2019
Annual INCOSE
international workshop
Torrance, CA, USA
January 26 - 29, 2019

Tool Integration and Model Lifecycle Management

www.incose.org/iw2019

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125

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INCOSE CONNECT ADDRESS

https://connect.incose.org/WorkingGroups/TIMLM/Pages/Home.aspx

INCOSE WEB PAGE

https://www.incose.org/incose-member-resources/working-groups/transformational/tools-integration-interoperability

Charter Summary

2019 Annual INCOSE international workshop
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WG PURPOSE/MISSION

The Tool Integration and Model Lifecyle Managament Working Group provides a forum for discussion and information dissemination on best practices, methods and processes that promote the development, validation and deployment of standards to advance data exchange capability of digital data created during the product development lifecycle.

WG GOAL(S)

- To characterize systems engineering tool integration and interoperability requirements.
- To specify requirements and assess solutions for model life cycle management and data exchange.
- To provide forums for discussion and information dissemination regarding tool integration, process implementation and effectiveness of data exchange standards.
- To promote the development, validation and deployment of standards that advance the interoperability of systems engineering tool sets.
- To address model lifecycle management concerns and to establish scenarios and best practices that address the needs of the community.
- To determine efficient modeling structures to use including the repository, the models, and data within the models.

WG SCOPE

Our scope is focused on the integration and interoperability of tools, data exchange, and model lifecycle management of models as they relate to Systems Engineering processes and methods throughout a product or system lifecycle.

- The TIMLM WG collaborates with PDES Inc. to discuss, research, validate and promote the development of data exchange standards to incorporate digital artifacts and data exchange standards modernization. Standards include data exchange standards such as ISO10303-AP233, AP239, AP242, AP243, LOTAR, and various OMG and OSLC standards.
- The TIMLM WG also collaborating with Product Performance International and all INCOSE Working Groups to develop, support and maintain a Systems Engineering Tools Database for the systems engineering community. The SETDB will be available from the INCOSE Website to all members.

Planned Work for IW

TIMLM WG - SETDB Opening Session

Sat 26 : 10:30-11:00

Opening Session for the Systems Engineering Tools Database Project. Status for 2018, Agenda for IW2019 and plans for 2019.

SETDB System Model (SysML) Review

Sat 26 : 11:00-12:00

Review of the SETDB SysML System Model

SETDB Operational Concept Review

Sat 26 : 13:00-14:00

Review of the SETDB Operational Concept and documentation.

SETDB System Requirements Review

Sat 26 : 14:00-17:00

SETDB Requirements, capture, analysis and validation

MoSSeC (AP243) Standard and Model Interoperability Review

Sun 27 : 09:00-10:30

The globalization of the aerospace and defence industries is driving large volumes of work to model and simulate product performance and behavior using geographically distributed teams across their supply chain. The modelling and simulation technical data is used to justify change decisions and to validate the product throughout development, certification and in-service. There are mature standards for exchange of the modelling and simulation technical data, but these either do not include traceability to the systems engineering and product data management context, or are inefficient for data sharing. This context information can be summarized as “who”, “what”, “where”, “when”, “how”, “why”, and the goal of the MoSSEC project is to provide the standard for sharing this information. The MoSSEC project will be agnostic of the type of modelling and simulation, and it is the intention that the modelling and simulation data will continue to be exchanged with the technical standards in use today (e.g. AP209, AP210, AP242, FMI). This presentation will describe the rationale and context for the work, provide the status and future plans of the project (developed as part of the ISO suite of STEP standards)."

Planned Work for IW

SETDB Tool Categories and Taxonomy

Sun 27 : 09:00-12:00

SETDB Tool Category review and development

SETDB Tool Vendor Survey Development

Sun 27 : 13:00-17:00

Initiate Tool Vendor Survey development for tool data capture by working groups.

Systems Engineering Tools Database SE Project Planning

Mon 28 : 10:30-12:00

Establish a multiple year SETDB Technical Project Plan

Systems Engineering Tools Database SE Project Planning

Mon 28 : 13:00-15:00

Establish a multiple year SETDB Technical Project Plan

TIMLM WG : LOTAR for MBSE - The Digital Lifecycle

Mon 28 : 13:00-15:00

The MBSE for PDES adventure, the LOTAR MBSE project, the Aerospace and Defense PLM Action Group MBSE Project, and the PDES-INCOSE MoU will be discussed.

Systems Engineering Tools Database SE Project Planning

Mon 28 : 15:30-17:00

Establish a multiple year SETDB Technical Project Plan

TIMLM WG : LOTAR for MBSE - The Digital Lifecycle

Mon 28 : 15:30-17:00

The MBSE for PDES Adventure, the LOTAR MBSE project, the Aerospace and Defense PLM Action Group MBSE Project, and the PDES-INCOSE MoU will be discussed.

Planned Work for IW

SETDB Operations and Maintenance Procedures

Tue 29 : 08:00-10:00

Development of SETDB Operations and Maintenance SOPs

SETDB Test Planning

Tue 29 : 10:30-12:00

Establishment of SETDB Test Plans

SETDB Wrap Up and Next Steps

Tue 29 : 13:00-15:00

SETDB Wrap Up and Next Steps