

Preface

This volume contains the proceedings of DAIS 2003, the 4th IFIP WG 6.1 International Conference on Distributed Applications and Interoperable Systems. The conference was held in Paris on November 17–21, 2003. The event was the fourth meeting of this conference series, which is held roughly every two years. Previous editions were held in 1997 in Cottbus (Germany), in 1999 in Helsinki (Finland), and in 2001 in Krakow (Poland).

Following the evolution of the field, DAIS 2003 focused on models, technologies and platforms for reconfigurable, scalable and adaptable distributed applications. In keeping with this focus, the call for papers especially encouraged original unpublished papers addressing the following topics:

- new/extended software architectures and frameworks for reconfiguration and adaptation including component-based approaches (e.g., CORBA Components, EJB, .NET),
- modelling, specifying, monitoring and management of context-aware and adaptive applications,
- support for reconfiguration, self-organization and autonomic behavior in new/existing distributed platforms (e.g., CORBA, J2EE, .NET, WebServices),
- integration of multi-agent distributed decision-making,
- application environments that exploit characteristics of specific technologies (e.g., grid computing, mobile and wireless),
- issues in enterprise-wide and large-scale application reconfiguration,
- semantic interoperability and semantic web services.

We organized a program committee composed of 31 experts of the field. The program committee agreed on a call for papers and reviewed 88 submitted papers, 76 long papers (12 pages) and 12 short papers (5 pages). The program committee selected 21 long papers and 2 short papers; 4 long papers were accepted as short papers. Overall, the acceptance rate was less than 1 in 3.

The DAIS 2003 technical program covered many aspects that reflect the evolution of the field. Among the selected papers, we identified the following topics, each of which corresponded to a session of the conference technical program:

- adaptation, separation of concerns,
- deployment,
- security and transactions,
- replication,
- networking and routing,
- discovery, context-awareness and ontologies,
- asynchronous messaging.

We would like to express our deepest appreciation to the authors of all submitted papers and to the program committee members and external reviewers who did an outstanding job in selecting the best papers for presentation. For the first time, the DAIS conference was held as a joint event in federation with the 6th IFIP WG 6.1 International Conference on Formal Methods for Open Object-based Distributed Systems (FMOODS 2003). The co-location of the 2003 vintages of the FMOODS and DAIS conferences provided an excellent opportunity to the participants for a wide and comprehensive exchange of ideas within the domain of distributed systems and applications. Both FMOODS and DAIS address this domain, the former with its emphasis on formal approaches, the latter on practical solutions. Their combination in a single event meant that both theoretical foundations and practical issues were presented and discussed. Also due to the federation of the two conferences, the topics of reconfigurability and component-based design were particularly emphasized this year, along with the many open issues related to openness and the interoperability of distributed systems and applications. To further the interaction between the two communities, participants at the federated event were offered a single registration procedure and were entitled to choose freely between DAIS and FMOODS sessions. Also several invited speakers were explicitly scheduled in joint sessions. As another novelty, this year's conference included a two-day tutorial and workshop session, the latter again explicitly held as a joint event.

We would like to thank the members of the executive committee, with special thanks to Fabrice Kordon and Laurent Pautet for help with running the electronic submission system.

We are grateful to Bertrand Meyer, Andrew Herbert, Bart Jacobs, Alan Cameron Wills and David Chambliss for agreeing to present invited talks at the conference.

We would also like to thank the DAIS steering committee (Kurt Geihs, Guy Leduc, Hartmut Koenig and Kerry Raymond) for their advice, and the sponsors for their contribution.

November 2003

Jean-Bernard Stefani, General Chair
Isabelle Demeure and Daniel Hagimont, Program Chairs
DAIS 2003

Organization

DAIS 2003 was organized by ENST (École Nationale Supérieure des Télécommunications), Paris. DAIS 2003 was held in conjunction with FMOODS 2003.

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At the time of writing, we had received sponsorship from CNRS-ARP, GET, EDF, ENST, and INRIA. Other contributors were also expected. We extend our thanks to all of them.

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Distributed Applications and Interoperable Systems
4th IFIP WG6.1 International Conference, DAIS 2003,
Paris, France, November 17-21, 2003, Proceedings
Stefani, J.-B.; Demeure, I.; Hagimont, D. (Eds.)
2003, XIV, 318 p., Softcover
ISBN: 978-3-540-20529-6