The Business Informatics Group invites together with the Faculty of Informatics of the Vienna University of Technology, the Austrian Computer Society, and the Center for Computer Science to the talk

**UML: Once more with meaning**

**Ed Seidewitz**  
Ivar Jacobson International

**When?** June 25, 2013, 5 p.m.

**Where?** Technische Universität Wien  
1040 Wien, Favoritenstraße 11/EG  
Seminarraum Zemanek

**Abstract**

The Unified Modeling Language (UML) has arguably succeeded in becoming the most commonly used modeling notation for software development. But “modeling” in the software community seems largely to mean simply drawing pictures, either to represent the problem domain or to blueprint a solution, without a precise enough meaning to fully specify the functionality of the system being developed. As a result, the UML standard, up to and including the latest formal version (UML 2.4.1), does not define the semantics of UML models at all precisely.

Nevertheless, there has also long been an interest in models that are more precise, even to the extent that they may be executed in their own right. It has taken a while for this viewpoint to penetrate into the mainstream of UML usage. But there has been a great deal of work in recent years toward the standardization of the formal semantics of UML models – the “meaning” behind the pictures: the Foundational UML (fUML) specification adopted in 2008; the Action Language for fUML (Alf), adopted in 2010; the UML 2.5 specification, currently in finalization [which includes a semantics conformance point for the first time]; and work in progress on the Precise Semantics of UML Composite Structures.

This talk will review the state of this work and the implications in practice of bringing real meaning to UML.

**Bio**

Ed Seidewitz is Chief Technology Officer at Ivar Jacobson International. He has nearly 30 years of professional experience with the modeling, architecture and development of systems spanning diverse domains including aerospace, finance, acquisition and health care. In 2009, his 2003 paper "What Models Mean" was named an IEEE Software magazine 25th Anniversary Top Pick. Mr. Seidewitz has been active with the Object Management Group (OMG) for 15 years, including involvement in every UML 2 Revision Task Force, as well as 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. He is currently chair of the fUML 1.2 Revision Task Force, the Alf 1.1 Revision Task Force and the Essence 1.0 Finalization Task Force; a member of the UML 2.5 Finalization Task Force and the Information Flow Modeling Language 1.0 Finalization Task Force; a leader of the Model Interchange Working Group; and a member of the Precise Semantics of UML Composite Structures submission team.

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