

Proceedings of the Second Workshop on MDSD Today 2008



Elmshorn, Germany

Edited by
Peter Frieze,
Simon Zambrovski
and Frank Zimmermann

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openArchitectureWare – Open-Source-Plattform für modellbasierte Entwicklung

Der Quellcode von Open-Source-Software ist für jedermann frei zugänglich. Dies bedeutet jedoch nicht, dass jeder ein Experte für diesen Code ist. Die Lizenzkosten für Open-Source-Software sind gleich null – professionelle Dienstleistungen rund um die Software sind dennoch nicht irrelevant. Denn lizenzkostenfreie Software erfordert einen starken Partner, der hinter der Software steht.

Coaching und Consulting – Was Sie von uns erwarten können

Wir bieten Ihnen projektbegleitende, individuell angepasste Unterstützung, erfahrene Consultants sowie mitarbeitende Coaches, die Ihnen als technische Projektleiter, Softwarearchitekten, Senior-Entwickler oder als Testverantwortliche zur Seite stehen.

Toolentwicklung – Erfahrung, die sich auszahlt

Unser Team verfügt über eine langjährige Erfahrung im Bereich der Entwicklung von Entwicklungstools. Ob Modellierungstools, Generatoren, Lexer, Parser oder ganze Entwicklungsumgebungen auf Basis von Eclipse: Wir können Sie bei der Umsetzung unterstützen oder die Entwicklung komplett übernehmen.

Die itemis Support-Pakete – Unser Serviceversprechen

Wir versprechen Ihnen hohe Qualität und mit oAW bestens vertraute Mitarbeiter, die Ihre Anfragen bearbeiten. itemis bietet eine Reihe von Support-Paketen an, die es Ihnen ermöglichen, das Beste aus openArchitectureWare herauszuholen.

itemis stellt einen Großteil der openArchitectureWare-Entwickler und liefert daher Support aus erster Hand.

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Preface

Developing Software from models emerged as "Computer Aided Software Engineering" along with desktop computing in the early 90s. Yet the tools being proprietary without a well accepted common standard did not prove as successful as would have been expected. One possible reason could be that they were often used for documentation purposes only. Instead, the upcoming object-oriented programming languages and powerful integrated development environments became standard in commercial enterprise-oriented computing. They proved to be capable of developing complex information systems distributed in a variety of levels, interconnected to many other systems and having user interfaces with a high degree of usability. To achieve this, software developers are forced to become familiar with an ever growing number of frameworks they do not have the time to thoroughly understand. Even worse, many of the frameworks only have a limited life span and others have fast release cycles, thus generating a permanent maintenance problem.

To guarantee productivity in such an environment the idea of using models comes back into mind again. Raising the abstraction to a domain level by using domain-specific modeling languages (DSL) allows the developer to focus on the business requirements and thus free him from the need for detailed technical knowledge. The Object Management Group (OMG) calls this vision "Model Driven Architecture" (MDA), and when you prefer not to refer to the OMG it is called model driven software development (MDSD).

Powerful and flexible mechanisms are needed to make the vision of MDSD become reality. Modern IDEs provide the means for enabling domain specific modeling. The Open Source IDE Eclipse offers a powerful set of tools under the auspices of the Eclipse Modeling Project (EMP). This project centers around the Eclipse Modeling Framework (EMF), which is a pragmatic implementation of most of concepts introduced in OMGs MOF standard. EMP also covers tools to carry out visual and textual modelling, tools for model transformation and tools for code generation. EMF is a very mature and complete open source toolset which has been used in many professional projects.

Even though there are impressive examples that MDSD based on

Eclipse can improve software quality and productiveness, it is still in the phase of early adoption. The goal of this workshop is to facilitate discussion about MDSD in general and the Eclipse Modeling Project among interested commercial users and academic researchers. On the first day information is offered on an executive level. On the second and third day, MDSD is discussed on a more detailed level. Committers of the Eclipse Modeling Project, software architects and researchers will demonstrate how to successfully apply MDSD using the Eclipse Modeling Project.

Frank Zimmermann (Workshop Chair)

Workshop Organization

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