

## GUEST EDITORIAL

### Network and Service Management Series

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This is the third issue of the series on **Network and Service Management** that is published twice a year. The series provides articles on the latest developments in this well-established discipline, highlighting recent research achievements and providing insight into both theoretical and practical issues related to the evolution of the discipline from different perspectives. The series provides a forum for the publication of both academic and industrial research, addressing the state of the art, theory and practice in network and service management.

In the last editorial we mentioned that the recently established IEEE Electronic Transactions on Network and Service Management (eTNSM) journal had passed the first major IEEE approval, in which the proposed title, scope and sponsorship were approved. More recently, the next and final key milestone was passed, which means that IEEE eTNSM will become a full-fledge IEEE Transactions Journal from January 2007, see the editorial in the latest issue by the Editor in Chief Prof. Raouf Boutaba: <http://www.comsoc.org/livepubs/etn/public/2006/apr/editor.html>. The journal currently publishes two issues per year and five issues have been published so far. These are freely available at present at <http://www.comsoc.org/eTNSM>.

Another important development for the community has been the start in the beginning of 2006 of the European EMANICS project on Management of the Internet and Complex Services. This is an EU Network of Excellence that brings together 13 research institutions active in the area of network and service management. It encompasses work areas dealing with integration (long term vision, virtual laboratory and testbeds), dissemination (a new European conference, electronic dissemination, training and technology transfer, open source initiatives) and joint research activities (scalable, economic and autonomic management). For more information, visit the project site <http://www.emanics.org/>. You will also find there a newsletter with community news, events and developments which is published three times a year and to which you may subscribe if you want to receive it in a “push” mode.

Finally, it is worth noting that a key annual event in this area, the 2<sup>nd</sup> International Week on the Management of Networks and Services (ManWeek 2006), is to be held October 23-27, 2006 in Dublin, Ireland. This includes the well-established events MMNS, DSOM, IPOM and also the workshops MASE and AGNM, see <http://www.manweek2006.org/>. Also this year there has been for the first time an Integrated Network Management (INM) workshop attached to the ACM SIGCOMM conference that took place on September 11, 2006 in Pisa Italy.

We again experienced an overwhelming interest for the third issue, receiving 17 submissions. All these submissions were subject to 3 independent reviews and we finally selected 4 articles, resulting in an acceptance rate of 23.5%. Reviews for the first article in which the first series editor, Prof. Pavlou, is a co-author were independently handled by the second series editor, Dr Pras. We intend to maintain our rigorous review process in future issues, maintaining thus the high quality of the published articles.

The first article “A Methodological Approach Towards the Refinement Problem in Policy-based Management Systems” by Rubio-Loyola, Serrat, Charalambides, Flegkas and Pavlou provides first an

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introduction to policy refinement and the importance of establishing policy hierarchies and then presents a relevant methodology which is validated through a holistic scenario applied to the quality of service management domain.

The second article “Decentralized Service Level Monitoring Using Network Threshold Crossing Alerts” by Wuhib, Stadler and Clemm presents a network monitoring architecture and protocol in which information is aggregated across managed devices, providing the capability to implement in real-time network-wide threshold crossing alerts. Applicability examples are also presented.

The third article “Managing Fast Aggregation Networks for Fast Moving Users” by Van Quickenborne, De Greve, De Turck and Demeester argues that a hierarchical wired Ethernet aggregation network together with Ethernet-based wireless access networks is a suitable approach for providing broadband access to fast moving users (e.g. in trains etc.)

Finally, the fourth article “Managing Agility through Service Orientation in an Open Telecommunication Value Chain” by Bastiaansen and Hermans describes a strategy for managing commercial and operational agility in an open telecommunication value chain, focusing on openness and re-usability for providing such agility in deregulated and competitive telecommunication environments.

We hope that readers of this issue find again the articles informative and we will endeavor to continue with similar issues in the future. We would finally like to thank all the authors who submitted articles to this series and the reviewers for their valuable feedback and comments on the articles.

#### **1.1.1.1 BIOGRAPHIES**

GEORGE PAVLOU ([G.Pavlou@surrey.ac.uk](mailto:G.Pavlou@surrey.ac.uk)) is Professor of Communication and Information Systems at the Center for Communication Systems Research, Department of Electrical Engineering, University of Surrey, UK, where he leads the activities of the Networks Research Group. He received a Diploma in Electrical and Mechanical Engineering from the National Technical University of Athens, Greece and MSc and PhD degrees in Computer Science from University College London, UK. His research interests focus on network management, networking and service engineering, including policy-based management, programmable networks, traffic engineering, multimedia service control and object-oriented communications middleware. He has been instrumental in a number of European and UK research projects and has contributed to standardization activities in ISO, ITU-T and IETF. Prof. Pavlou has been the technical program co-chair of the Seventh IFIP/IEEE Integrated Management Symposium (IM 2001).

AIKO PRAS ([pras@cs.utwente.nl](mailto:pras@cs.utwente.nl)) is Associate Professor in the Departments of Electrical Engineering and Computer Science at the University of Twente, the Netherlands and member of the Design and Analysis of Communication Systems Group. He received a PhD degree from the same University for his thesis titled “Network Management Architectures”. His research interests include network management technologies, Web services, network measurements and accounting. He has participated in many European and Dutch research projects, such as SURFnet6 RoN, M2C, WASP and Internet NG. He currently is Research Leader in the European Network of Excellence on Management of the Internet and Complex Services (EMANICS). He has also been contributing to research and standardization activities as a member of the Internet Research Task Force (IRTF) Network Management Research Group (NMRG). Dr Pras has been the technical program co-chair of the Ninth IFIP/IEEE Integrated Management Symposium (IM 2005).