

GSAW 2022 Tutorial B:

Enterprise Architecture Guide for the Unified Architecture Framework (UAF)

Overview:

This tutorial describes a workflow for creating Enterprise Architecture (EA) views in accordance with the Unified Architecture Framework (UAF) standard published by the Object Management Group (OMG). This process is the foundation for a new EA Guide published as part of the OMG standard for UAF. The nine steps of the workflow are laid out in alignment with the stakeholder domains in the UAF for producing the requisite UAF views in each of those domains. This architecture description process can be used in conjunction with processes for conceptualization and evaluation of architecture, as well as being used as the basis for an EA modeling methodology, architecture development planning, MBSE capability assessment, and modeling project organization. The Guide covers architecting of the enterprise as well as architecting (at a high level) of a major entity within the enterprise. We will provide an understanding of what the Guide contains and how it could be used.

Instructor:

James Martin, The Aerospace Corporation

Biography:

James N. Martin is the INCOSE representative to the UAF Revision Task Force with OMG and was lead editor for the ISO 42020 standard on Architecture Processes. He is an Enterprise Architect and a Principal Systems Engineer at The Aerospace Corporation developing solutions for information systems and space system enterprises. He was a key author on the BKCASE project in development of Enterprise Systems Engineering articles for the SE Body of Knowledge (SEBOK). Dr. Martin led the working group responsible for developing ANSI/EIA 632, a US national standard that defined the processes for engineering a system.

He previously worked for Raytheon Systems Company and AT&T Bell Labs on airborne and underwater systems and on communication systems. His book, *Systems Engineering Guidebook*, was published by CRC Press in 1996. Dr. Martin is an INCOSE Fellow and was leader of the Standards Technical Committee. He was founder and was until recently leader of the Systems Science Working Group. He received from INCOSE the Founders Award for his long and distinguished achievements in the field.

Description of Intended Students and Prerequisites:

- Basics of MBSE and architecture

What can Attendees Expect to Learn:

- Purpose of UAF, how to use UAF, how will EA Guide help them do modeling, how to create models of an enterprise to guide system developments