

# ArchiMate 2.1 vs TOGAF 9.1: An iServer Accelerator Comparison

#### This document compares the iServer ArchiMate 2.1 and TOGAF 9.1 Accelerators.

### Background

Both the TOGAF 9.1 Method as well as the ArchiMate 2.1 Modeling Language have been developed and maintained by The Open Group.

TOGAF describes the process of developing and managing an enterprise architecture, it does not however contain a defined modeling language structure. ArchiMate is meant to be complimentary to the TOGAF content framework and architecture development process. As a modeling language which does contain a language structure, ArchiMate can be used to describe and depict all aspects of an enterprise architecture.

TOGAF is meant to be notation agnostic, meaning one can use ArchiMate, UML, or BPMN in addition to the generic TOGAF iServer notation.

Due to overlaps in concepts, viewpoints, artifacts and general focus of these two specifications, there has been confusion in regards to which framework is best used in certain organizations and in certain scenarios.

At the time of writing, The Open Group has initiated a project (Project Harmony) concerned with the harmonization of the ArchiMate 2.1 and TOGAF 9.1 specifications. This project aims to better integrate the two specifications and address inconsistencies.

## Specification Alignment

Alignment of the ArchiMate 2.1 and TOGAF 9.1 specifications does exist.

The ArchiMate concepts are mapped to the TOGAF ADM Phases as can be seen here.

The ArchiMate Motivation extension aligns with the preliminary, A, requirements management, and H phases of the ADM.

The ArchiMate Core aligns with phases B, C, and D of the ADM.

The ArchiMate Implementation and Migration extension maps to phases E, F and G.



The iServer Repository structure for both the ArchiMate 2.1 and TOGAF 9.1 accelerators have been laid out according to the ADM phases, as can be seen here:

The ArchMate 2.1 specification is a modeling language structure and does not prescribe a process for architecture development. Using this mapping, architects can make use of the ArchiMate 2.1 modeling language along with the TOGAF Architecture Development Method or architecture process.

The iServer architecture repository allows users to choose between using the standard TOGAF modeling notation, or the ArchiMate notation with the TOGAF architecture development framework.

This diagram shows the focus and overlap of the ArchiMate and TOGAF specifications.

### TOGAF TOGAF<sup>®</sup> Version 9.1 TOGAF<sup>®</sup> Version 9.1 Process View-points Language Process View-points Language Repository, Reference Models

#### 🖬 System Repository 🛛 🗙 🕀



# **Specification Comparison**

	ArchiMate 2.1	TOGAF 9.1		
Focus	Multi-purpose modeling language	Architecture Development Framework		
Meta-model	<figure><section-header></section-header></figure>	<text><text><text></text></text></text>		
	ArchiMate makes no distinction between logical and physical architecture components.	TOGAF defines logical and physical concepts well.		
Artifact Types	Diagrams Only	Catalogues, Matrices and Diagrams		
Templates	Referred to as viewpoints. ArchiMate has a defined set of architecture viewpoints.	Referred to as artifacts. TOGAF has a defined set of architectural artifacts.		
	ArchiMate has a defined viewpoint structure for selecting viewpoints, including stakeholders, concerns, purpose and detail or abstraction level:	<text></text>		
	ArchiMate viewpoints are specifically tailored to ArchiMate Language.	TOGAF artifacts are agnostic and can be created using any modeling languages.		

Relationships	Simplified relationsh ArchiMate provides cross domain relation Structural Composition Aggregation Assignment Realization Used By Access Association Dynamic Triggering Influence	ip structures. better support for onships. Other Group Specialization Junction	Many relationships makes it difficult to maintain consistency especially when using different notations.
	Allows modeling of interaction relations	collaboration and hips	No collaboration and interaction relationships
Architecture Development	No defined architecture development process or method		Clearly defined Architecture Development Method.

## iServer Structure: ArchiMate 2.1 Accelerator

The iServer ArchiMate 2.1 Accelerator includes the following:

• Architecture Repository Structure Based on TOGAF 9.1 ADM Phases



• Predefined ArchiMate 2.1 Viewpoints with structure and examples



• Predefined ArchiMate 2.1 Relationships including model validation

Name	Description	^	New
ArchiMate: Access	The access relationship models the access of behavioral concepts to business or data obje		Edit
ArchiMate: Aggregation	The aggregation relationship indicates that a concept groups a number of other concepts.		CUIL
ArchiMate: Assignment	The assignment relationship links active elements (e.g., business roles or application compo		Сору
ArchiMate: Association	An association models a relationship between objects that is not covered by another, more s		
ArchiMate: Composition	The composition relationship indicates that an object is composed of one or more other obje		Delete
ArchiMate: Flow	The flow relationship describes the exchange or transfer of, for example, information or value		
ArchiMate: Influence	The influence relationship models that some motivational element has a positive or negative		No. of Types: 31
ArchiMate: Realization	The realization relationship links a logical entity with a more concrete entity that realizes it.		
ArchiMate: Specialization	The specialization relationship indicates that an object is a specialization of another object.		
ArchiMate: Triggering	The triggering relationship describes the temporal or causal relationships between processes		
ArchiMate: Used by	The used by relationship models the use of services by processes, functions, or interactions		
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#### • ArchiMate ArchiSurance Case Study

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#### **iServer Structure: TOGAF 9.1 Accelerator**

The iServer TOGAF 9.1 Accelerator includes the following:

• Architecture Repository Structure Based on ADM Phases



• Predefined TOGAF architecture artifacts with structure and examples

BPMN 2 Model					
🔹 ROADMAP Architecture Landscape 動 ROADMAP Architecture Timeline		Functional Decomposition Diagram			
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🚯 T9 B Business Footprint Diagram			average on now the organization ases it. Chose a basic Functional Decomposition diagram has been sevel ped. It is comes possible to been average to an of the diagram to chose cases, and decision. For example, the another lace		s possible to layer
T9 B Business Service - Information Diagram			implemented in different phases	of a change program.	
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🚯 T9 B Event Diagram					
🚯 T9 B Functional Decomposition Diagram	PUNCTION		FUNCTION	FUNCTION	FUNCTION
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🚯 T9 B Organization Decomposition Diagram					
🛃 T9 B Process Flow Diagram					
🚯 T9 B Product Lifecycle Diagram	>		Þ		(D)
TOGAF 9 Diagram Template					

• Predefined TOGAF 9.1 Relationships including model validation

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GAF: Actor consumes Data Entity		System Adr	Edit
GAF: Actor consumes Service		System Adr	Conv
GAF: Actor generates Event		System Adr	COPy
GAF: Actor interacts with Function		System Adr	Delete
GAF: Actor participates in Process		System Adr	
GAF: Actor performs Function		System Adr	No. of Types: 104
GAF: Actor performs task in Role		System Adr	
GAF: Actor resolves Event		System Adr	
GAF: Actor supplies Data Entity		System Adr	
GAF: Application Component commun	Logical/Physical Application Component communicates with Logic	System Adr	
GAF: Application Component constitut	Logical/Physical Application Component constitutes Logical/Physi	System Adr	
GAF: Business Service is realized thro		System Adr	
GAF: Contract meets Service Quality		System Adr	
GAF: Data Component constitutes Da	Logical/Physical Data Component constitutes Logical/Physical D	System Adr	
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#### TOGAF MTT Case Study

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4 🔛 iServer Example ADM	MTT (Training) Functional Decomposition Diag T9 B Functional Decomposition Diagram	
C. Preliminary Phase	MTT Organization Decomposition Diagram T9 B Organization Decomposition Diagram	
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#### TOGAF 9.1 Reference Materials



#### Conclusion

The TOGAF Architecture Development Method is comprehensive and there are a large number of guidance materials, best practices and techniques available to assist users in tailoring the processes to their organization's needs.

ArchiMate offers a well-defined structure of architecture viewpoints which provide a good, business friendly notation to represent artifacts/ viewpoints that are discussed in the TOGAF domains (BIDAT). The inconsistencies in concepts, views and artifacts between TOGAF and ArchiMate are currently being addressed by The Open Group.

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www.orbussoftware.com

London United Kingdom +44 (0) 870 991 1851

Washington DC United States +1 (703) 647 4124

Perth Australia

Sydney Australia +61 2 9238 1996 Johannesburg **South Africa** 

+61 8 9288 4411

+27 (11) 881 5893