

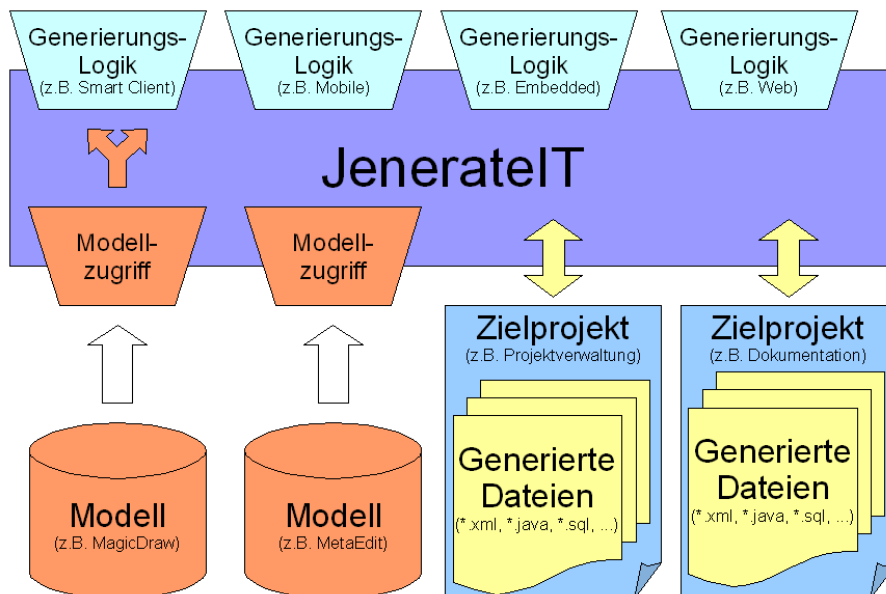
24. January 2009

JenerateIT

Generation made easy

JenerateIT is a tool that makes possible the software development with model-driven approaches. It is well-provided with many practical facilities to develop generation logic effectively and efficiently. The tool is written completely in Java. Our conception of JenerateIT provides for greatest learnability and operability. Moreover, the user should always be able to monitor the generation process as well as the generation outcomes.

Essential components of JenerateIT



JenerateIT has an interface for the model access. Onto this interface, adapters can be mounted to enable direct access to a specific modeling tool. In addition, the implementation of a so-called model converter allows the transformation of the initial model into a form that is easier to process for the generation logic. The outcome of the conversion is passed on to the generation logic.

The generation logic can be divided into generation groups. A generation group typically includes generation logic that pertains to a certain

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Tax numbers

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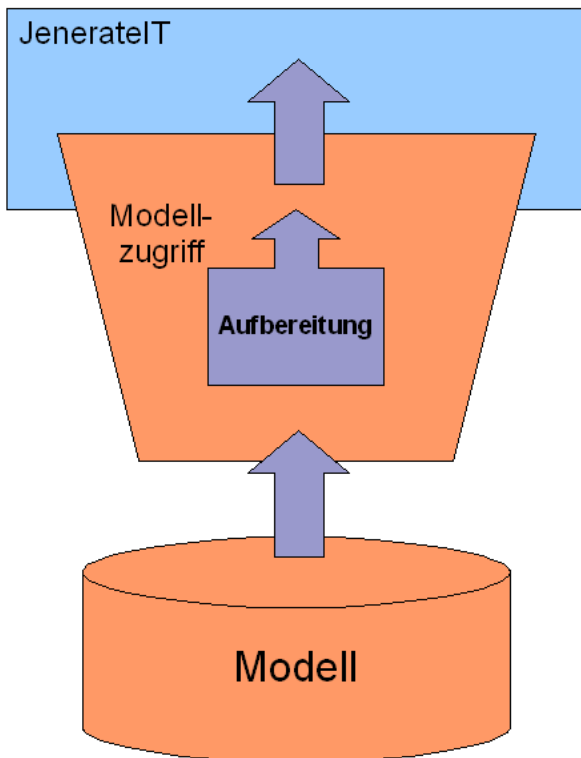
Place of jurisdiction

District court
Freiburg im Breisgau
HRB 700862

functional section of the application that is to be generated - for example, there could be a generation group called "Persistence". Generation groups are correlated with target projects. Among other things, this enables to generate different functional sections into different target projects. With the appropriate attribution however, a complete application can also be generated into exactly one target project.

Models according to your wishes

The number of modeling tools in the sector is large. Accordingly large is the number of formats in which the models are available. JenerateIT provides the facility to directly access the



modeling tools via adapters. The adapters read the model elements from the modeling tools and provide them for JenerateIT. Changes in the model can thus directly be considered in the next generation. A time-consuming export of the model and a following import into JenerateIT can be omitted.

Adapters do already exist for MagicDraw from NoMagic and MetaEdit+ from MetaCase. With a model converter, the model data is transferred into a format independent from the modeling tool. During the conversion, the model can be enriched with additional information or it can be reduced to information essential for the generation. The possibility of model conversion also allows to construct a modeling style and reference models independent of a specific modeling tool. Thus, generation logic can be developed without having

chosen a specific modeling tool already. Because they are independent of each other, the development of the model conversion and the development of the generation logic can be performed by different developers and/or can be divided into several project periods.

Generation in the style of JenerateIT

To keep the development of generation logic simple, the JenerateIT-API has only few elements. The three major ones are: "generation group", "target" and "writer". Writers produce the content in the target files and thus contain the largest part of the generation logic. Simple write-commands enable the developer to write into a target file. A target always represents one target file and determines what writer can write into a target file. Generation groups form logical entities for targets. Thus, a generation logic can be divided. Through this division, it can be determined what contents are to be generated into which target projects. In addition, it can be defined which part if the generation logic is to be conducted in a generation run.

Under control

During the process of generation, JenerateIT records all the important data and procedures of the generation in a generation report. This report is analyzed and edited by JenerateIT. With Java IDE for example, it can then be traced what writer had written which part of a target file. Equally, statistical data can be investigated, like for example the number of modified areas of developer and the duration of generation.

One generator for all formats

JenerateIT does not prescribe a format for the single target files. Therefore, it is possible to create binary files as well as ASCII files. Thus, documentations can be generated for example in the format PDF, MS-Word or HTML. The direct creation of Java Bytecode or Microsoft's Common Intermediate Language would also be possible.

One language for everything

Model converter and generation logic are to be developed in Java. As a result, the whole scope of facilities of the Java platform is available.

About us

The Generative Software private limited company was founded January 18th 2007 by the certified mathematician Marcus Munzert and the qualified engineer Heinz Rohmer. The company is based in Freiburg (im Breisgau).

We offer services and tools to maximize effectivity and efficiency in software development. We focus our attention on methods of model-driven software development. In our consulting service, we consider technical, organizational, and economical as well as human factors.