



OBJECT MANAGEMENT GROUP®

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

UAF® & MBSE Tutorials

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

Thursday, 1:30 pm - 4:30 pm
March 22, 2018



AGENDA

13:30 - 14:00

Unlocking the Promise of MBSE: Executable Models in UAF®

Dr. Andy Ko - Engineering Service Manager, Phoenix Integration

The UAF framework exists to support MBSE frameworks under a single platform for consistency, interoperability and traceability. However, to achieve the full benefit of MBSE, there is a critical need to link systems engineering and disciplinary/domain engineering. By making available the sophisticated analytical capabilities in the domain engineering world, MBSE models would be transformed from a primarily descriptive role to be a truly integrated executable model. Only then would the true promise of MBSE be realized.

14:00 - 15:00

UAF 101

Aurelijus Morkevicius, Ph.D. - Head of Solutions, No Magic, Inc., and OMG UAF Co-Chair

This tutorial introduces a brand new Unified Architecture Framework® v1.0 and explores how to leverage MBSE with architecture modeling in an integrated and disciplined approach, enabling the modernization of systems of systems. Tutorial is based on an industry case-study and features the creation of architecture from A to Z, combining both theory and practice.

The session presents a straightforward and easy-to-understand modeling process for the key UAF domains - covering strategy, operational, personnel and resources, project, and security. It also covers traceability all the way through to produce an integrated model, which can later be used for various engineering analysis, like trade-offs, what-if analysis, behavioral simulation, etc.

15:00 - 15:30

Afternoon Refreshment Break

15:30 - 16:00

How to Make Use of UAF to Speed Up System Development

Lars-Olof Kihlström - Principal Consultant, Syntell AB

This afternoon tutorial will be a description of how to look at a complex system of systems and use UAF to analyze the interactions and quickly get to grips with the detailed design required. The example used is based on electrical handling of a quarry operation (electric site). The afternoon session will make use of PTC integrity modeler. To maintain strict neutrality as regards tools I can say that we are initiating a thesis work by two almost graduates from the Royal Institute of Technology (KTH) in Stockholm to create an executable model describing a slightly simplified quarry operation using Rhapsody.

16:00 - 16:30

Q & A Session