UAF®, UPDM™ & MBSE Summit
The Unified Architecture Framework® (UAF) and Profile (UAFP)
Thursday Morning, March 23, 2017
08:30-12:30, Reston, VA USA

COMPLIMENTARY MORNING EVENT

Join us on Thursday Morning, March 23rd at the Hyatt Reston Town Center Hotel, Reston, VA for the third UAF®, formerly UPDM™, with MBSE Summit. This complimentary Summit explores how to leverage MBSE with Architecture modeling in an integrated and disciplined approach, enabling the modernization of complex systems (Systems of Systems, C4I systems and heavy industry systems), bringing together thought leaders from government, system integrators, the UAF development team, and practitioners to discuss the challenges, strategies, and current and emerging practices, and to inform the user community on the path forward. UAF with MBSE attendees will have the opportunity to exchange experiences and ideas. A companion program to the morning session will be presented in the afternoon on **UAF and MBSE Tutorials**. Please come back in the afternoon for a deeper dive.

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

The UAFP is a response to the "UML® Profile for DoDAF/MODAF" Request for Proposal c4i/13-09-11 (UPDM 3.0 RFP.)[1] UAFP enables the extraction of specified and custom views from an integrated architecture description (AD) in support of a model-based systems engineering (MBSE) approach. The views describe a system from a set of stakeholders' concerns such as security or information. The UAFP specification supports the Department of Defense Architecture Framework (DoDAF) 2.02, the Ministry of Defence Architecture Framework (MODAF), Security Views from Canada's Department of National Defense Architecture Framework (DNDAF) and the North Atlantic Treaty Organization (NATO) Architecture Framework (NAF) v 3.1. The core concepts in the UAF domain metamodel used to specify the UAFP are based upon the DoDAF 2.0.2 Domain Metamodel (DM2) and the MODAF ontological data exchange mechanism (MODEM, which is intended to provide the basis for the next version of NAF). The intent is to provide a standard representation for AD support for Defense Organizations. UAFP is also intended to support a standard representation for non-defense organizations' ADs as part of their Systems Engineering (SE) technical processes. The associated UAF metamodel (see c4i/2015-10-2) intent is to improve the ability to exchange architecture data between related tools that are UML/SysML® based and tools that are based on other standards. UAFP v 1.0 will support the capability to:

- model architectures for a broad range of complex systems, which may include hardware, software, data, personnel, and facility elements;
- model consistent architectures for system-of-systems (SoS) down to lower levels of design and implementation;
- support the analysis, specification, design, and verification of complex systems;
- support cybersecurity analysis, specification, and mitigation of security risks from a system/infrastructure perspective and to aggregate the impact analysis to the operational perspective and cybersecurity risks' impact on the mission; and
- improve the ability to exchange architecture information among related tools that are SysML based and tools that are based on other standards.

Keynote Speaker:

Challenges to Operationalizing Digital Identity in DOD
Colonel Tom Clancy, IdAM and PKI Lead, Office of the Secretary of Defense's Deputy CIO for Cybersecurity (View COL Clancy's Bio)

AGENDA

TIME	PRESENTATIONS
0830 - 0900	**Formalizing a Security Approach for the IIOT with UAF** *Stephen Mellor, Chief Technical Officer for the Industrial Internet Consortium*
0900 - 0930	**KEYNOTE PRESENTATION: Challenges to Operationalizing Digital Identity in DOD** *Colonel Tom Clancy, IdAM and PKI Lead, Office of the Secretary of Defense's Deputy CIO for Cybersecurity*

0930 - 1000	**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 UAFCo-Chair* *Matthew Hause, GTM Solutions Specialist, Fellow, PTC, and OMG UAF Co-Chair*
1000 - 1030	**Using UAF to Describe a Phased Service Architecture Deployment Within an Enterprise** *Lars-Olof Kihlström, Principal Consultant, Syntell AB* This presentation describes how a phased introductions of services in a Search and rescue scenario is performed and is based on the second example shown in the annex to the UAF standard. will make use of a SAR service example defined using MagicDraw.
1030 - 1100	**Morning Refreshments**
1100 - 1130	**Digital Engineering: MBSE Approach for DoD** *Philomena Zimmerman, Deputy Director, Engineering Tools and 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.
1130 - 1200	**Using the UAF to model TVR (threat, vulnerability and risk) for the Model Oriented Development Environment (MODE) Automation of Assessment and Authorization (AAA)** *Yong Choe, Multi Agency Collaboration Environment (MACE)* MODE is an R&D project to explore and develop a methodology that allows generation of secure and reliable code directly out of (UML) models to enable rapid development and operationalization of new capabilities. This work includes implementations in prototypical form and also the development of a model-driven code assessment framework. This assessment framework primarily targets ongoing assessment of model-generated code, but can also be used for assessment of any external/imported code. Leveraging this framework, the MODE intends to provide a platform supporting automated security assessments, allowing deeper code-level security assessments and reducing RMF (Risk Management Framework) authorization cycles. The UAF-based TVR models will allow such RMF A&A processes, and support remediation investments that take threat, vulnerability, and risk parameters into account.
1200 - 1230	**MBSE Acquisition Reference Model (ARM) - Lowering the Barrier to MBSE Using UPDM/UAF** *Laura Hart, The MITRE Corporation, Federally Funded Research and Development Center (FFRDC)*

NOTE: *If you register for the OMG Technical Meeting Week, you do not have to pay additional fee(s) (if applicable) to attend any or all of the special events. If you register only for a specific special event, then the relevant special fees apply. This event is scheduled for the morning only and lunch is not included.*

[1] http://www.omg.org/cgi-bin/doc.cgi?c4i/2013-9-11