Lecture Notes in Computer Science 3165

Commenced Publication in 1973
Founding and Former Series Editors:
Gerhard Goos, Juris Hartmanis, and Jan van Leeuwen

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Grid Computing

Second European AcrossGrids Conference, AxGrids 2004
Nicosia, Cyprus, January 28-30, 2004
Revised Papers

Springer

Volume Editor

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Library of Congress Control Number: 2004113302

CR Subject Classification (1998): C.2.4, D.1.3, D.2.7, D.2.12, D.4, F.2.2, G.2.1

ISSN 0302-9743
ISBN 3-540-22888-8 Springer Berlin Heidelberg New York

Typesetting: Camera-ready by author, data conversion by Olgun Computergrafik
Printed on acid-free paper SPIN: 11314103 06/3142 5 4 3 2 1 0

General Chairs' Message

As conference co-chairs, we have great pleasure in writing this short foreword to the proceedings of the 2nd European AcrossGrids Conference (AxGrids 2004). The conference clearly demonstrated the need in Europe for an annual event that brings together the grid research community to share experiences and learn about new developments. This year, in addition to the large number of attendees from across the 25 member states of the European Union, we were especially pleased to welcome fellow researchers from the Americas and the Asia – Pacific region. Only by talking and working together will we realize our vision of building truly global grids.

In addition to the main AxGrids 2004 conference, and thanks to the large number of researchers from European Commission-funded projects who were present, we were able to run a series of GRIDSTART Technical Working Group meetings and we are indebted to the conference organizers for helping with the logistics of this parallel activity.

In particular we would like to express our gratitude to Marios Dikaiakos and his team for working tirelessly over many months to make the conference the smooth-running success that it was. Of course, no conference is complete without speakers and an audience and we would like to thank everyone for their interest and engagement in the many sessions over the three days of the event.

AxGrids 2004 once again demonstrated the need in Europe for an event to bring together the research community. As we move forward into Framework 6 we look forward to its continuation and expansion to represent all of the grid research community in Europe.

June 2004

Mark Parsons
Michal Turala

Editor's Preface

The 2nd European AcrossGrids Conference (AxGrids 2004) aimed to examine the state of the art in research and technology developments in Grid Computing, and provide a forum for the presentation and exchange of views on the latest grid-related research results and future work. The conference was organized by CrossGrid, a European Union-funded project on Grid research, GRIDSTART, the EU-sponsored initiative for consolidating technical advances in grids in Europe, and the University of Cyprus. It continued on from the successful 1st European Across Grids Conference, held in Santiago de Compostela, Spain, in February 2003. AxGrids 2004 was run in conjunction with the 2nd IST Concertation Meeting on Grid Research, which brought together representatives from all EU-funded projects on Grid research for an exchange of experiences and ideas regarding recent developments in European grid research.

The conference was hosted in Nicosia, the capital of Cyprus, and attracted authors and attendees from all over Europe, the USA, and East Asia. The Program Committee of the conference consisted of 37 people from both academia and industry, and there were 13 external reviewers. Overall, AxGrids 2004 attracted 57 paper submissions (42 full papers and 15 short posters). Papers underwent a thorough review by several Program Committee members and external reviewers. After the review, the Program Chair decided to accept 26 papers (out of 42) for regular presentations, 8 papers for short presentations, and 13 papers for poster presentations. Accepted papers underwent a second review for inclusion this postproceedings volume, published as part of Springer's Lecture Notes in Computer Science series. Eventually, we decided to include 27 long and 3 short papers, which cover a range of important topics of grid research, from computational and data grids to the Semantic Grid and grid applications.

Here, we would like to thank the Program Committee members, the external reviewers, and the conference session chairs for their excellent work, which contributed to the high-quality technical program of the conference. We would also like to thank the University of Cyprus, IBM, GRIDSTART, and the Cyprus Telecommunications Authority (CYTA) for making possible the organization of this event through their generous sponsorship. Special thanks go to Maria Poveda for handling organizational issues, to Dr. Pedro Trancoso for setting up and running the Web management system at the Computer Science Department at the University of Cyprus, and to Kyriacos Neocleous for helping with the preparation of the proceedings.

I hope that you find this volume interesting and useful.

Nicosia, Cyprus, June 2004 — Marios D. Dikaiakos

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