CALL FOR PAPERS

ICSE 2002 Workshop on
Architecting Dependable Systems

Orlando, Florida
25 May, 2002

http://www.cs.ukc.ac/wads

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Architectural representations of systems have shown to be effective in assisting the
understanding of broader system concerns by abstracting away from details of the system.
The dependability of systems is defined as the reliance that can justifiably be placed on the
service the system delivers. Dependability has become an important aspect of computer
systems since everyday life increasingly depends on software. Although there is a large body
of research in dependability, architectural level reasoning about dependability is only just
emerging as an important theme in software engineering. This is due to the fact that
dependability concerns are usually left until too late in the process of development. In
addition, the complexity of emerging applications and the trend of building trustworthy
systems from existing, untrustworthy components are urging dependability concerns be
considered at the architectural level. Hence the questions that the software architecture and
dependability communities are currently facing: what are the architectural principles
involved in building dependable systems? How should these architectures be evaluated?

By bringing together researchers from both the software architectures and the dependability
communities, this workshop will make contributions from dependability more visible within
the software engineering community and vice-versa, thus helping to build strong
collaboration possibilities among the participants. The workshop will provide software
engineers with systematic and disciplined approaches for building dependable systems, as
well as allow further dissemination of the state of the art methods and techniques.

OBJECTIVES AND TOPICS

The aim of the workshop is to bring together the communities of software architectures and
dependability to discuss the state of research and practice when dealing with dependability
issues at the architecture level, and to jointly formulate an agenda for future research in this
emerging area. We are interested in submissions from both industry and academia on all
topics related to software architectures for dependable systems. These include, but are not
limited to:

- dependability modeling in software architectures;
- verification and validation of dependable software architectures;
- adaptable architectures for achieving dependability;
- run-time checks of dependable architectural model;
- dependability evaluation in software architectures;
- architectural patterns for dependable systems;
- exception handling for software architectures;
- redundancy and diversity at the level of architectures.

PARTICIPATION AND SELECTION PROCESS

The workshop is open to all researchers, system developers and users who are involved with
or have an interest in dependability at the architecture level. All prospective participants
should submit an extended abstract, work-in-progress report or position paper. The
submissions should be between 4 and 5 pages. They should explain the contribution to the
field and the novelty of the work, making clear the current status of the work. Workshop
paper submissions should be sent electronically (preferably in PDF format), by the
submission date, to icse-wads@ukc.ac.uk

The number of participants will be between 20 and 30, and it will be restricted to authors of
accepted papers and to a few invited guests.

IMPORTANT DATES

Submission deadline: 11 March 2002
Author notification: 1 April 2002
Camera ready copy: 7 April 2002