Tools Integration & Model Lifecycle Management

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MEMBERS
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INCOSE CONNECT ADDRESS
https://connect.incose.org/WorkingGroups/TIMLM/Pages/Home.aspx

INCOSE WEB PAGE
http://www.incose.org/ChaptersGroups/WorkingGroups/transformational/tools-integration-interoperability
Charter Summary

WG PURPOSE/MISSION

The Tool Integration and Model Lifecycle Management WG provides a forum for discussion and dissemination of best practices, methods and processes that promote the development, the validation and the deployment of standards to advance the exchange of digital data between MBSE tools and toolsets.

WG GOAL(S)

• To provide the systems engineering community a reliable source of information about tool data exchange standards used while executing their business processes in the product lifecycle.

• To collaborate with data exchange standards organizations and other supporting INCOSE Working Groups to characterize systems engineering tool integration and interoperability requirements for tools and data standards for the exchange of Model Based Systems Engineering (MBSE) digital artifacts.

• To promote the development, validation and deployment of standards that advance the interoperability, storage, archival and retrieval of digital data and artifacts produced by systems engineering processes.

• To provide a forum for the discussion and dissemination of information regarding tool integration, data exchange processes, use cases applying standards and the data exchange accomplishments of in our engineering community.
WG SCOPE

The TIMLM WG is focused on the integration and interoperability of tools, data, models and processes as they relate to Systems Engineering processes and methods throughout the acquisition and product development life cycles. The TIMLM maintains collaboration with PDES Inc., ISO and STEP standards organizations, the INCOSE Standards Development Department and other INCOSE Working Groups as required to support standards that improve the exchange, archival and retrieval of digital artifacts produced by our systems engineering processes.

OUTCOMES (PRODUCTS/SERVICES)

1. 3 PDES MBSE and LOTAR MBSE Workshops were conducted in 2021 covering NAS 9300 Part 500 documentation product development, Boeing - MIC to Ap243 Mapping, Data Exchange Solutions, Modelica, FMI and SSP for LOTAR models, SysML v2 review (Friedenthal); using Ap243 (MoSSEC), example of archiving models (LOTAR). Notes and summaries available on request.

2. ISO-IEC/TC1-SC7_N8226_ISOIEC_CD_24641: Methods and Tools for Model Based Systems and Software Engineering review and editing of the second committee draft for submission to the ISO committee. (Robert Malone)

3. Introduction to and review of the current version of the Model Portfolio Management Guideline and adaption by INCOSE as a working group product. (Misak Zetilyan, John Nallon)
IW Outcomes

PLANNED ACTIVITIES AFTER IW

2. Continue working with PDES and LOTAR to modernize data standards to meet the needs of MBSE.
3. Continue weekly collaboration meetings.
4. Continue supporting quarterly PDES/LOTAR workshops.
5. Continue supporting the ISO-IECJTC1-SC7_N8226_ISOIEC_CD_24641: Methods and Tools for Model Based Systems and Software Engineering reviews and comments towards a final ballot and signature for release.

PLANNED WORK PRODUCTS AFTER IW

1. INCOSE Model Portfolio Management Guide