



OBJECT MANAGEMENT GROUP®

OMG TECHNICAL MEETING
SPECIAL EVENT
RESTON, VA U.S.A.

UAF® & MBSE Summit

The Unified Architecture Framework®
(UAF) and Profile (UAFP)

Thursday, 8:30 am - 12:30 pm
March 22, 2018



AGENDA

08:30 - 09:00

Introduction and Welcome

Laura Hart, The MITRE Corporation, Federally Funded Research and Development Center (FFRDC)

09:00 - 09:40

KEYNOTE: A NATO ACaT Perspective on the Use of Architecture and Standards

Konstantin Ristani - Senior Enterprise Architect, CFD/DEA, Department of National Defence for the Government of Canada, NATO C3B ACaT Leader

09:40 - 10:10

An Introduction to the Unified Architecture Framework® (UAF®)

*Graham Bleakley, Ph.D. - Principal Consultant, Systems Engineering & Architecture Frameworks, IBM and OMG UAF Co-Chair
Aurelijus Morkevicius, Ph.D. - Head of Solutions, No Magic, Inc., and OMG UAF Co-Chair
Matthew Hause - GTM Solutions Specialist, Fellow, PTC, and OMG UAF Co-Chair*

10:10 - 10:30

Morning Refreshment Break

10:30 - 11:00

Enterprise Architecture Throughout the System of Systems Lifecycle

Matthew Hause - GTM Solutions Specialist, Fellow, PTC, and OMG UAF Co-Chair

Enterprise Architecture for Systems of Systems as implemented in the Unified Architecture Framework (UAF) should be used throughout the entire system lifecycle. This starts at the initial concept, requirements and specification phases, proceeds through the implementation, deployment, transition and operations phase, as well as through maintenance, upgrade and disposal phases. This presentation will look at how the UAF can be used throughout the system lifecycle and how a standards-based integrated toolchain helps in this process.

11:00 - 11:30

Digital Engineering: MBSE Approach for DoD

*Dr. John Coleman,
Philomena Zimmerman - Deputy Director, Engineering Tools & Environments, United States Department of Defense*

Through the ODASD(SE), the DoD is establishing model-based methods, processes and tools for use in acquisition and acquisition related activities. The use of models as a technical means of communication within the systems engineering discipline is understood; but the full potential of the models to support activities in other disciplines is not yet realized. Part of overcoming this realization lies in understanding the basic language and artifact representations as they are; and another part lies in projecting/executing a path forward to keep a loosely coupled community which can take advantage of other's successes and failures.

11:30 – 12:00

Continuous Architecture: The Age of Complexity

Antoine Lonjon – Chief Innovation Officer, MEGA International

Systems of systems raise many challenges as they seek to provide additional capabilities through the interoperability of existing autonomous systems.

- How adding capabilities without breaking the existing independent ones?
- How shared management shall be organized?
- How enough autonomy and independency shall be maintained?

Guidance of traditional engineering practices is not enough to handle these challenges. The emerging discipline of continuous architecture attempts to provide a first answer.

12:00 – 12:30

Model-based System Security Analysis Using UAFP

Mary Tolbert – MITRE SE, The MITRE Corporation

Tamara Hambrick – MBSE Manager, Northrop Grumman Corporation

Successful Model-Based Systems Engineering (MBSE) implementation that includes security considerations allow for early risk identification and system performance anomalies prior to implementation. "Baking-in", rather than "bolting-on", a system's security architecture early in the design phase allows for the early detection of a system's threats and vulnerabilities through definition and usage of the security control type as defined in UAFP.