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Ambient Networks

16th IFIP/IEEE International Workshop
on Distributed Systems: Operations and Management, DSOM 2005
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Proceedings



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Preface

This volume of the Lecture Notes in Computer Science series contains all the papers accepted for presentation at the 16th IFIP/IEEE International Workshop on Distributed Systems: Operations and Management (DSOM 2005), which was held at the University Politècnica de Catalunya, Barcelona during October 24–26, 2005.

DSOM 2005 was the sixteenth workshop in a series of annual workshop and it followed the footsteps of highly successful previous meetings, the most recent of which were held in Davis, USA (DSOM 2004), Heidelberg, Germany (DSOM 2003), Montreal, Canada (DSOM 2002), Nancy, France (DSOM 2001), and Austin, USA (DSOM 2000). The goal of the DSOM workshop is to bring together researchers in the areas of networks, systems, and services management, from both industry and academia, to discuss recent advances and foster future growth in this field. In contrast to the larger management symposia, such as IM (Integrated Management) and NOMS (Network Operations and Management Symposium), the DSOM workshops are organized as single-track programs in order to stimulate interaction among participants.

The focus of DSOM 2005 was “Management of Ambient Networks”. Ambient networks is a new vision to provide accessibility and distributed services through the dynamic composition of networks. The wide adoption of packet switched networking technologies and the fast growing wireless networking infrastructures in public as well as in private spaces allow systems to choose how to obtain connectivity. Systems may also dynamically form new networks and the devices or the whole network may be mobile. Furthermore, many ambient networks will be in private spaces, owned and “operated” by non-technical users (home networks). The heterogeneity of the services and resources participating in ambient networks and the dynamics associated with the composition of networks poses new management challenges. While some papers presented at the workshop address some of these challenges, there was also room for papers addressing general topics related to the management of distributed systems.

This year, DSOM 2005 was for the first time co-located with several related events, namely the 8th International Conference on Management of Multimedia Networks and Services (MMNS 2005), the 5th IEEE International Workshop on IP Operations & Management (IPOM 2005), the 2005 Symposium on Self-Stabilizing Systems (SSS 2005), and the 1st IEEE/IFIP International Workshop on Autonomic Grid Networking and Management (AGNM 2005). All these events together formed the 1st International Week on Management of Networks and Services (MANWEEK 2005).

DSOM 2005 attracted a total of 87 papers with authors from 23 different countries. Every submitted paper received at least three reviews. The authors were invited to write a rebuttal to the reviews while the members of the Technical

Program Committee discussed the papers online. The final paper selection was based on the reviews, the author's feedback and the online discussions within the Technical Program Committee. Out of the 87 submitted papers, 23 were finally accepted for presentation in eight paper sessions.

This workshop owes its success to all members of the Technical Program Committee who did a great job of encouraging their colleagues to submit high-quality papers. The Technical Program Committee members and all the reviewers also deserve special thanks for their constructive and detailed reviews, which were key to assuring the high quality of the workshop. We also thank Lisandro Zambenedetti Granville for running the online paper submission system JEMS which again proved to be invaluable.

Last but not least, we thank all sponsors and patrons who helped to make DSOM 2005 a success and a very enjoyable experience.

August 2005

Jürgen Schönwälder
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