FUSE 2004

held in conjunction with ETAPS 2004

March 27- April 4, 2004
Barcelona, Spain

at Universitat Polytècnica de Catalunya

Workshop on
Foundations of Unanticipated Software Evolution

March 27-28, 2004 http://joint.org/fuse2004/

Organisers

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(Programme Chair)

Call for Papers

Many studies of complex software systems have shown that unanticipated changes account for most technical problems and related costs of software evolution. By definition, unanticipated software evolution (USE) is not something which we can prepare for during the design of a software system. Therefore, support for unanticipated software evolution is a key issue for software development tools and techniques, programming languages, component models and runtime infrastructures. Without it, unanticipated changes often force software engineers to perform extensive invasive modification of existing architectures, designs and code.

This two-day workshop will address formal techniques that help to perform, analyse and manage unanticipated static and dynamic evolution of software. It is a successor of the second workshop on *Unanticipated Software Evolution* (at ETAPS 2003) and of the first workshop on *Formal Foundations of Software Evolution* (at CSMR 2001).

Topics of Interest The workshop is intended to cover all aspects of unanticipated software evolution, from theoretical foundations to empirical studies. Topics of interest include, but are not limited to:

- Formal approaches, language concepts and implementation techniques for USE.
- USE support at different stages of a program's life-cycle: design time, compile time, load time and run time.
- USE support in programming languages, component models and related infrastructures (such as JVM, EJB, JavaBeans, CORBA, DCOM, and .NET).
- USE support by meta-programming, reflection, prototype-based, generative, agile, and aspect-oriented approaches.
- Consistency, safety, integrity, constraint enforcement and dependency management issues.
- Learning from object-oriented databases: Application of techniques for schema evolution and instance adaptation for run-time USE.
- Experience reports on engineering for 24x7 availability and on-line software upgrades.
- Related descriptions of hard problems from a practitioner`s perspective.

Attendance Attendance at the workshop is by invitation based on submitted papers, and will be limited to approximately 20 people in order to facilitate lively discussion and the exchange of ideas.

Important dates

Online submission possible as of:	December 1st, 2003
Paper submission deadline:	December 14, 2003
Notification of acceptance or rejection:	January 23, 2004
Deadline for final versions:	February 13, 2004
Programme and online proceedings available:	February 27, 2004
Workshop:	March 27-28, 2004

Submission Guidelines We seek high-quality submissions in two categories:

- Full technical papers, describing original, unpublished research (between 10 and 15 pages).
- Work-in-progress papers, describing on-going work and interim results (up to 6 pages).

All submissions must be made through the electronic submission system that will be reachable from the workshop website starting December 1st, 2003. All articles must include an abstract and the full contact information of at least one author. For information about formatting your submissions please read carefully the following guidelines.

Workshop Proceedings All **full** papers that have gone through the regular review process, have been accepted for the workshop and adhere to the submission guidelines laid out below, will be published as a special issue of Elsevier's *Electronic Notes in Theoretical Computer Science*. Printed copies will be handed out to the participants at the workshop.
For inclusion in the proceedings, the final versions of accepted **full** papers must be submitted in Postscript format and also as LaTeX sources. This is required in order to compile the proceedings. Please use the *ENTCS LaTeX style* for the final version.

All **short** (work in progress) papers will be included in the online proceedings (see below) and will be printed as an addendum to the proceedings to be handed out to participants at the workshop. For inclusion in the addendum, the final versions of accepted **short** papers should preferably use *LaTex article style* and be submitted in Postscript or PDF format and also as LaTeX sources. Authors of short papers who cannot provide LaTeX format are requested to indicate this in their submission.

Online Proceedings The online proceedings will contain all the acepted papers. They will be made available on the workshop website four weeks in advance (see important dates). Participants are required to prepare for the workshop by reading at least three papers from the online proceedings. See the description of the workshop format to understand why this is essential.

Workshop Format In keeping with the spirit and format of a workshop, FUSE will have a highly discursive nature, with different theme-based discussion tracks. All invited participants will be able to briefly present their work. There will be plenty of time for discussion of presentations and subsequent discussions in small focus groups. Please see the website for more details on the workshop format.

Journal Special Issue The ENTCS copyright explicitly encourages authors to write journal-length articles based on their papers that appear in ENTCS for publication in other scientific journals. Depending on the quality and number of full paper submissions, editing of a special issue with best papers of the workshop is considered by the organizers.

Program Commitee

… to be announced …