



2023 UAF® SUMMIT

ACTIONABLE ARCHITECTURE IN THE 21ST CENTURY – A HYBRID EVENT

Hosts



Laura E. Hart



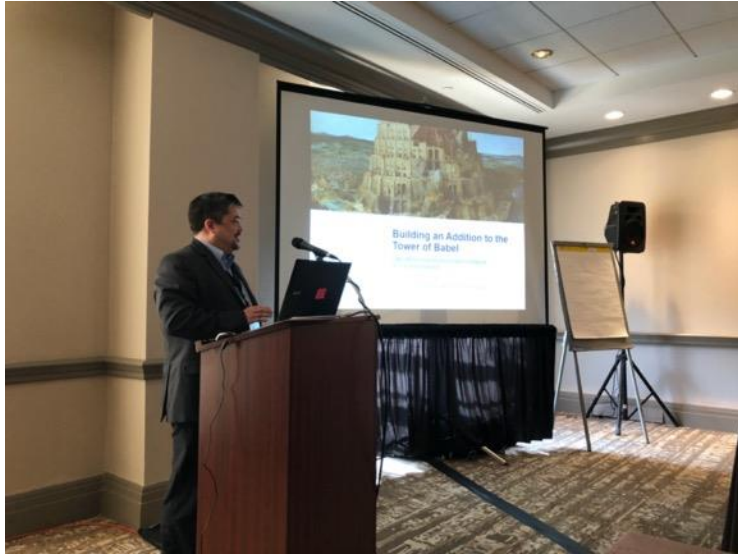
Dr. Aurelijus Morkevicius



Matthew Hause



UAF Annual Events



UAF Annual Events Calendar

- UAF and MBSE Information Day, 2015, Reston, VA
- UAF and MBSE Summit, 2016, Reston, VA,
- UAF and MBSE Summit, 2017, Reston, VA,
- UAF, UPDM, and MBSE tutorials, 2017, Reston, VA,
- UAF and MBSE Summit, 2017, Brussels, Belgium
- UAF and MBSE tutorials, 2017, Brussels, Belgium
- UAF and MBSE Summit, 2018, Reston, VA
- UAF and MBSE tutorials, 2018, Reston, VA
- MBSE-inspired Actionable Enterprise Architectures Summit, 2018, Ottawa, Canada
- MBSE-inspired Actionable Enterprise Architectures Tutorials, 2018, Ottawa, Canada
- MBSE-inspired Actionable Enterprise Architectures Summit, 2019, Reston, VA
- UAF in the context of the NATO Architecture Framework (NAF), 2019, Amsterdam, Netherlands
- UAF Summit: Actionable Architecture in the 21st century, 2020, Virtual
- UAF Summit: Actionable Architecture in the 21st century and beyond, 2021, Virtual
- UAF Summit: Actionable Architecture in the 21st century - Hybrid event, 2022, Reston, VA
- UAF Tool Vendor Roadshow, - Hybrid event, 2022, Austin, TX

<https://www.brighttalk.com/search/?q=UAF>

UAF Summit: Actionable Architecture in the 21st century - Hybrid event, 2023, Reston, VA

Morning Agenda

Welcome Address: Technology Update on Unified Architecture Framework

Co-Chair: *Aurelijus Morkevicius, Industry Process Consulting Director (Dassault Systèmes)*

Co-Chair: *Laura Hart, Research Engineer Senior Manager (Lockheed Martin)*

Morning Keynote: Application of UAF in Support Mission Engineering of Early Stage Concept Development *Bill Jankowski, Model Based Mission Engineering Lead (Naval Sea Systems Command/Naval Undersea Warfare Center, Newport)*

Morning Break

Applying UAF and The Airbus MBSE Framework within Future Combat Air System Development

Dominique Ernadote, MBSE Senior Expert (Airbus),

Jörg Wirtz, Senior Manager Process, Methods & Tools FCAS (Airbus), Lalitha Abhaya, Systems Architect (Airbus)

Using the Unified Architecture Framework in Support of Mission Engineering Activities

James Martin, Distinguished Engineer (The Aerospace Corporation)

Keeping People First in the Smart Cities Enterprise *Jennifer Russell, Program &*

Management Support Leader (Garver), Matthew Hause, Principal Consultant (System Strategy)

Lunch Break

Time (EST)

9:00 – 9:30

9:30 – 10:00

10:00 – 10:30

10:30 – 11:00

11:00 – 11:30

11:30 – 12:00

12:00 – 13:30

Afternoon Agenda

Afternoon Keynote: Aligning to Industry Best Practices; UAF @ OSD

Daniel Hetteema, Director of Digital Engineering, Modeling and Simulation (Office of the Under Secretary of Defense for Research & Engineering)

OMG UAF Model Based Acquisition (MBAcq) Overview and Update

Laura Hart, Research Engineer Senior Manager (Lockheed Martin)

How I Stumbled Across A Domain Overlay and Why It's Actually Useful

Michael Shearin, Senior Research Engineer (Georgia Tech Research Institute)

Richard Wise, Senior Research Engineer (Georgia Tech Research Institute)

Afternoon Break

Lessons Learned While Applying Mission Engineering to The Military Acquisition Process Using The Unified Architecture Framework

Monte Porter, Consultant (Monte Porter Associates LLC)

Closing Address: Q&A Session and Discussion

Co-Chair: Aurelijus Morkevicius, Industry Process Consulting Director (Dassault Systèmes)

Co-Chair: Laura Hart, Research Engineer Senior Manager (Lockheed Martin)

Co-Chair: Matthew Hause, Principal Consultant (System Strategy)

Time (EST)

13:30 – 14:15

14:15 – 14:45

14:45 – 15:15

15:15 – 15:45

15:45 – 16:15

16:15 – 17:00

Presentations will be recorded and made available on BrightTalk and Youtube!



UAF
OMG UNIFIED ARCHITECTURE FRAMEWORK™

Unified Architecture Framework (UAF)

Listed group <https://www.linkedin.com/groups/887865/>

Who is behind?

Tool vendors:

- Dassault Systemes
- IBM
- KDM
- MEGA
- Orbus Software
- PTC
- Sparx Systems
- Tom Sawyer

Industry/ Government Contributors:

- Aerospace Corporation
- Airbus
- Arcfield
- BAE Systems
- Boeing
- Department of Navy (US)
- DoD CIO
- Lockheed Martin
- MITRE
- Northrop Grumman
- Rolls-Royce Corporation
- CAG Syntell
- Thales
- INCOSE and GfSE

Leadership



Laura E.
Hart



Dr. Aurelijus
Morkevicius



Matthew
Hause



2023 UAF® OVERVIEW



UAF is a Standard...

- To develop architectural descriptions for **commercial industries, federal governments and military organizations**
- Is compatible with **DoDAF** and **NAF**
- Has many different use cases from **Enterprise as a System** and **SoS** and **Cyber-Systems engineering** to enabler for **Digital Transformation planning**
- Developed by Object Management Group (OMG) with the leadership from Dassault Systemes, Lockheed Martin and System Strategy
- Is an international ISO standard **ISO/IEC 19540:1** and **ISO/IEC 19540:2**
- Current version of UAF specification is 1.2
<https://www.omg.org/spec/UAF/1.2/About-UAF>

UAF specification at a glance



EA guide (EAG)

Specification



4

View specifications organized in viewpoints and aspects (Grid)

	Treatment	Structure & Connectivity	Behavior	Information	Parameters	Constraints	Roadmap	Traceability
Strategic								
Operational								
Services								
Personnel & Resources								
Security								
Projects								
Standards								
	Requirements							

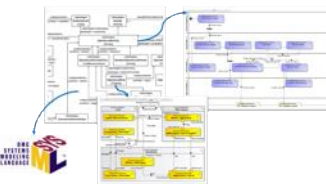
1

Domain MetaModel (DMM)



2

UAF Modeling Language (UAFML) based on SysML)



3

UAF specification at a glance

The grid is a graphical way of organizing the various **view specifications** (cells), using **viewpoints** (horizontal rows) and **aspects** (the columns).



EA guide (EAG)



Specification

4

View specifications organized in viewpoints and aspects (Grid)

	Treatment	Structure & Connectivity	Behavior	Information	Parameters	Constraints	Roadmap	Traceability
Strategic								
Operational								
Services								
Personnel & Resources								
Security								
Projects								
Standards								
	Requirements							

1

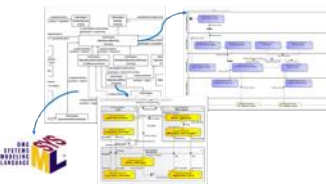
Domain MetaModel (DMM)

2



UAF Modeling Language (UAFML) based on SysML)

3



UAF Grid

Aspects

Viewpoints

	Taxonomy	Structure & Connectivity	Behavior	Information	Parameters	Constraints	Roadmap	Traceability
Strategic				Requirements	Views			
Operational								
Services								
Personnel & Resources								
Security								
Projects								
Standards								

View Specifications

Views

#	Exchange ID	Operational Exchange Item	Sending Operational Performer	Receiving Operational Performer	Producing Operational Activity	Consuming Operational Activity	Confidentiality
1	OE17	E1: Requirements Specification	Requirements Engineering	Design	Specify Requirements	Identify Functional Prototype	Confidential
2	OE13	Prototype	Design	Modular Development	Review Prototype	Develop Module	
3	OE18	E1.1: Market Launch Plan	Marketing	Decision Group	Evaluate Product	Launch Product	Confidential
4	OE6	Product	Decision Group	Marketing	Manufacture Product	Evaluate Product	
5	OE5	Product	Development	Decision Group	Evaluate Scope & Concepts	Evaluate Product	
6	OE20	E1.8: Scope & Concepts	Decision Group	Development	Evaluate Scope & Concepts	Manufacture Product	Confidential
7	OE4	E1.8: Scope & Concepts	R&D	Decision Group	Develop Scope & Concepts	Evaluate Scope & Concepts	Confidential
8	OE1	E1: Prototype	Design	Design	Create Prototype	Review Prototype	
9	OE14	Prototype	Design	Design	Identify Functional Prototype	Create Prototype	
10	OE19	E1.3: Idea	Decision Group	R&D	Evaluate Idea	Develop Scope & Concepts	Confidential
11	OE3	E1.9: Module Flow	Quality Assurance	Modular Development	Report Flow	Develop Module	
12	OE2	E1.9: Requirements Flow	Quality Assurance	Requirements Engineering	Report Flow	Specify Requirements	
13	OE12	E1: Design Flow	Quality Assurance	Design	Report Flow	Identify Functional Prototype	
14	OE11	E1: Integration Flow	Quality Assurance	Modular Integration	Report Flow	Integrate Modules	
15	OE7	Product	Modular Integration	Quality Assurance	Perform Quality Check	Perform Quality Check	
16	OE10	E1: Feedback	Modular Integration	Modular Development	Send Feedback	Develop Module	
17	OE9	E1: Feedback	Modular Development	Design	Send Feedback	Identify Functional Prototype	
18	OE8	E1: Feedback	Design	Requirements Engineering	Send Feedback	Specify Requirements	
19	OE15	System Module	Modular Development	Modular Integration	Develop Module	Integrate Modules	
20	OE16	E1: Idea	Idea Panel	Decision Group			Confidential



UAF UNIFIED ARCHITECTURE FRAMEWORK™	Motivation Mv	Taxonomy Tx	Structure Sr	Connectivity Cn	Processes Pr	States St	Sequences Sq	Information ^c If	Parameters ^d Pm	Constraints Ct	Roadmap Rm	Traceability Tr
Architecture Management ^a Am	Architecture Principles Am-Mv	Architecture Extensions Am-Tx ^e	Architecture Views Am-Sr	Architecture References Am-Cn	Architecture Development Method Am-Pr	Architecture Status Am-St		Dictionary Am-If	Architecture Parameters Am-Pm	Architecture Constraints Am-Ct	Architecture Roadmap Am-Rm	Architecture Traceability Am-Tr
Summary & Overview Sm-Ov												
Strategic St	Strategic Motivation St-Mv	Strategic Taxonomy St-Tx	Strategic Structure St-Sr	Strategic Connectivity St-Cn	Strategic Processes St-Pr	Strategic States St-St		Strategic Information St-If	Environment En-Pm-E and Measurements Me-Pm-M and Risks Rk-Pm-R	Strategic Constraints St-Ct	Strategic Deployment, St-Rm-D Strategic Phasing St-Rm-P	Strategic Traceability St-Tr
Operational Op	Requirements Rq-Mv	Operational Taxonomy Op-Tx	Operational Structure Op-Sr	Operational Connectivity Op-Cn	Operational Processes Op-Pr	Operational States Op-St	Operational Sequences Op-Sq	Operational Information Op-If		Operational Constraints Op-Ct		Operational Traceability Op-Tr
Services Sv		Services Taxonomy Sv-Tx	Services Structure Sv-Sr	Services Connectivity Sv-Cn	Services Processes Sv-Pr	Services States Sv-St	Services Sequences Sv-Sq			Services Constraints Sv-Ct	Services Roadmap Sv-Rm	Services Traceability Sv-Tr
Personnel Ps		Personnel Taxonomy Ps-Tx	Personnel Structure Ps-Sr	Personnel Connectivity Ps-Cn	Personnel Processes Ps-Pr	Personnel States Ps-St	Personnel Sequences Ps-Sq	Resources Information Rs-If		Personnel Availability Ps-Rm-A Personnel Evolution PS-Rm-E Personnel Forecast Ps-Rm-F	Personnel Traceability Ps-Tr	
Resources Rs		Resources Taxonomy Rs-Tx	Resources Structure Rs-Sr	Resources Connectivity Rs-Cn	Resources Processes Rs-Pr	Resources States Rs-St	Resources Sequences Rs-Sq			Resources evolution Rs-Rm-E Resources forecast Rs-Rm-F	Resources Traceability Rs-Tr	
Security Sc	Security Controls Sc-Mv	Security Taxonomy Sc-Tx	Security Structure Sc-Sr	Security Connectivity Sc-Cn	Security Processes Sc-Pr			Security Constraints Sc-Ct			Security Traceability Sc-Tr	
Projects Pj		Projects Taxonomy Pj-Tx	Projects Structure Pj-Sr	Projects Connectivity Pj-Cn	Projects Processes Pj-Pr						Projects Roadmap Pj-Rm	Projects Traceability Pj-Tr
Standards Sd		Standards Taxonomy Sd-Tx	Standards Structure Sd-Sr								Standards Roadmap Sd-Rm	Standards Traceability Sd-Tr
Actual Resources Ar			Actual Resources Structure, Ar-Sr	Actual Resources Connectivity, Ar-Cn	Simulation ^b						Parametric Execution/ Evaluation ^b	

UAF specification at a glance

The UAF Domain Metamodel (DMM) establishes the underlying foundational modeling constructs to be used in modeling an enterprise and major entities within the enterprise. It provides the definition of **concepts**, **relationships** and viewpoints for the framework. The UAF DMM is the basis for any implementation of UAF including non-UML/SysML implementations.



EA guide (EAG)

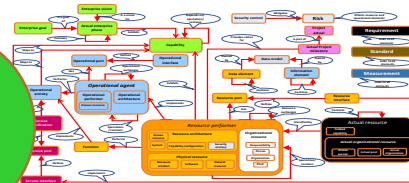
Specification

4



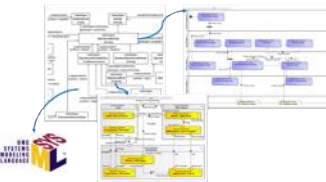
Domain MetaModel (DMM)

2



UAF Modeling Language (UAFML) based on SysML

3

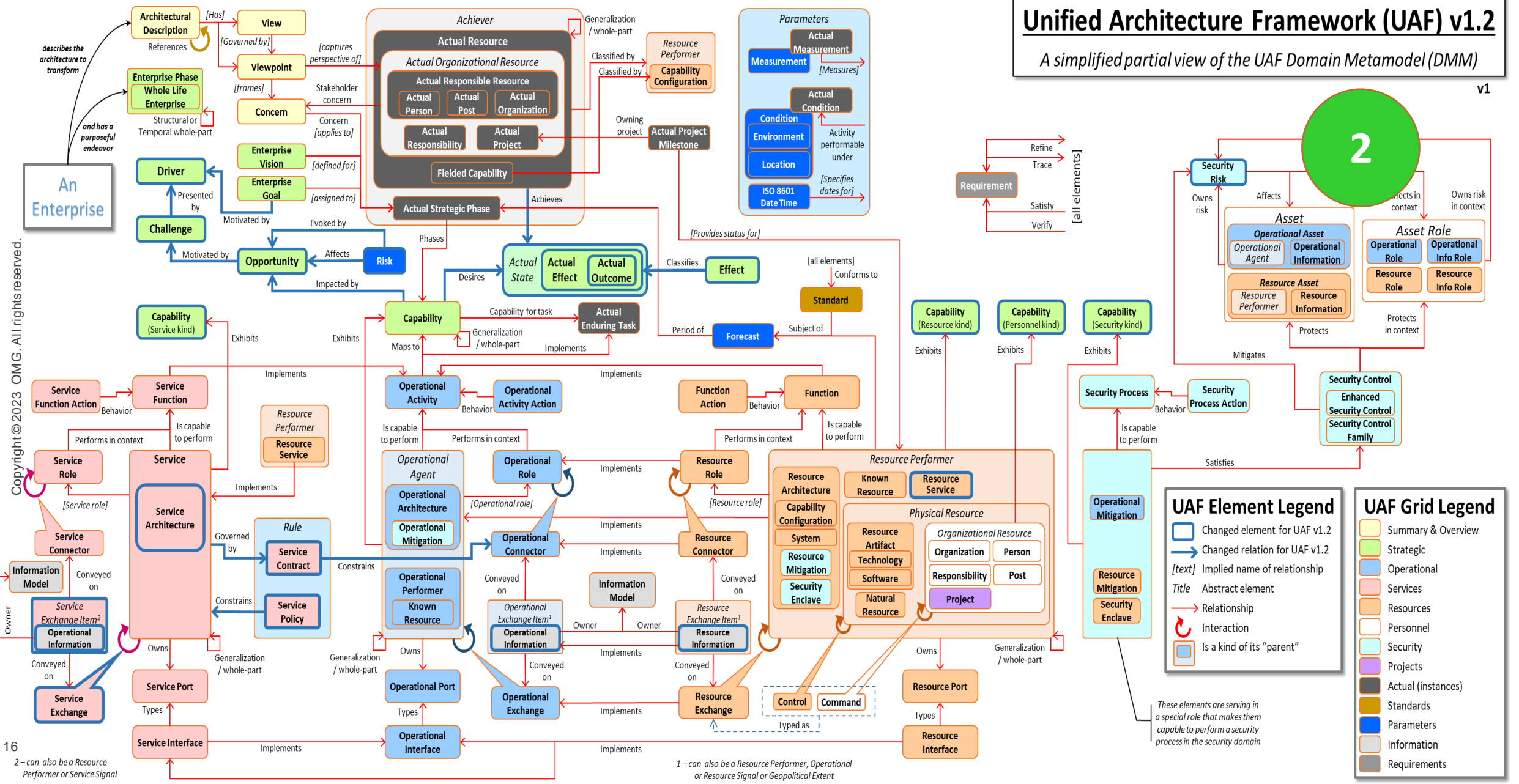


Domain Metamodel

Unified Architecture Framework (UAF) v1.2

A simplified partial view of the UAF Domain Metamodel (DMM)

v1



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UAF specification at a glance



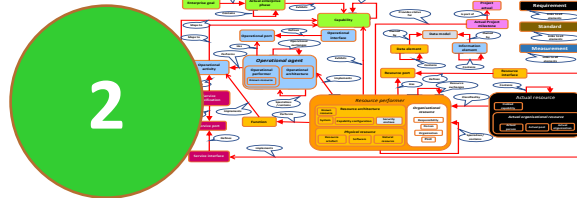
Specification

View specifications organized in viewpoints and aspects (Grid)

	Transaction	Structure & Connectivity	Behavior	Information	Parameters	Constraints	Timeline	Traceability
Strategic								
Operational								
Services								
Personnel & Resources								
Security								
Projects								
Standards								

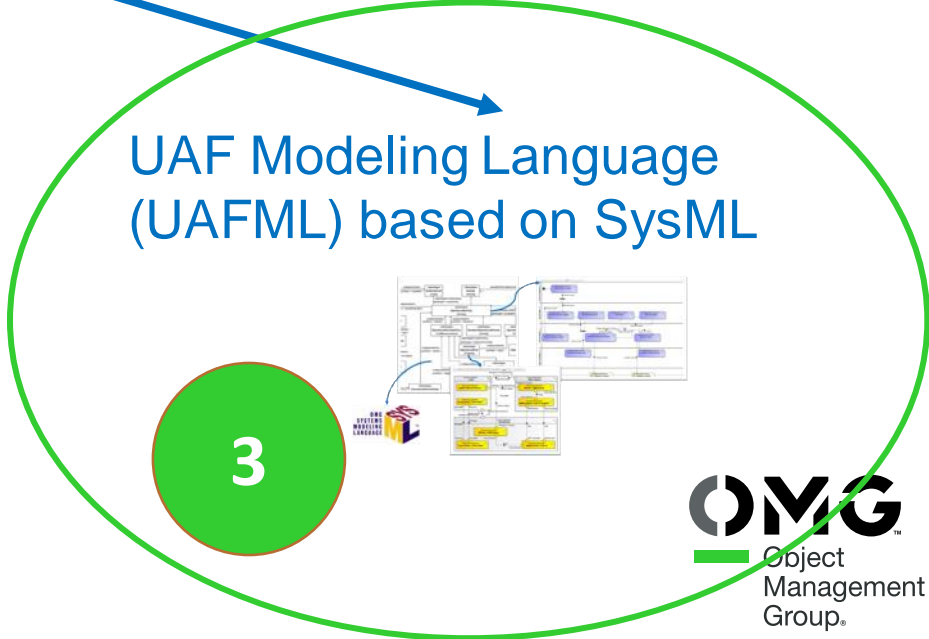


Domain MetaModel (DMM)



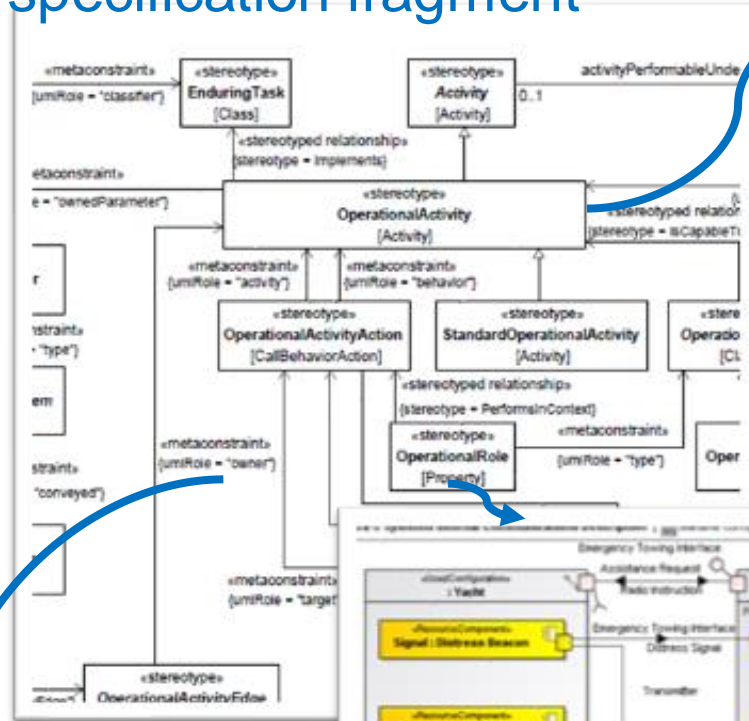
The UAF Modeling Language (UAFML) is a UML/SysML specification for implementing the UAF DMM

UAF Modeling Language (UAFML) based on SysML

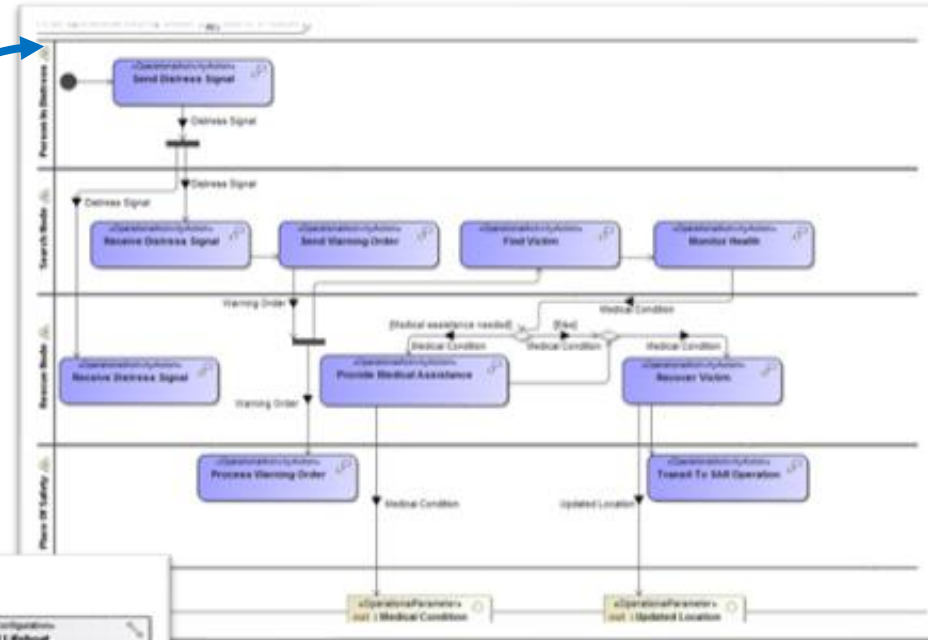


UAF Modeling Language (UAFML) – Implementation in SysML

UAFML specification fragment



Extends



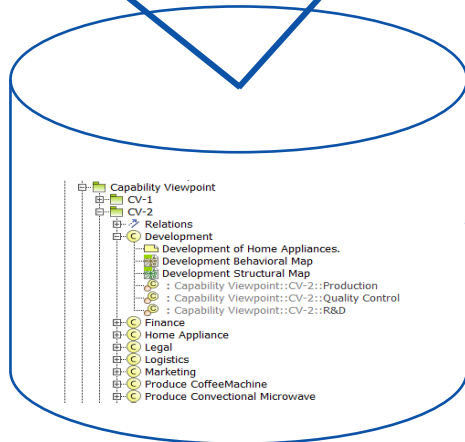
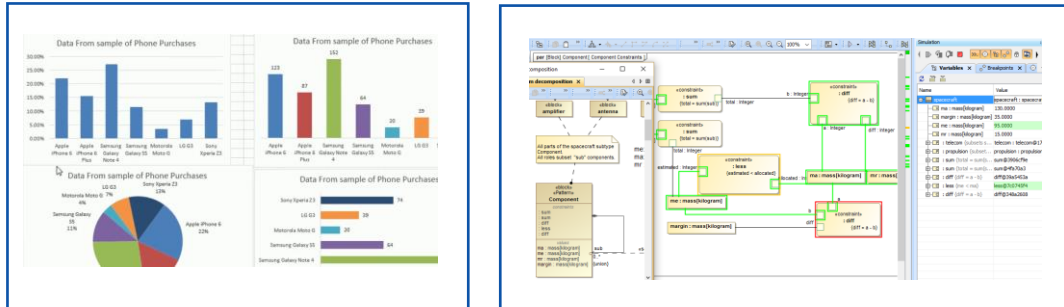
SysML Internal Block Diagram



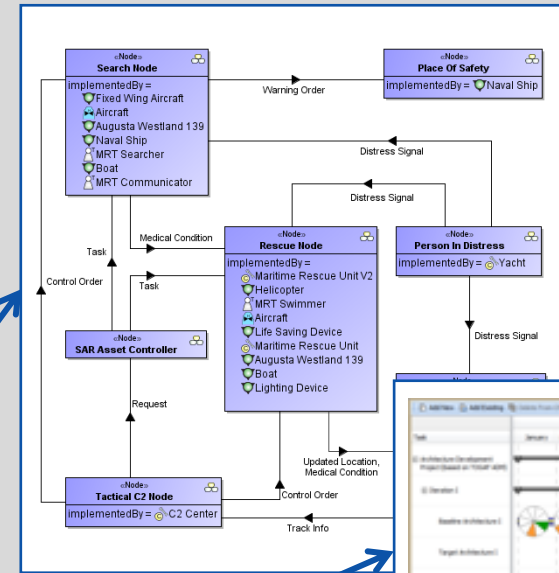
Architecture Model

FRONT END AND BACK END

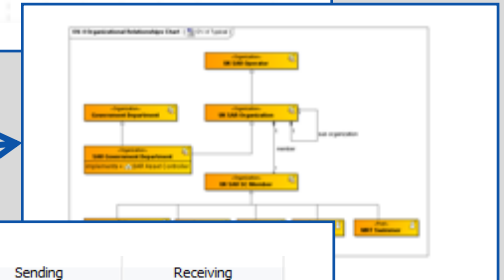
ANALYSIS & SIMULATION



ARCHITECTURE MODEL



ARCHITECTURE VIEWS



#	Exchange ID	Needline ID	Operational Exchange Item	Sending Node	Receiving Node
1	IE7	7	Control Order	Tactical C2 Node	Search Node
2	IE8	8	Request	Tactical C2 Node	SAR Asset Controller
3	IE5	5	Control Order	Tactical C2 Node	Rescue Node
4	IE1	1	Warning Order	Search Node	Place Of Safety
5	IE10	10	Task	SAR Asset Controller	Search Node
6	IE9	9	Task	SAR Asset Controller	Rescue Node
7	IE2	2	Medical Condition	Search Node	Rescue Node
8	IE11	11	Distress Signal	Person In Distress	Search Node
9	IE3	3	Distress Signal	Person In Distress	Rescue Node
10	IE4	4	Distress Signal	Person In Distress	Monitoring Node
11	IE6	6	Track Info	Monitoring Node	Tactical C2 Node

UAF specification at a glance



Specification

The UAF Enterprise Architecture Guide (EAG) provides guidance on how to use the UAFML to model an architecture.

EA guide (EAG)



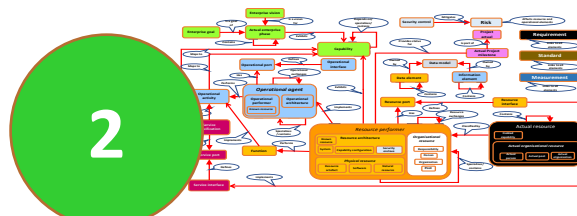
4

View specifications organized in viewpoints and aspects (Grid)

	Technology	Structure & Connectivity	Behavior	Information	Parameters	Combin.	Roadmap	Traceability
Strategic								
Operational								
Services								
Personnel & Resources								
Security								
Projects								
Standards								
	Requirements							

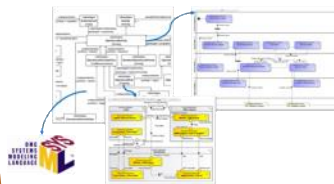
1

Domain MetaModel (DMM)



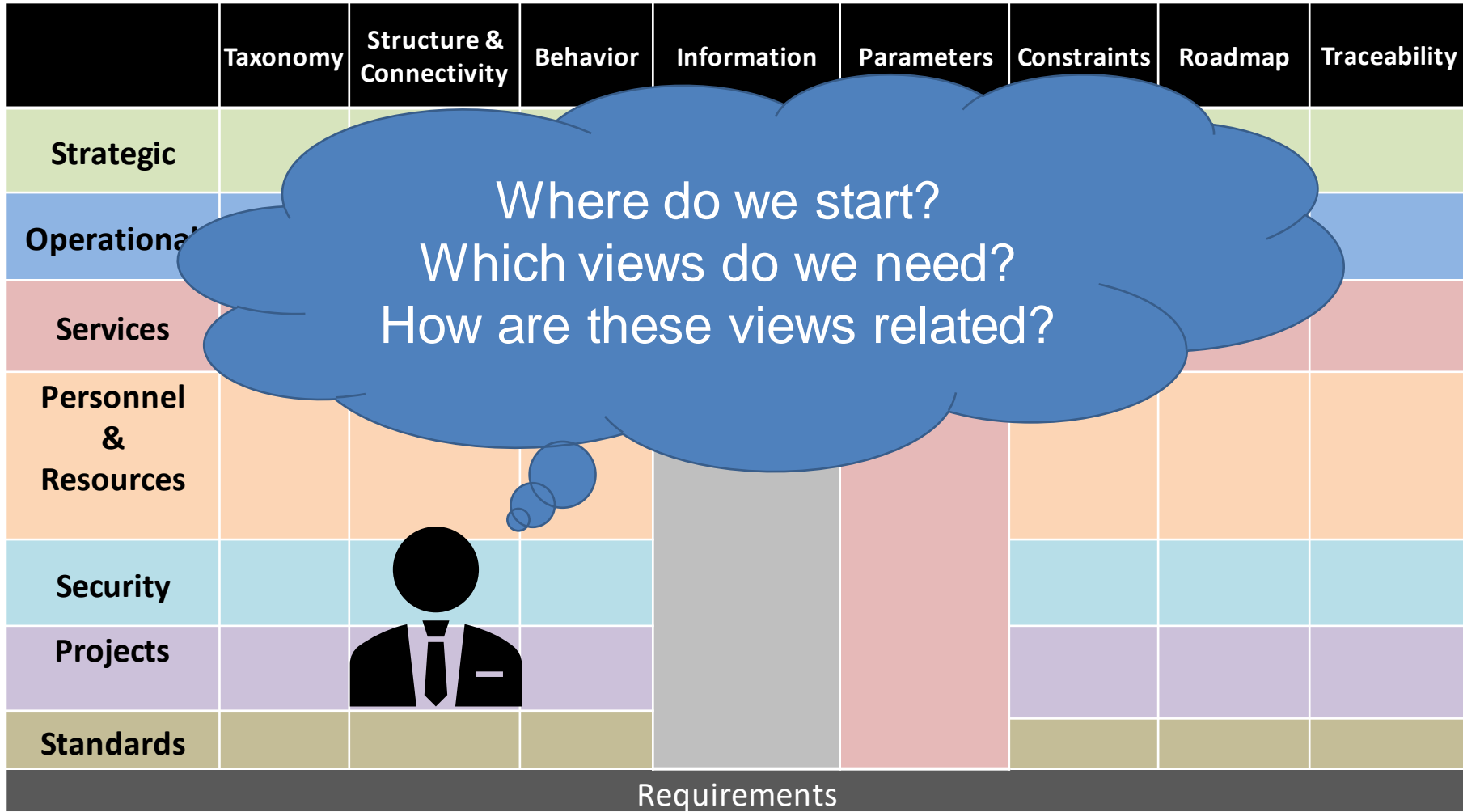
2

UAF Modeling Language (UAFML) based on SysML

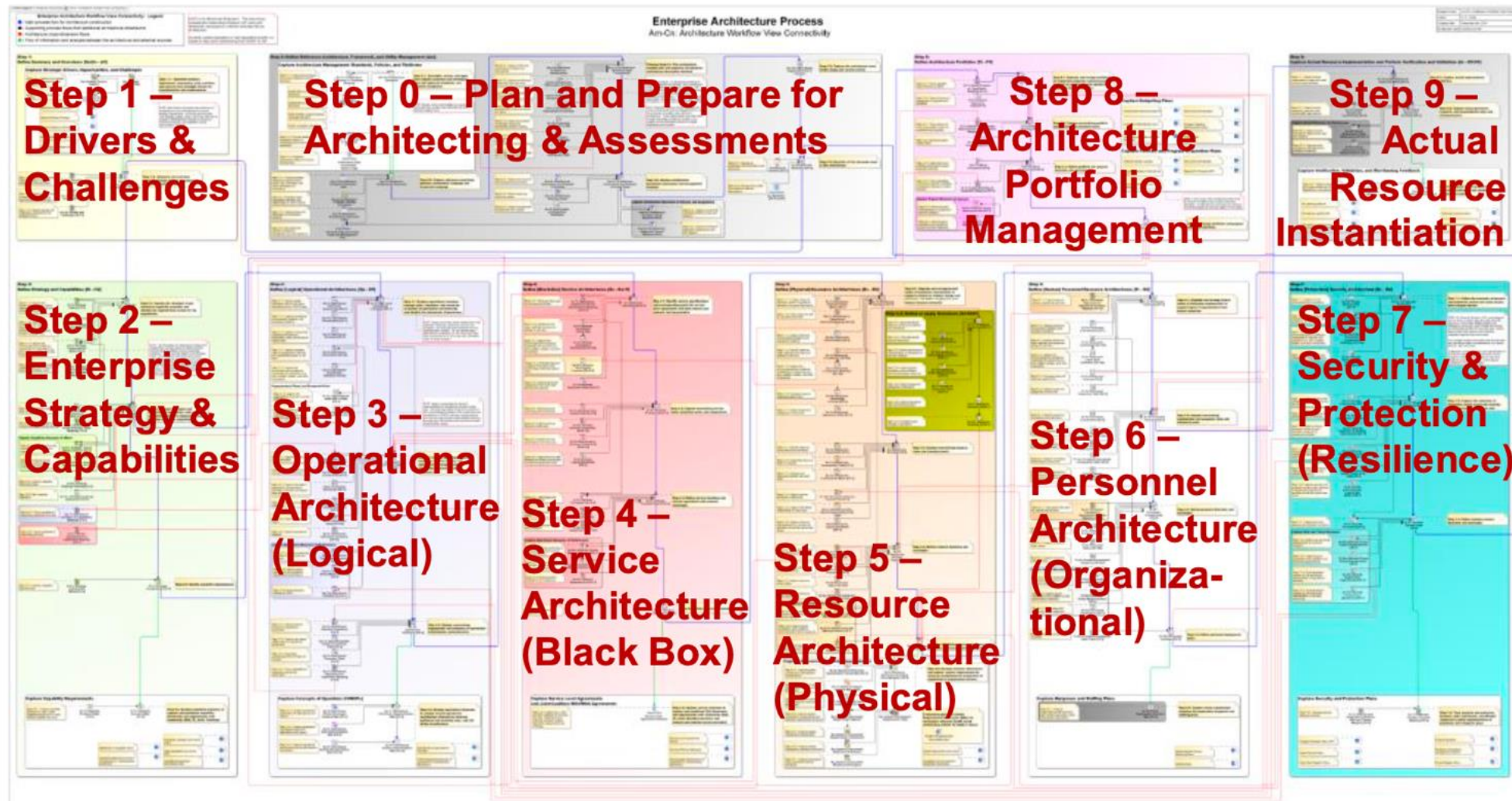


3

EA Guide



EA Guide Steps



4

Why Use Frameworks?

Frameworks such as Unified Architecture Framework (UAF):

- Supports semantic interoperability through the use of a common vocabulary enabling:
 - Portfolio and capability management
 - SoS Operational planning, Mission Engineering and Acquisition
- UAF is methodology-agnostic (structured, OO, etc.)
- Extends UPDM with additional architectural dimensions: Security, Personnel, Requirements, Analysis, Simulation with full cross-cutting Traceability using a common semantic vocabulary



	Taxonomy	Structure & Connectivity	Behavior	Information	Parameters	Constraints	Roadmap	Traceability
Strategic	Understand enterprise objectives, defining and deploying cap							
Operational	Understand the SoS from Operational/ Logical Perspecti							
Services	Identify Services to abstract behaviour and capabilities							
Personnel & Resources	Understand constituent Systems of Systems and relationships personnel/organizations							
Security	Cyber Security Analysis							
Projects	Understand project development milestones							
Standards	Standards compliance							
Requirements								

Traceability across all levels

Architecture Framework: Conventions, principles and practices for the description of architectures established within a specific domain of applications and/or community of stakeholders. ISO/IEC/IEEE 42010:2011



THE ROLE OF UAF IN SUPPORT OF NATO AND DOD

DoD and NATO positioning

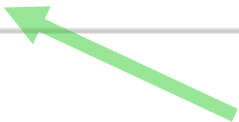


DoD

Standard Citation Standard Overview

Mandated by DISR
November 10, 2021

Standard Identifier	OMG UAFP v1.0
Standard Title	Unified Architecture Framework Profile (UAFP) v1.0, OMG formal/2017-12-01, November 2017 including all normative appendices.
DoD Status	Mandated
IC Status	IC-Mandated



NATO

3 UNIFIED ARCHITECTURE FRAMEWORK® (UAF) DOMAIN META-MODEL (DMM)®

3.1 The Unified Architecture Framework (UAF) Domain Meta-model (DMM) is an open and non-implementation specific meta-model developed by the Object Management Group® to describe various stakeholder concerns, such as security or information, associated with a system through a set of predefined viewpoints and associated views, mapped to the corresponding view in NAFv4.

3.2 Since scope and expressiveness of the UAF DMM exceed the current needs of NAFv4 and some of the mapped viewpoints differ between NAFv4 and UAF, the use of UAF in NAFv4 is based on a subset of the UAF DMM described in a separate guideline document.

3.3 Architectures implemented using the full UAF DMM are fully compliant to NAFv4 when covering the corresponding viewpoints. To ensure further compliance, the additional parts of the UAF DMM must first be used if extending the UAF DMM based NAFv4 metamodel.



Overlay of DoDAF Views onto the UAF Grid

	Taxonomy Tx	Structure Sr	Connectivity Cn	Processes Pr	States St	Interaction Scenarios Is	Information If	Parameters Pm	Constraints Ct	Roadmap Rm	Traceability Tr
Metadata Md	-	-	-	-	-	-	DIV-1	ScV-7	-	-	-
Strategic St	CV-2	CV-1	CV-4	-	-	-			CV-3 CV-5	CV-6	
Operational Op	OV-2 OV-1	OV-2	OV-2 OV-3	OV-5a OV-5b	OV-6b	OV-6c			OV-6a	-	
Services Sv	SvcV-1	SvcV-1 SvcV-2	SvcV-3a SvcV-3b SvcV-6	SvcV-4	SvcV-10b	SvcV-10c			SvcV-10a	SvcV 8 SvcV-9	SvcV-5 CV-7
Personnel Pr	OV-4	OV-4	OV-4 SV-6	SV-4	SV-10b	SV-10c			OV-4 SV-10a SV-7	PV-2 SV-8 SV-9	SV-5a SV-5b
Resources Rs	SV-1 SV-2	SV-1 SV-2	SV-3 SV-6	SV-4	SV-10b	SV-10c			SV-10a	SV-8 SV-9	SV-5a SV-5b
Security Sc	-	-	-	-	-	-			-	-	-
Projects Pj	PV-1	PV-1	PV-2	-	-	-			-	PV-2	PV-3
Standards Sd	StdV-1	StdV-1	-	-	-	-			-	StdV-2	StdV-1
Actual Resources Ar	-	OV-4	OV-4 SV-1 & SV-2	Simulation					-	Parametric Execution/Evaluation	-
Dictionary Dc (AV-2)											
Summary & Overview SmOv (AV-1, OV-1)											
Requirements -											

UAF	Motivation Mv	Taxonomy Tx	Structure Sr	Connectivity Cn	Processes Pr	States St	Sequences Sq	Information If	Parameters Pm	Constraints Ct	Roadmap Rm	Traceability Tr
Architecture Management Am	Architecture Principles Am-Mv	Architecture Extensions Am-Tx*	Architecture Views Am-Sr	Architecture References Am-Cn	Architecture Development Method Am-Pr	Architecture Status Am-St		Dictionary Am-If	Architecture Parameters Am-Pm	Architecture Constraints Am-Ct	Architecture Roadmap Am-Rm	Architecture Traceability Am-Tr
Summary & Overview Sm-Ov												
Strategic St	Strategic Motivation St-Mv	Strategic Taxonomy St-Tx	Strategic Structure St-Sr	Strategic Connectivity St-Cn	Strategic Processes St-Pr	Strategic States St-St		Strategic Information St-If	Environment En-Pm-E and Measurements Me-Pm-M and Risks Rk-Pm-R	Strategic Constraints St-Ct	Strategic Deployment St-Am-D Strategic Phasing St-Am-P	Strategic Traceability St-Tr
Operational Op		Operational Taxonomy Op-Tx	Operational Structure Op-Sr	Operational Connectivity Op-Cn	Operational Processes Op-Pr	Operational States Op-St	Operational Sequences Op-Sq	Operational Information Op-If		Operational Constraints Op-Ct		Operational Traceability Op-Tr
Services Sv		Services Taxonomy Sv-Tx	Services Structure Sv-Sr	Services Connectivity Sv-Cn	Services Processes Sv-Pr	Services States Sv-St	Services Sequences Sv-Sq	Services Information Sv-If		Services Constraints Sv-Ct	Services Roadmap Sv-Rm	Services Traceability Sv-Tr
Personnel Ps	Requirements Rq-Mv	Personnel Taxonomy Ps-Tx	Personnel Structure Ps-Sr	Personnel Connectivity Ps-Cn	Personnel Processes Ps-Pr	Personnel States Ps-St	Personnel Sequences Ps-Sq	Personnel Information Ps-If		Personnel Constraints Ps-Ct	Personnel Roadmap Ps-Rm	Personnel Traceability Ps-Tr
Resources Rs		Resources Taxonomy Rs-Tx	Resources Structure Rs-Sr	Resources Connectivity Rs-Cn	Resources Processes Rs-Pr	Resources States Rs-St	Resources Sequences Rs-Sq	Resources Information Rs-If		Resources Constraints Rs-Ct	Resources Roadmap Rs-Rm	Resources Traceability Rs-Tr
Security Sc	Security Controls Sc-Mv	Security Taxonomy Sc-Tx	Security Structure Sc-Sr	Security Connectivity Sc-Cn	Security Processes Sc-Pr			Security Information Sc-If		Security Constraints Sc-Ct		Security Traceability Sc-Tr
Projects Pj		Projects Taxonomy Pj-Tx	Projects Structure Pj-Sr	Projects Connectivity Pj-Cn	Projects Processes Pj-Pr			Projects Information Pj-If			Projects Roadmap Pj-Rm	Projects Traceability Pj-Tr
Standards Sd		Standards Taxonomy Sd-Tx	Standards Structure Sd-Sr					Standards Information Sd-If			Standards Roadmap Sd-Rm	Standards Traceability Sd-Tr
Actual Resources Ar			Actual Resources Structure, Ar-Sr	Actual Resources Connectivity, Ar-Cn	Simulation ³					Parametric Execution/Evaluation ³		



UAF ROADMAP

Work in Progress

- UAF Certification Program
- Model-Based Acquisition
- Addition of Use Cases and Use Case Diagrams
- Mission Engineering and Mission Threads
- Improvements in Portfolio Management
- Security Viewpoint improvements and alignment with RAAML
- Service Architecture improvements
- Alignment with ISO style guide and ISO 42010 terminology
- **Standard Implementation in the SysML v2**

Upcoming version of UAF is V2

UAF Certification Program

- Validate the breadth and depth of an individual's knowledge within the enterprise architecture and systems engineering domains
- Instills peers and employers alike with confidence in a certified candidate's participation and/or leadership role in real-world Architecture development team for an **Enterprise**, **System** or **System of Systems** employing a UAF-based modeling methodology.

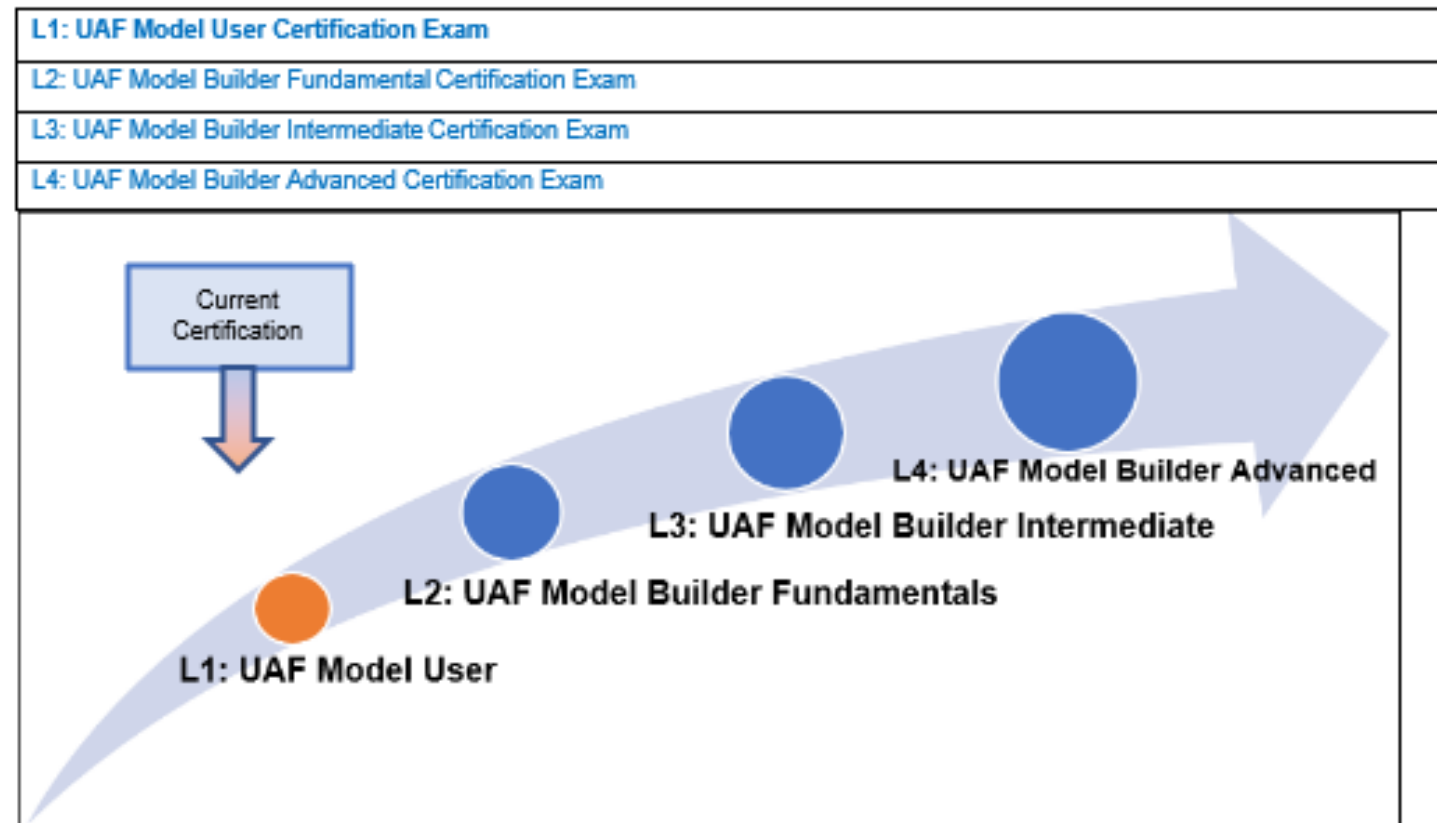
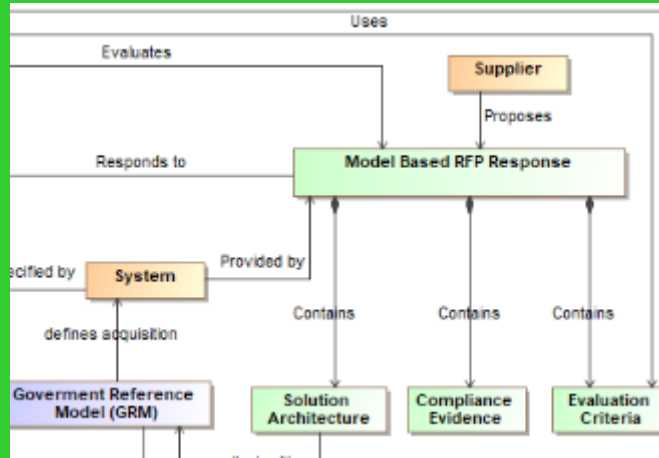


Figure 1. OMG UAF Certification Path

BLUF: Model-Based Acquisition (MBAcq)

About MBAcq

Model-based acquisition is the Technical approach to acquisition that uses models and other digital artifacts as the primary means of information exchange, rather than document-based information exchange.



Why MBAcq Matters

Customers are increasingly specifying MBSE in RFPs
Customers are increasingly requiring models in proposals
Lack of standardization raises proposal learning curves

MBAcq standardization minimizes acquisition risk while improving communication across industry

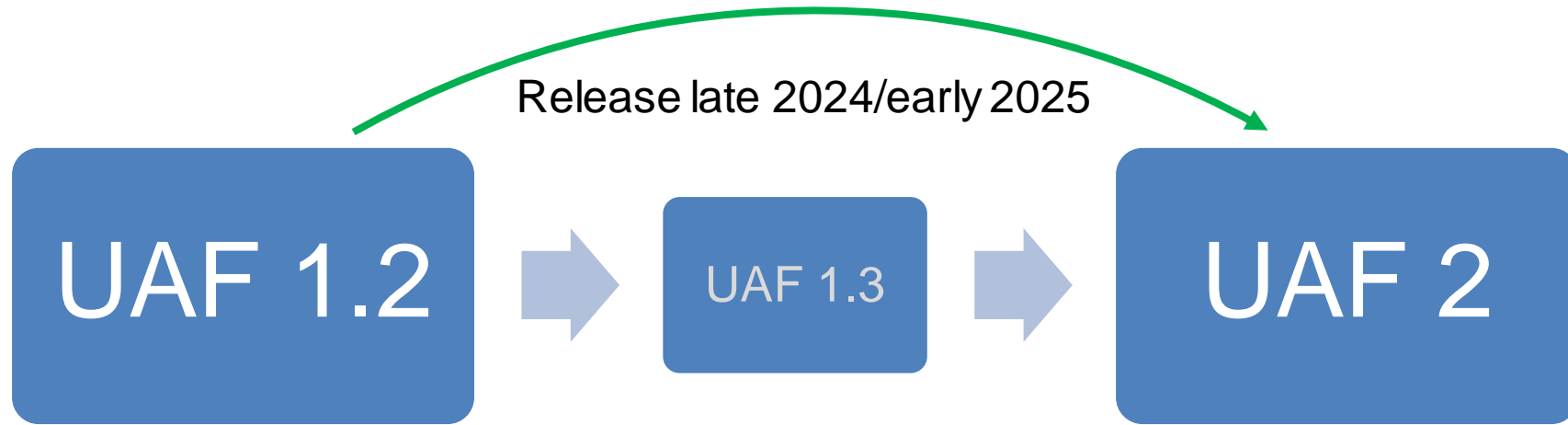
OMG MBAcq User Group

Is a broad industry body with participation from OMG, INCOSE, Armed Services, OUSD, DoD CIO, NDIA, DAU, FFRDCs and many industry suppliers such as Boeing, Northrop Grumman, Lockheed Martin, etc. working together to create the standards and guidance to successfully deploy MBAcq to the larger community.

Expected Timeline

2022: Formed Team & Framework
2023: Q4 Govt Ref Arch
2024: Q2 Acquisition Users Guide
Q2/3 DAU Acquisition Training
Q4 Acquisition Model Example

UAF V2



Normative

- UAF DMM
- UAF ML (SysML V1 based)

Non-normative

- Traceability
- Example Model
- EA Guide

Normative

- UAF DMM
- UAF ML (SysML V1 based)
- **UAF ML V2 (SysML V2 based)**

Non-normative

- Traceability
- Example Model
- EA Guide
- **MBAcq Guide**

SUMMARY AND OVERVIEW

Who Uses UAF?

1. Aerospace Corp.
2. Airbus
3. Arcfield
4. BAE Systems
5. Boeing
6. Bundeswehr
7. Deloitte
8. DISA
9. DGA
10. Leonardo
11. Lockheed Martin
12. MITRE
13. NATO
14. Northrop Grumman
15. Norwegian Air Traffic Control
16. Raytheon
17. Rolls Royce
18. SAAB
19. Swedish Defense Materiel Administration
20. US Airforce
21. US Navy
22. US Army
23. Volvo Construction Equipment

- not complete list



UAF is an enabler for **NAF** and **DoDAF**

and

alternatively it is a **STAND ALONE** framework to support a wide variety of architectures in different industries

which

Incorporates the best practices of MBSE

and

Evolves taking into account user feedback

More on UAF

Intro to UAF



https://youtu.be/AWJk_7KtQ0w

DAU MBACq Recording

A banner for a webinar recording. At the top, it says "Let's Be Modular and Open Webinar – Model Based Systems Engineering In Acquisition-20230209". Below that is a logo with three interlocking shapes (blue, green, orange) and the text "LET'S BE MODULAR & OPEN". The main text reads "Welcome to the Let's Be Modular and Open series". Below this are several bullet points: "Mics: Audio will be muted throughout the session", "Recording: This session will be recorded and posted on the event page", "Questions: Please submit questions via chat", "Survey: Link will be provided in chat and posted on event page", and "CLPs: Each session qualifies for 1.0 CLPs." At the bottom, it provides a dial-in number: "Dial in (audio only) number: 1-571-403-9146, Conference ID: 872 690 282#". The DAU logo is in the bottom left corner.

The session Link (~30 min presentation and 30 min Q&A) :
<https://www.dau.edu/event/Lets-Be-Modular-and-Open-Webinar-Model-Based-Systems-Engineering-In-Acquisition>



Unified Architecture Framework (UAF)

<https://www.linkedin.com/groups/8878655/>





Object
Management
Group®

Thank you!

Are you too busy to improve?



Håkan Forss @hakanforss <http://hakanforss.wordpress.com>

This illustration is inspired by and in part derived from the work by Scott Simmerman, "The Square Wheels Guy" <http://www.performancemanagementcompany.com/>