



COURSEWARE

**COURSEWARE BASED
ON THE TOGAF®
STANDARD VERSION 9.2
FOUNDATION (LEVEL I)
BY VAN HAREN PUBLISHING**

Courseware based on The TOGAF® Standard,
Version 9.2 - Foundation (Level 1)

Colophon

Title: Courseware based on The TOGAF® Standard, Version 9.2 - Foundation (Level 1)

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In the event of any discrepancy between text in this Study Guide and the official TOGAF documentation, the TOGAF documentation remains the authoritative version for certification, testing by examination, and other purposes. The official TOGAF documentation can be obtained online at www.opengroup.org/togaf.

About the Courseware

The Courseware was created by experts from the industry who served as the author(s) for this publication. The input for the material is based on existing publications and the experience and expertise of the author(s). The material has been revised by trainers who also have experience working with the material. Close attention was also paid to the key learning points to ensure what needs to be mastered.

The objective of the courseware is to provide maximum support to the trainer and to the student, during his or her training. The material has a modular structure and according to the author(s) has the highest success rate should the student opt for examination. The Courseware is also accredited for this reason, wherever applicable.

In order to satisfy the requirements for accreditation the material must meet certain quality standards. The structure, the use of certain terms, diagrams and references are all part of this accreditation. Additionally, the material must be made available to each student in order to obtain full accreditation. To optimally support the trainer and the participant of the training assignments, practice exams and results are provided with the material.

Direct reference to advised literature is also regularly covered in the sheets so that students can find additional information concerning a particular topic. The decision to leave out notes pages from the Courseware was to encourage students to take notes throughout the material.

Although the courseware is complete, the possibility that the trainer deviates from the structure of the sheets or chooses to not refer to all the sheets or commands does exist. The student always has the possibility to cover these topics and go through them on their own time. It is recommended to follow the structure of the courseware and publications for maximum exam preparation.

The courseware and the recommended literature are the perfect combination to learn and understand the theory.

The Open Group Publications available from Van Haren Publishing

The TOGAF Series:

The TOGAF® Standard, Version 9.2
The TOGAF® Standard Version 9.2 – A Pocket Guide
TOGAF® 9 Foundation Study Guide, 4th Edition
TOGAF® 9 Certified Study Guide, 4th Edition

The Open Group Series:

The IT4IT™ Reference Architecture, Version 2.1
IT4IT™ for Managing the Business of IT – A Management Guide
IT4IT™ Foundation Study Guide, 2nd edition
The IT4IT™ Reference Architecture, Version 2.1 – A Pocket Guide
Cloud Computing for Business – The Open Group Guide
ArchiMate® 3.0.1 – A Pocket Guide
ArchiMate® 2 Certification – Study Guide
ArchiMate® 3.0.1 Specification

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O-TTPS - A Management Guide
Open Information Security Management Maturity Model (O-ISM3)
Open Enterprise Security Architecture (O-ESA)
Risk Management – The Open Group Guide
The Open FAIR™ Body of Knowledge – A Pocket Guide

All titles are available to purchase from: www.vanharen.net
and also many international and online distributors.

Self-Reflection of understanding Diagram

‘What you do not measure, you cannot control.’ – Tom Peters

Fill in this diagram to self-evaluate your understanding of the material. This is an evaluation of how well you know the material and how well you understand it. In order to pass the exam successfully you should be aiming to reach the higher end of Level 3. If you really want to become a pro, then you should be aiming for Level 4. Your overall level of understanding will naturally follow the learning curve. So, it’s important to keep track of where you are at each point of the training and address any areas of difficulty.

Based on where you are within the Self-Reflection of Understanding diagram you can evaluate the progress of your own training.

<i>Level of Understanding</i>	<i>Before Training (Pre-knowledge)</i>	<i>Training Part 1 (1st Half)</i>	<i>Training Part 2 (2nd Half)</i>	<i>After studying / reading the book</i>	<i>After exercises and the Practice exam</i>
<i>Level 4 I can explain the content and apply it .</i>					
<i>Level 3 I get it! I am right where I am supposed to be.</i>					<i>Ready for the exam!</i>
<i>Level 2 I almost have it but could use more practice.</i>					
<i>Level 1 I am learning but don't quite get it yet.</i>					

(Self-Reflection of Understanding Diagram)

Write down the problem areas that you are still having difficulty with so that you can consolidate them yourself, or with your trainer. After you have had a look at these, then you should evaluate to see if you now have a better understanding of where you actually are on the learning curve.

Troubleshooting

Problem areas:

Topic:

Part 1

Part 2

You have gone through the book and studied.

You have answered the questions and done the practice exam.

Other publications by Van Haren Publishing

Van Haren Publishing (VHP) specializes in titles on Best Practices, methods and standards within four domains:

- IT and IT Management
- Architecture (Enterprise and IT)
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- Project Management

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Topics are (per domain):

IT and IT Management

ABC of ICT
ASL®
CATS CM®
CMMI®
COBIT®
e-CF
ISO/IEC 20000
ISO/IEC 27001/27002
ISPL
IT4IT®
IT-CMF™
IT Service CMM
ITIL®
MOF
MSF
SABSA
SAF
SIAM™
TRIM
VeriSM™

Enterprise Architecture

ArchiMate®
GEA®
Novius Architectuur
Methode
TOGAF®

Business Management

BABOK® Guide
BiSL® and BiSL® Next
BRMBOK™
BTF
EFQM
eSCM
IACCM
ISA-95
ISO 9000/9001
OPBOK
SixSigma
SOX
SqEME®

Project Management

A4-Projectmanagement
DSDM/Atern
ICB / NCB
ISO 21500
MINCE®
M_o_R®
MSP®
P3O®
PMBOK® Guide
Praxis®
PRINCE2®

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Courseware based on The TOGAF® Standard,
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Version 3.5.2

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1

About the trainer and about you

- Name
- Background
- Architectural experience
- Course objectives / expectations

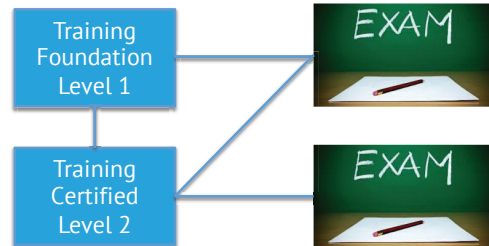


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Training path

- TOGAF® Foundation
- TOGAF® Certified
- Examination



This training

Foundation
Multiple Choice Questions 40 Questions / 60 minutes Pass score 55% (22 out of 40) Closed Book
<i>Note: English as second language 90 minutes</i>

Certificating
Foundation
/
Certified

Certified
Scenario-based Multiple Choice 8 Questions / 90 minutes Pass guide 60% (24 out of 40 points) Open Book PDF – The TOGAF® Standard 9
Correct answer : 5 points Second best answer: 3 points Third best answer: 1 point Distractor: 0 point
<i>Note: English as second language 120 minutes</i>

About Definitions

About

- A common language requires understanding of it's vocabulary
- These definitions provide insight, help to increase understanding and avoid miscommunication.
- The TOGAF® standard, chapter 3, contains 85 definitions

Next we will list a subset of the definitions:

Key glossary of definitions – 1 / 3

Application Architecture: A description of the structure and interaction of the applications as groups of capabilities that provide key business functions and manage the data assets.

Architecture Framework: A conceptual structure used to plan, develop, implement, govern, and sustain an architecture.

Business Architecture: A representation of holistic, multi-dimensional business views of: capabilities, end-to-end value delivery, information, and organizational structure; and the relationships among these business views and strategies, products, policies, initiatives, and stakeholders.

Business Governance: Concerned with ensuring that the business processes and policies (and their operation) deliver the business outcomes and adhere to relevant business regulation.

Key glossary of definitions – 2 / 3

Data Architecture: A description of the structure and interaction of the enterprise's major types and sources of data, logical data assets, physical data assets, and data management resources.

Modeling: A technique through construction of models which enables a subject to be represented in a form that enables reasoning, insight, and clarity concerning the essence of the subject matter.

Organization Map: An articulation of the relationships between the primary entities that make up the enterprise, its partners, and stakeholders.

Requirement: A statement of need that must be met by a particular architecture or work package.

Key glossary of definitions – 3 / 3

Technology Architecture: A description of the structure and interaction of the technology services and technology components.

Value Stream: A representation of an end-to-end collection of value-adding activities that create an overall result for a customer, stakeholder, or end user.

NOTE:

- The courseware document *key glossary of definitions* explains the remainder key definitions
- The TOGAF® standard, chapter 3, describes all definitions

The TOGAF® Standard

Part I Introduction

*Chap 1-3. Intro, Core Concepts and
Definitions*



1.3

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Enterprise and Architecture

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What is an Enterprise?

Any collection of organizations that have **common goals**

- A whole corporation or a division
- A government agency or a single department
- A chain of geographically distant organizations linked together by common ownership
- Groups of countries or governments working together to create common or shareable deliverables or infrastructures
- Partnerships and alliances of businesses working together



Hence

- Large corporations may comprise **multiple enterprises**
- May be an **“extended enterprise”** including partners, suppliers and customers

What is an Architecture?

ISO/IEC/IEEE 42010: 2011 defines "architecture" as:

"The fundamental concepts or properties of a system in its environment embodied in its elements, relationships, and in the principles of its design and evolution."

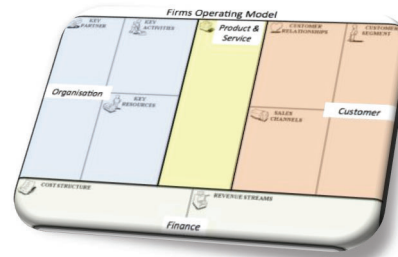
The TOGAF standard embraces but does not strictly adhere to ISO/IEC/IEEE 42010: 2011 terminology, the TOGAF standard defines a second meaning depending upon the context:

"The structure of components, their inter-relationships, and the principles and guidelines governing their design and evolution over time."

Enterprise Architecture is:

A **conceptual blueprint** that **defines the** structure and operation of an **organization**.

- The intent of an enterprise architecture is to determine how an organization can most effectively achieve its current and future objectives.
[1] MIT Center for Information Systems Research
- The organizing logic for business processes and IT infrastructure reflecting the integration and standardization requirements of the firm's operating model
[2] SearchCIO.com



Why is Enterprise Architecture needed?

- Purpose of Enterprise Architecture is to optimize across the enterprise. the often fragmented legacy of processes, both manual and automated, into an integrated environment
- Effective management and exploitation of information and Digital Transformation are key factors to business success, which leads to a competitive advantage
- EA provides the strategic context for the evolution and reach of the constantly changing needs of the business environment.
- **Further more...**
- A good Enterprise Architecture enables you to achieve the right balance between business transformation and continuous operational efficiency.
- Allows individual business units to innovate

What are the benefits of an Enterprise Architecture?

1. More effective and efficient business operations:

- More agile organization
- Business capabilities shared across the organization

2. More effective and efficient Digital Transformation and IT operations:

- Extending effective reach of the enterprise through digital capability
- Bringing all components of the enterprise into a harmonized environment

3. Better return on existing investment, reduced risk for future investment:

- Reduced complexity in the business and IT
- The flexibility to make, buy, or out-source business and IT solutions

4. Faster, simpler, and cheaper procurement:

- Simpler buying decisions, the information governing procurement is readily available in a coherent plan
- The ability to procure heterogeneous, multi-vendor open systems

Scoping Enterprise Architecture

Reasons for scoping:

- The authority of the organization creating the architectures
- The objectives and stakeholders concerns addressed
- The availability of people, finances and resources

Dimensions for scoping:

- Breadth
- Depth
- Time horizon
- Architecture domains

Exercise – Describe as an Architecture

Choose one:

1. The Human Body as an Architecture



15 minutes



2. The training delivered here

-In the business layers take i.e. actors, the training process, and outcomes into account

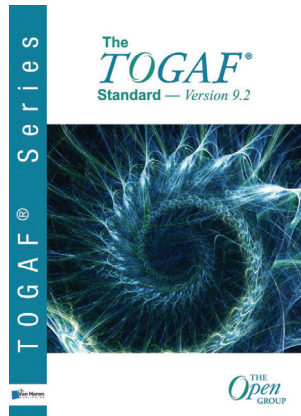
-in Information systems take the applications and data used to deliver into account

-In technology the products technology used.

Hint try avoid product names, use fundamental names instead

The TOGAF® standard Framework

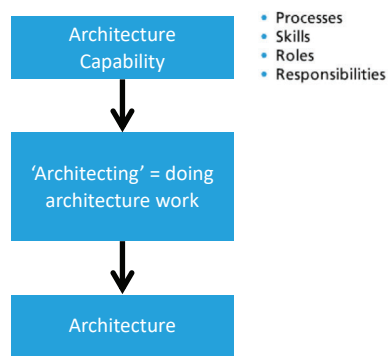
The TOGAF® standard high level



The TOGAF® standard is a framework for:

- Developing
 - Implementing
 - Maintaining
- enterprise architectures

Architecture Capability, Architecting and Architecture

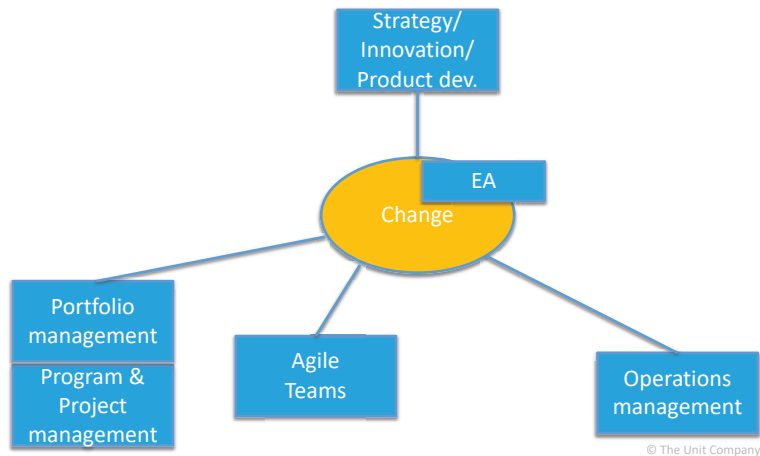


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An operational EA organization should establish capabilities in the following areas:

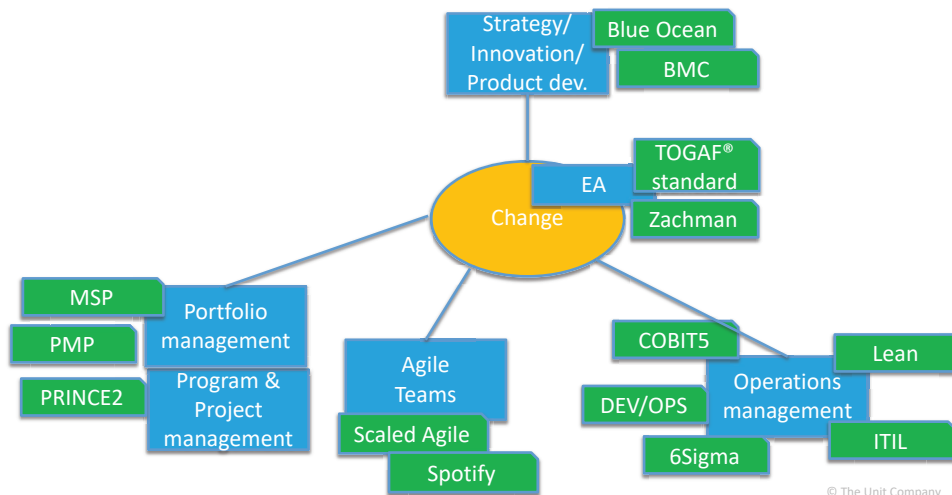
- Financial Management
- Performance Management
- Service Management
- Risk Management
- Resource Management
- Communications & Stakeholder Management
- Quality Management
- Supplier Management
- Configuration Management
- Environment Management

The TOGAF® standard does not stand on its own



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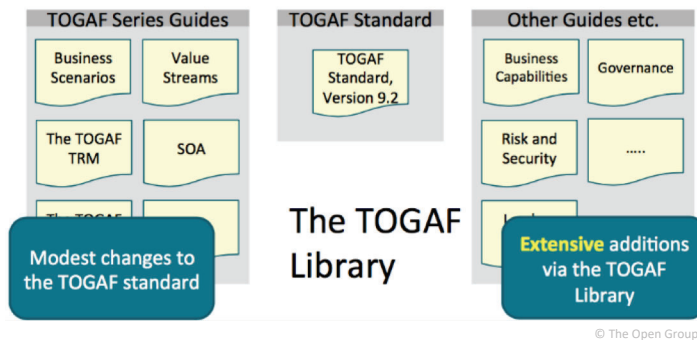
The TOGAF® standard does not stand on its own



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TOGAF® Library

The TOGAF® Library is a portfolio of guidance material. It is a reference library containing materials like templates, patterns and other reference materials to support practical application and accelerate the architecture work.



TOGAF® Library – the four sections

- The TOGAF® Library is maintained under the governance of The Open Group Architecture Forum.
- The TOGAF® Library resources are organized into four sections:
 - Section 1:** Foundation Documents
 - Section 2:** Generic Guidance and Techniques
 - Section 3:** Industry-Specific Guidance and Techniques
 - Section 4:** Organization-Specific Guidance and Techniques