

A Solutions based approach to MBSE architectures with UPDM

UPDM is the Unified Profile for DoDAF and MODAF. The UPDM specification was developed by a diverse group of tool vendors, end users, academia, and government representatives. The UPDM Specification was submitted to the OMG in September 2008 and was finalized in June 2009. UPDM enjoys the full support of the DOD and MOD. The UML/SysML foundation improves the integration between architectural framework modeling and system modeling to support post acquisition life-cycle design and implementation.

This tutorial provides a brief introduction to how UPDM will provide a standard means of expressing DoDAF and MODAF using SysML and UML, an overview of the UPDM views and viewpoints and language concepts, and selected sample problems to demonstrate how the language can be used. Following this, the course will proceed to demonstrate how the MBSE foundation of UPDM can provide the answers to problems found in projects:

How to avoid the problems of stovepipe development?

How to ensure that systems deployment is in line with capability deployment requirements?

How to effectively use MBSE to provide trade-off analysis?

How to transition from a system of systems to systems development?

How to ensure system interfaces are compatible?

How to communicate with non-experts?

How to reuse architectures?

How to integrate requirements management into modeling?

Biography

Jon Holt

Head of Systems Engineering

Jon was the founding director of Brass Bullet Ltd, based in the UK, which became part of the Artisan Group in 2009. An international award-winning author and public speaker, specializing in all aspects of systems, process and competency modeling, Jon's other work interests include Enterprise Architecture, standards and education, he has previously held a variety of positions at universities in the UK and USA. Jon is a Fellow of the IET and BCS, a Chartered Engineer and IT Professional.

Jon has also published several books including UML for systems engineering—watching the wheels, SysML for Systems engineering, A pragmatic guide to business process modelling' and Modelling Enterprise Architectures'.

