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Managing Virtualization of Networks and Services

18th IFIP/IEEE International Workshop
on Distributed Systems: Operations and Management, DSOM 2007
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Proceedings

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Preface

This volume of the Lecture Notes in Computer Science series contains all papers accepted for presentation at the 18th *IFIP/IEEE International Workshop on Distributed Systems: Operations and Management (DSOM 2007)*, which was held in the heart of Silicon Valley, San Jose, California, USA, on October 29–31, 2007.

DSOM 2007 was the 18th event in a series of annual workshops. It followed in the footsteps of previous successful meetings, the most recent of which were held in Dublin, Ireland (DSOM 2006), Barcelona, Spain (DSOM 2005), Davis, California, USA (DSOM 2004), Heidelberg, Germany (DSOM 2003), and Montreal, Canada (DSOM 2002). The goal of the DSOM workshops is to bring together researchers from industry and academia working in the areas of networks, systems, and service management, to discuss recent advances and foster future growth. In contrast to the larger management conferences, such as IM (Integrated Network Management) and NOMS (Network Operations and Management Symposium), DSOM workshops have a single-track program in order to stimulate more intense interaction among participants.

The theme of DSOM 2007 was “*Managing Virtualization of Networks and Services*”. Virtualization, in which the properties of a service are decoupled from its physical realization over networking and IT infrastructure, is capturing the imagination of industry and the research community alike. Questions need to be addressed such as: what is different about virtualization in 2007 compared with virtualization in the mainframe era, which advances in network control and self-management may advance virtualization technologies, which new problems will we incur when managing virtualized networks and services, and in which ways may management itself benefit from virtualization. At the same time, DSOM 2007 continued its tradition of giving a platform to papers that address general topics related to the management of distributed systems. As a result, DSOM 2007 included sessions on decentralized and peer-to-peer management, fault detection and diagnosis, performance tuning and dimensioning, problem detection and mitigation, operations and tools, service accounting and auditing, and Web services and management as well as a session with short papers.

Like the previous two DSOM workshops, DSOM 2007 was co-located with several related events as part of the Third International Week on Management of Networks and Services (MANWEEK 2007). The other events were the 10th IFIP/IEEE International Conference on Management of Multimedia and Mobile Networks and Services (MMNS 2007), the 7th IEEE International Workshop on IP Operations and Management (IPOM 2007), the 2nd IEEE International Workshop on Modeling Autonomic Communications Environments (MACE 2007), and the 1st IEEE/IFIP International Workshop on End-to-End Virtualization and Grid Management (EVGM 2007). Co-locating those events provided the opportunity for an

exchange of ideas between research communities that work on related topics, allowing participants to forge links and exploit synergies.

DSOM 2007 attracted a total of 54 paper submissions by authors from 21 different countries. Each paper received at least three, and in most cases four, reviews by experts in the field. The authors were invited to write a rebuttal to the reviews. The final paper selection was based on the reviews, the authors' feedback, and (in some cases) online discussions among Technical Program Committee members. A total of 20 submissions were finally accepted into the program as full papers, 5 as short papers.

DSOM 2007 owes its success in large part to a dedicated community of researchers from academia and industry, which has formed over many years. First and foremost, we want to thank the authors of the submitted papers – without them, there would be no program. We also want to thank the members of the Technical Program Committee and the additional reviewers for their constructive and detailed reviews. A big “thank you” goes to Tom Pfeifer, our publications chair, who played a big part in creating these proceedings. Finally, we want to thank our patrons, Cisco Systems and France Telecom, whose financial support was essential to making DSOM 2007 a great event.

October 2007

Alexander Clemm
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