

Systems Engineering DSIG

- Tuesday, June 21, 2022

Highlights from this Meeting:

SysML v2 Update and Demo– S Friedenthal, HP de Koning, M Bajaj

- SysML v2 language
 - Metadata definition and language extension
 - Representing geometry
- SysML v2 API & Services update
 - Recipes and API Cookbook

SysMD: Experiences from using KerML for inclusive modeling and consistency checking of innovation roadmaps – Dr. Christoph Grimm, Damun Mollahassani

- EU Project funding
- Simplified textual modeling language based on SysML v2
- Includes constraint solver
- Integration with document-based view using annotations

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Highlights from this Meeting (cont.):

- **Analysis Demonstration using Maple with SysML 2.0 - Paul Goossens**
 - Integration of math solver with SysML v2
 - Leverages base capability of SysML v2 API to extract eq's from SysML v2 model
 - Demonstrated application to solve turbofan analysis (> 100 equations)
- **UPR 2.0 - Charles Dickerson, Siyuan Ji**
 - UPL Profile for Rosetta adopted in 2019
 - Mathematical formalism to analyze/transform relationships among design variables
 - Considering alignment with SysML v2
- **Modeling Tool Integration Plugins (MTIP) – Karina Martinez, Trent Severson**
 - Developed by Aerospace Corp
 - Provides XMI alternative (HUDS XML) to provide EA and Cameo interchange
- **INCOSE Systems Engineering Vision 2035 Highlights - S Friedenthal**
 - Identifies factors that influence SE practice and how SE must respond