

Workshop Report from the 10th IEEE ECBS'2003 conference, Huntsville, Alabama, April 9th and 10th, 2003

Model-Based Development of Computer Based Systems: Features, Components and Architectures

Objective

The intention was to establish a working group for continuous work during the next few years, to identify topics and to start the work in the group. For organizing this work a schedule and the outline of a paper for the next year's ECBS conference were to be defined.

Procedure

The workshop took place at April 9th and 10th as part of the ECBS'2003 conference. It consisted of

- an introduction of the participants, their background and research interest
- 6 presentations (see conference proceedings)
- and five hours of group work.

The presentations were connected with extensive discussions and gave inspirations for setting up topics for the work in the group and for the following time.

The participants did a brain storming for collecting open problems in the field of application of models in engineering of computer-based systems. Afterwards a classification of these topics and the elaboration of a vision were done. A skeleton for a paper and a working plan were developed. The participants committed themselves to strongly cooperate and participate in the working plan.

Results

Vision

The vision was developed for the working group for the next IEEE ECBS MBD workshops.

It is intended to integrate different kinds of models into a continuous usage throughout the whole life cycle of computer-based systems (CBS). To change the way of developing CBS, some kind of standard for establishing models shall be provided. Support will given by identifying appropriate models for the particular life cycle steps. Between these models a mapping and means of transition shall be elaborated, to persevere persistence of the different kinds of models.

Work plan

For the next year's ECBS conference, a comparison of the applicability of different approaches to an example domain is to be done.

Schedule for the continuous work throughout the year

Cooperation platform

Web Forum,
Mailing List

Participants

Frank Keller
John Leaney
Frank Marschall
Byron Purves
Matthias Riebisch
Silva Robak
Willi Rossak
Ethan Scarl
Bernhard Schätz
Roy Sterritt
Peter Wolstenholme
Lugang Xu

List of Papers

F.H. Wagner, **P. Wolstenholme**: Modeling and Building Reliable, Re-useable Software

B. Schätz, P. Braun, F. Huber, A. Wisspeintner: Consistency in Model-Based Development

D. Streitferdt, **M. Riebisch**, I. Philippow: Formal Details of Relations in Feature Models

S. Robak, A. Pieczynski: Employing Fuzzy Logic in Feature Diagrams to Model Variability in Software Product-Lines

F. Marschall, M. Schoenmakers: Towards model-based Requirements Engineering for web-enabled B2B Applications

G. Butler, X. Shen, **L. Xu**: Issues on Architectural Modeling and Evolution in the *Know-It-All* Case Study

Organizers

Matthias Riebisch Matthias.Riebisch@tu-ilmenau.de
Silva Robak s.robak@ioz.uz.zgora.pl
Willi Rossak rossak@informatik.uni-jena.de