WWTF Project ICT10-018

FAME: Formalizing and Managing Evolution in Model-Driven Engineering

Abstract

Like traditional program code, software models are not resistant to change, but evolve over time by undergoing continuous extensions, corrections, and modifications. In model-driven engineering (MDE), evolution is multidimensional leading to the model management tasks of synchronization, versioning, and co-evolution. Whereas each of these tasks has recently received increased research interest, a systematic comparison and evaluation of the different approaches is missing. Within the FAME project, we aim at establishing a uniform framework characterizing changes and their impacts. The resulting findings will provide the basis for a suite of efficient techniques for avoiding unexpected side-effects of evolution. We will use different, well-explored formalisms with powerful inference engines exploiting concise semantic definitions of the modeling languages. By this, FAME will contribute to reliable change propagation indispensable for automatic quality assurance in MDE.

Keywords:

Model Evolution, Model Management, Model Quality, Change Propagation

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Further links about the involved persons and regarding the project you can find at

https://archiv.wwtf.at/programmes/information_communication/ICT10-018