

First International Workshop on Incorporating COTS into Software Systems

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Abstract. This workshop explores innovative ways of integrating COTS software into software systems for purposes often unimagined by their original designers. It emphasizes tools and techniques for plugging COTS into software systems safely and predictably. The past has predominantly explored how to deal with COTS integration during requirements engineering, risk assessment, and selection. This workshop focuses on how to complement ordinary software development with techniques for designing, implementing, and testing COTS integration.

1 Introduction

There is empirical evidence that COTS integration is not like ordinary software development. It has been shown that, for example, writing glue code is several times more difficult than writing ordinary application code. Thus the emphasis of this workshop is on software engineering principles for COTS integration. This includes but is not limited to the following topics:

- how to write the glue code
- how to implement data and control dependencies
- how to mediate between incompatible interfaces
- how to make the COTS tool aware of its surroundings
- how to architect/design/simulate COTS integration
- how to do code generation
- how to resolve stumbling blocks and risks
- how to integrate user interfaces
- how to handle new COTS releases and other evolution issues
- how to reverse engineer
- how to design product lines with COTS
- how to build domain-specific architectures with COTS
- how to test COTS-based systems

2 Organization

The call for papers is available at <http://www.tuisr.utulsa.edu/iwicss/>. Prospective participants may submit a position paper of up to 6 pages. To focus contributions, both theoretical contributions and experience reports are welcome. The submission of a position paper is not mandatory; the workshop is open to anyone who is interested in the problems of COTS integration

The submissions are subject to review by at least three different program committee members and selection is based on relevance, soundness, and novelty.

The workshop is divided into sessions. Topics of the working sessions will be determined based on the distribution of accepted position papers. Each session will cluster presentations of varying lengths where authors will have an opportunity to present the main ideas of their position papers. The presentations shall serve as an opening statement of the sessions, after which there will be time reserved for in-depth discussions of the presentations, related issues, and the implications for future research.

The best position papers will be selected for expansion and subsequent journal publication.

3 Organizing and Program Committee

- Francis Bordeleau
- Lisa Brownsword
- Alexander Egyed
- Rose Gamble
- Anna Liu
- Nenad Medvidovic
- Maurizio Morisio
- Dewayne E Perry
- Judith Stafford
- Tarja Systa
- Ye Wu

Panels Introduction

The panels for ICCBSS 2004 address various hot topics for COTS-based systems development, such as a) the new role of requirements and their corresponding activities; b) information security as a built-in software feature; and c) standardization of components and their interfaces and consensus on reference architecture.

The organizers are experienced practitioners (Judy Kerner from the Aerospace Corporation) and researchers (Carol Sledge from the SEI and Xavier Franch from Universitat Politecnica de Catalunya, Spain). The panels' members are selected representative of various industry domains, from both the COTS vendor and consumer camps, as well as of research institutes and universities, from the US and Europe.

Lively and fruitful discussions are expected between the audience and the panelists. Critical questions will be raised and even if not all the problems will find solutions on the spot - as usually happens with panels - they will certainly increase awareness of issues and will facilitate communication among diverse participants.