use-cases, including Agile enterprises and Digital Transformation.

The TOGAF Standard is the most prominent and reliable Enterprise Architecture standard, ensuring consistent standards, methods, and communication among Enterprise Architecture professionals. Those professionals who are fluent in the TOGAF approach enjoy greater industry credibility, job effectiveness, and career opportunities. The TOGAF approach helps practitioners avoid being locked into proprietary methods, utilize resources more efficiently and effectively, and realize a greater return on investment.

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About The Open Group

Leading the development of open, vendor-neutral technology standards and certifications

The Open Group is a global consortium that enables the achievement of business objectives through technology standards. The Open Group works with customers, suppliers, consortia, and other standards bodies. Its role is to capture, understand, and address current and emerging requirements, establish policies, and share best practices; to facilitate interoperability, develop consensus, and evolve and integrate specifications and open source technologies; and to operate the industry's premier certification service.

Keys facts include:

- Over 870 member organizations, with 43,000+ participants in The Open Group activities from 126 countries – our Platinum Members are DXC Technology™, Fujitsu®, HCL, Huawei™, IBM®, Micro Focus™, Intel®, and Philips®
- Services provided include strategy, management, innovation and research, standards, certification, and test development
- Vision of Boundaryless Information Flow™, with Enterprise Architecture as a critical element for making the vision a reality; the TOGAF® Architecture Development Method (ADM) provides an important toolset

Further information on The Open Group can be found at www.opengroup.org.