



Business Informatics Group

The Business Informatics Group together with the Faculty of Informatics at TU Wien, the Austrian Computer Society, and the Center for Computer Science invites to the talk

SysML v2 and the Next Generation of Modeling Languages

Prof Ed. Seidewitz
CTO at Model Driven Solutions, Inc.

When? February 18th, 2019

4 p.m.

Where? TU Wien

1040 Wien, Favoritenstraße 9-11 lecture room ZEMANEK, ground floor



Abstract

The Systems Modeling Language (SysML) is a particularly successful offshoot of the Unified Modeling Language (UML) tailored for Model-Based Systems Engineering. After a decade of growing use of SysML, in 2017 the Object Management Group (OMG) issued a Request for Proposals (RFP) for a new version of the language. This talk will describe work now ongoing to respond to this RFP.

A year into this work, it is clear that SysML v2 needs to be more than just an expansion of the functional capabilities of SysML. Rather, it must address fundamental architectural issues that have made it difficult to further evolve SysML v1 to address the needs of its user community. Therefore, the language is being re-designed using a new kernel metamodel with formally grounded semantics. This kernel can then be extended using semantic model libraries, rather than by expanding the language metamodel itself.

This approach will allow SysML v2 to be not only the modeling language for traditional systems engineering, but also the foundation for a whole new generation of modeling languages.

Bio

Ed Seidewitz is Chief Technology Officer at Model Driven Solutions, Inc., a long-time provider of enterprise and systems architecture services using model-based methods. Mr. Seidewitz has extensive background in state of the art information system technologies and leading expertise in the Unified Modeling Language (UML). He is also experienced in agile system architecture and development in both the commercial and government sectors.

Mr. Seidewitz has been active with the Object Management Group (OMG) for 20 years, including involvement in every UML Revision Task Force and with the Service Oriented Architecture Modeling Language (SoaML) and System Engineering Modeling Language (SysML) specifications. He was primary author of the Foundational Subset for Executable UML Models (fUML) and Action Language for Foundational UML (Alf) specifications and maintains open source reference implementations for both. He is currently chair of the OMG Model Interchange Special Interest Group and of Revision Task Forces for fUML, Alf, Precise Semantics of UML Composite Structures, Precise Semantics of State Machines and Essence. He is also co-leader of the SysML v2 Submission Team and leader of the Precise Semantics of Time for fUML Submission Team.

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