SIVOES1 - MDA:

Model Driven Architecture

Workshop at <u>UML 2003</u> October 20 - 24, 2003 San Francisco, California, USA

WORKSHOP OVERVIEW

This workshop is part of a series of workshops on object-oriented (OO) approaches to developing distributed embedded real-time system (DRES) (SIVOOES 2000 and SIVOES'2001 at ECOOP, FDTRT'2000, CIUML 2001 and SIVOES-MONA 2002 at UML).

The latest OMG initiative (already two years old), called MDA -- for "Model Driven Architecture" – puts forward the idea that the growing complexity of software systems and the rapid rate of change in technology can be more effectively tackled by making models the primary focus of development. Modelling abstractions enable the separation of platform-independent concerns from platform-specific concerns, thus allowing developers to better manage changes in technology. The OMG has initiated activities (e.g. MOF 2.0 Query/View/Transf. RFP) to promote the development and use of technologies that pave the way for the use of MDA in industry.

A significant feature of the MDA paradigm is the support it gives engineers for building application models that can be conveniently ported to new, emerging technologies - implementation languages, middleware, etc.- with minimal effort and risk.

In the DRES area, the model-based development paradigm is gaining attention and there is a growing awareness of the benefits that can be reaped. The purpose of this workshop is to provide a forum for researchers, academicians, engineers and other practitioners to debate the advantages and drawbacks of applying model driven architecture to distributed embedded systems, and relate and discuss MDA experiences.

TOPICS

The workshop aims to bring together experts from academia and industry to consider software engineering issues related to applying UML in distributed embedded system development in a lodel driven architecture. The following is a partial list of topics that are expected to be covered by the workshop:

- Specifying distributed embedded systems in an MDA architecture
- Verification and testing that can be performed at model level
- Use of the UML model later in the lifetime of the developed system
- Place of the platform dependent information (model of the platform of other)

FORMAT OF THE WORKSHOP

This full-day workshop will be divided in two parts: first one dedicated to presentations of position papers, and a second one to specific discussion groups. First, the workshop organizers will select 2 or 3 of the submitted position papers to introduce the workshop subject and initiate discussions. In the second part, separate focus groups will be formed to investigate individual topics. The set of topics will be provided by the organizers to all participants prior to the workshop to allow preparation for the discussions. Each working group will then summarize their conclusions and will present them to the plenary group at the conclusion of the workshop.

Specification, Implementation and Validation of Object-oriented Embedded Systems

SUBMISSIONS & PARTICIPATION

To participate in this workshop, please send a position paper to to <u>Sébastien Gérard</u> via email. The papers should not exceed 10 pages (10 pt., single space) and should be in one of the following file formats: plain text, postscript, pdf or word.

Accepted submissions will be placed on the workshop web site and will be published in the Electronic Notes in Theoretical Computer Science (ENTCS) published on the web by Elsevier as an electronic companion to the journal Theoretical Computer Science in a volume dedicated to the UML 2003 workshops.

IMPORTANT DATES

Submission deadline: 15 August 2003 Notification date: 30 August 2003

Workshop date: 21 October 2003, during the UML 2003 conference

ORGANISERS

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