COTS-Based Software Systems

Third International Conference, ICCBSS 2004
Redondo Beach, CA, USA, February 1-4, 2004
Proceedings
Preface

In the short space of about a decade, Commercial-Off-the-Shelf (COTS) software has evolved through being a relatively minor aspect of software development; a top-management-endorsed silver bullet solution for software development; a disruptive technology requiring people and organizations to extensively rethink their approaches to software development; to an increasingly well-understood software phenomenon for which effective solutions are being developed.

Part of this understanding has been to recognize that different COTS application sectors can be at different stages of this evolution. Some sectors are just beginning to become COTS-intensive. Some have evolved COTS solutions that are very well matched to their problem domain. Others, including most large-scale applications, still involve their developers in rethinking how to adapt their traditional software architectures, processes, management practices, and personnel skills to accommodate economically attractive but complex combinations of powerful but incompletely compatible and independently evolving COTS products.

The series of International Conferences on COTS-Based Software Systems (ICCBSS) has been established as a continuing forum for bringing together CBSS developers, suppliers, and researchers to summarize and discuss progress toward understanding and resolving CBSS problems. This year’s conference theme, “Matching Solutions to Problems,” reflects this objective. We have been fortunate to have three outstanding keynote speakers, David Carr, Tricia Oberndorf, and Douglas Schmidt, who have contributed significantly both in analyzing CBSS problems and developing better CBSS solutions.

The contributed papers and summaries of workshops, panels, and tutorials in these Proceedings give a good understanding of the nature and directions of evolution of CBSS problems and solutions. As has been my experience with previous ICCBSS Proceedings volumes, I believe that you will find lasting value in the content of the Proceedings.

I would like to express a special note of thanks to all of the members of ICCBSS 2004 organizing committee, program committee, and individual committees listed in the Proceedings. Their capable and dedicated volunteer efforts are what continues to make the ICCBSS series a timely and useful experience and contribution toward improved CBSS practices. I would also like to thank the Northrop Grumman Corporation for its sponsorship of ICCBSS 2004, and the overall sponsoring organizations of the ICCBSS series: the Canadian National Research Council, the CMU Software Engineering Institute, the European Software Institute, and the USC Center for Software Engineering.

January 2004

Barry Boehm, General Chair
Welcome to the Proceedings for the 3rd International Conference of COTS Based Software Systems. The conference is still young, but it is vital and growing fast. This year there were a total of 57 submissions on all aspects of COTS, with about 60% of these coming from the United States and the remainder from Europe, and Asia. Equally encouraging, we had about equal numbers of submissions coming from academia and industry. This shows that ICCBSS is hitting our target audience—both practitioners and researchers interested in the effective use of COTS.

The specific program statistics are as follows:

- 4 tutorials submitted
- 3 tutorials accepted
- 4 panels submitted
- 3 panels accepted
- 10 experience presentations submitted
- 8 experience presentations accepted
- 39 refereed papers submitted
- 17 refereed papers accepted
- 2 invited workshops

We were uniformly impressed with the high quality and broad scope of these submissions. There were about an equal number of technically focused and managerially oriented submissions whose topics generally fell into three tracks: COTS Product Evaluation and Selection, COTS-Based System Definition and Development, and COTS-Based System Evolution and Management.

The superb quality of the submissions and the invited workshops continues to indicate the importance and interest in COTS based system development and issues. With this trend, ICCBSS 2005 will prove to be even more exciting!

Dan Port, Rick Kazman
ICCBSS Proceedings Editors
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