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Advances in Grid Computing – EGC 2005

European Grid Conference
Amsterdam, The Netherlands, February 14-16, 2005
Revised Selected Papers

Springer

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Preface

> "When the network is as fast as the computer's internal links, the machine disintegrates across the net into a set of special purpose appliances." (George Gilder)

We are proud to present to you the proceedings of the European Grid Conference 2005, held at the Science Park Amsterdam during February 14–16.

The aim of the European Grid Conference was to be the premier event on Grid computing in Europe in 2005, focusing on all aspects of Grid computing and bringing together participants from research and industry. EGC 2005 was a follow-up of the Across Grids Conferences held in Santiago de Compostela, Spain (2003) and in Nicosia, Cyprus (2004).

We decided to have three main tracks during this conference: one with peer-reviewed scientific contributions, one with presentations from business and industry, and one event track with presentations from European and national Grid projects.

In order to guarantee high-quality proceedings, we put extensive effort into reviewing the scientific papers and processing the proceedings. We received over 180 papers from which, after peer review by 2–3 reviewers each, we selected 70 for oral presentations and 52 for poster presentations during the scientific tracks. In this book you find the final versions of these accepted papers.

After the conference opening by the Dean of the Faculty of Science of the University of Amsterdam, Prof. Dr. K.J.F Gaemers, we enjoyed a series of inspiring keynote lectures and two parallel scientific tracks over three days.

The keynote addresses were given by:

- Domenico Laforenza "Towards a Next Generation Grid: Learning from the Past, Looking into the Future"
- Bob Hertzberger "e-Science and Grid"
- Wolfgang Boch "Moving Grids from Science into Industry and Business – Challenges of EU Grid Research"
- Peter Coveney "Real Science on Computational Grids"
- Thierry Priol "Objects, Components, Services for Grid Middleware: Pros and Cons"
- Malcom Atkinson "Lessons Learned Building OGSA-DAI — Middleware for Distributed Data Access"
- Carol Goble "Semantic(Grid services)+(Semantic Grid)Services"
- Carl Kesselman "Managing Work Across Virtual Organizations: The GriPhyN Virtual Data System"

We would like to express our sincere thanks to the invited speakers who delivered such high-quality lectures at EGC 2005.

The scientific programme of the conference was organized along the following tracks:

- Applications
- Architecture and Infrastructure
- Resource Brokers and Management
- Grid Services and Monitoring
- Performance
- Security
- Workflow
- Data and Information Management
- Scheduling Fault-Tolerance and Mapping

This conference would not have been possible without the support of many people and organizations that helped in various ways to make it a success.

First of all we would like to thank the authors who took the effort to submit so many high-quality papers. We thank the Programme Committee for their excellent job in reviewing the submissions and thus guaranteeing the quality of the conference and the proceedings. We thank Lodewijk Bos and his staff for their practical assistance and support. Many thanks go to Coco van der Hoeven for her secretarial work. Dick van Albada, Berry Vermolen, Dennis Kaarsemaker and Derek Groen are acknowledged for their punctuality in preparing the proceedings.

We thank our sponsors for their financial support: the Board of the University of Amsterdam, the Science Faculty and the Institute for Informatics. Finally we thank the Dutch Science Foundation NWO, Section Exact Sciences.

February 2005

P.M.A. Sloot, A.G. Hoekstra, T. Priol, A. Reinefeld and M. Bubak

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