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Contents

List of Figures

List of Examples

List of Tables

Preface

The Open Group

The Open Group is a global consortium that enables the achievement of business objectives through IT standards. With more than 500 member organizations, The Open Group has a diverse membership that spans all sectors of the IT community – customers, systems and solutions suppliers, tool vendors, integrators, and consultants, as well as academics and researchers – to:

- Capture, understand, and address current and emerging requirements, and establish policies and share best practices
- Facilitate interoperability, develop consensus, and evolve and integrate specifications and open source technologies
- Offer a comprehensive set of services to enhance the operational efficiency of consortia
- Operate the industry's premier certification service

Further information on The Open Group is available at www.opengroup.org.

The Open Group publishes a wide range of technical documentation, most of which is focused on development of Open Group Standards and Guides, but which also includes white papers, technical studies, certification and testing documentation, and business titles. Full details and a catalog are available at www.opengroup.org/bookstore.

Readers should note that updates – in the form of Corrigenda – may apply to any publication. This information is published at www.opengroup.org/corrigenda.

This Document

This document is the ArchiMate® 3.0 Specification, an Open Group standard. It has been developed and approved by The Open Group.

This edition of the standard includes a number of corrections, clarifications, and improvements to the previous edition, as well as several additions.

Intended Audience

The intended audience of this standard is threefold:

- All those working to shape and implement complex organization change. Typical job titles include Enterprise Architecture practitioners, business architects, IT architects, application architects, data architects, information architects, process architects, infrastructure architects, software architects, systems architects, solutions architects, product/service managers, senior and operational management, project leaders, and anyone working within the reference framework defined by an Enterprise Architecture.

- Those who intend to implement the ArchiMate language in a software tool. They will find a complete and detailed description of the language in this document.
- The academic community, on which we rely for amending and improving the language based on state-of-the-art research in the architecture field.

Structure

The structure of this standard is as follows:

- Chapter 1, Introduction, provides the introduction to this standard, including the objectives, a brief overview, conformance requirements, and terminology.
- Chapter 2, Definitions, defines the general terms used in this standard.
- Chapter 3, Language Structure, describes the structure of the ArchiMate modeling language, including the top-level structure, layering, the ArchiMate Core Framework, and the full Framework.
- Chapter 4, Generic Metamodel, describes the structure and elements of the ArchiMate generic metamodel.
- Chapter 5, Relationships, describes the relationships in the language.
- Chapter 6, Motivation Elements, describes the concepts for expressing the motivation for an architecture, together with examples.
- Chapter 7, Strategy Elements, provides elements for modeling the enterprise at a strategic level, together with examples.
- Chapter 8, Business Layer, covers the definition and usage of the Business Layer elements, together with examples.
- Chapter 9, Application Layer, covers the definition and usage of the Application Layer elements, together with examples.
- Chapter 10, Technology Layer, covers the definition and usage of the Technology Layer elements, together with examples.
- Chapter 11, Physical Elements, describes the language elements for modeling the physical world, together with examples.
- Chapter 12, Cross-Layer Dependencies, covers the relationships between different layers of the language.
- Chapter 13, Implementation and Migration Elements, describes the language elements for expressing the implementation and migration aspects of an architecture (e.g., projects, programs, plateaus, and gaps).
- Chapter 14, Stakeholders, Viewpoints, and Views, describes the ArchiMate viewpoint mechanism.
- Chapter 15, Language Customization Mechanisms, describes how to customize the ArchiMate language for specialized or domain-specific purposes.
- Appendix A, Summary of Language Notation, is an informative appendix.

- Appendix B, Relationship Tables, is a normative appendix detailing the required relationships between elements of the language.
- Appendix C, Example Viewpoints (Informative), presents a set of architecture viewpoints, developed in ArchiMate notation based on practical experience. All viewpoints are described in detail. The appendix specifies the elements, relationships, usage guidelines, goals, and target groups for each viewpoint.
- Appendix D, Relationship to Other Standards (Informative), describes the relationships of the ArchiMate language to other standards, including the TOGAF framework, BPMN, UML, and BMM.
- Appendix E, Changes from ArchiMate 2.1 to ArchiMate 3.0 (Informative), is an informative appendix outlining the changes in the standard between Version 2.1 and Version 3.0.

Trademarks

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- ABN AMRO
- Centrum voor Wiskunde en Informatica
- Dutch Tax and Customs Administration
- Leiden Institute of Advanced Computer Science
- Novay
- Ordina
- Radboud Universiteit Nijmegen
- Stichting Pensioenfonds ABP

Referenced Documents

The following documents are referenced in this standard. These references are informative.

(Please note that the links below are good at the time of writing but cannot be guaranteed for the future.)

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[15] Business Motivation Model (BMM), Version 1.1 (formal/2010-05-01), Object Management Group, 2010.

[16] Using the ArchiMate® Language with UML®, White Paper (W134), September 2013, published by The Open Group; refer to: www.opengroup.org/bookstore/catalog/w134.htm.

1 Introduction

1.1 Objective

This standard is the specification of the ArchiMate Enterprise Architecture modeling language, a visual language with a set of default iconography for describing, analyzing, and communicating many concerns of Enterprise Architectures as they change over time. The standard provides a set of entities and relationships with their corresponding iconography for the representation of Architecture Descriptions.

1.2 Overview

An Enterprise Architecture is typically developed because key people have concerns that need to be addressed by the business and IT systems within an organization. Such people are commonly referred to as the "stakeholders" of the Enterprise Architecture. The role of the architect is to address these concerns by identifying and refining the motivation and strategy expressed by stakeholders, developing an architecture, and creating views of the architecture that show how it addresses and balances stakeholder concerns. Without an Enterprise Architecture, it is unlikely that all concerns and requirements are considered and addressed.

The ArchiMate Enterprise Architecture modeling language provides a uniform representation for diagrams that describe Enterprise Architectures. It includes concepts for specifying inter-related architectures, specific viewpoints for selected stakeholders, and language customization mechanisms. It offers an integrated architectural approach that describes and visualizes different architecture domains and their underlying relations and dependencies. Its language framework provides a structuring mechanism for architecture domains, layers, and aspects. It distinguishes between the model elements and their notation, to allow for varied, stakeholder-oriented depictions of architecture information. The language uses service-orientation to distinguish and relate the Business, Application, and Technology Layers of Enterprise Architectures, and uses realization relationships to relate concrete elements to more abstract elements across these layers.

1.3 Conformance

The ArchiMate language may be implemented in software used for Enterprise Architecture modeling. For the purposes of this standard, the conformance requirements for implementations of the language given in this section apply. A conforming implementation:

1. Shall support the language structure, generic metamodel, relationships, layers, cross-layer dependencies, and other elements as specified in Chapter 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, and 13
2. Shall support the standard iconography as specified in Chapters 5, 6, 7, 8, 9, 10, 11, and 13, and summarized in Appendix A