

2020
Annual INCOSE international workshop
Torrance, CA, USA
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MBSE Patterns

www.incose.org/IW2020

MBSE Patterns





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https://www.omgwiki.org/MBSE/doku.php?id=mbse:patterns:patterns

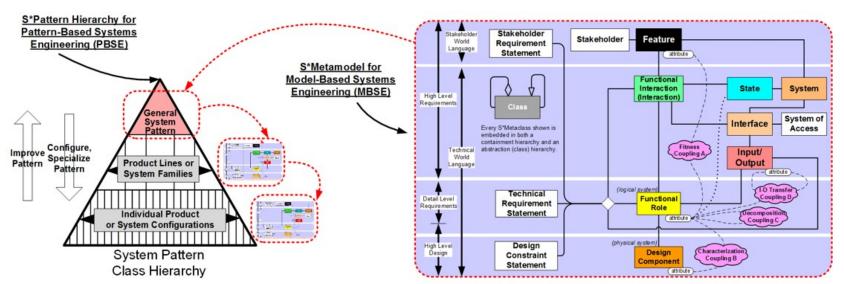
Charter Summary





WG PURPOSE/MISSION

Impactful MBSE Patterns resources and practice--also called Pattern-Based Systems Engineering (PBSE):



S*Metamodel informal summary pedagogical diagram (formal S*Metamodel includes additional details.)

WG GOAL(S)

- Lower model-origination, refinement time, effort, skill load, risk, using configured System Patterns.
- Extend impact of skilled modelers across projects and systems, reduce repeated mistakes, learning
- Improve the ROI demonstrated by MBSE methods and tools.

WG SCOPE

- System Patterns = configurable, re-usable System Models.
- Not limited to, but including, OMG SysML models.
- System Patterns become points of accumulation of organizational learning and expertise.

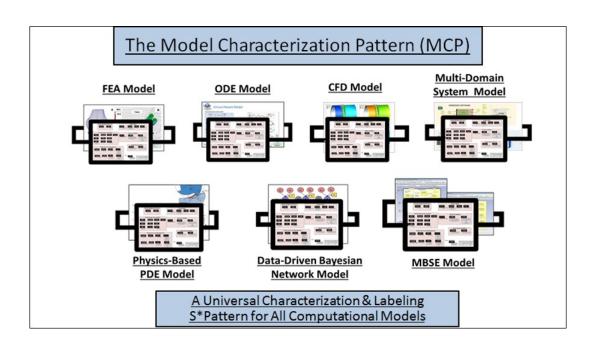
IW Outcomes





IW Outcomes

- Gained approval of Technical Product Plan for ST4SE Project: INCOSE"s first formal product to be based on public distribution of non-document, model-based semantic pattern data structure information.
- Reviewed Model Characterization Pattern (AKA Model Wrapper) use and content.
- Reviewed Vision 2035 Theoretical Foundations pattern inputs.
- Reviewed Innovation Ecosystem Pattern derived from ASELCM Pattern.
- Supported System Science WG, Architecture WG, and Vision 2035 Team.



Planned Work past IW





PLANNED ACTIVITIES

- Internalize Semantic Technologies for Systems Engineering (ST4SE) Project.
- Collaborate with INCOSE Vision 2035 Theoretical Foundations Project.
- Collaborate with ASME VV50 Standards Committee project for Model Credibility
- Collaborate with INCOSE Systems Science Working Group.
- Model Characterization Pattern (Model Wrapper) collaboration with ASSESS.

PLANNED WORK PRODUCTS

- First ST4SE Project Technical Product?Interface Pattern to distribution.
- SE Theoretical Foundations deliverable.
- Model Characterization Pattern (Model Wrapper) to ST4SE distribution.