

Preface

Welcome to LANOMS 2005, the 4th Latin American Network Operations and Management Symposium, held in Porto Alegre, Brazil, in August 29-31. LANOMS 2005 is organized by the Institute of Informatics of the Federal University of Rio Grande do Sul (UFRGS) and by the University of Vale do Rio dos Sinos (UNISINOS). The Symposium is technically co-sponsored by the IEEE Communications Society, the IFIP Technical Committee 6 (Communications Systems), the Brazilian Computer Society (SBC), and the Brazilian Laboratory on Computer Networks (LARC).

This edition of the Symposium is the result of the great success of the previous LANOMS 1999 (held in Rio de Janeiro), LANOMS 2001 (held in Belo Horizonte), and LANOMS 2003 (held in Iguassu Falls), as well as the successful events in the area of network management such as NOMS (IEEE/IFIP Network Operations and Management Symposium) and APNOMS (Asia-Pacific Network Operations and Management Symposium).

The main goal of LANOMS is to create a Latin American forum in the area of network management focused on both local and global audience, involving networking and telecommunication companies, academic institutions, service providers, and equipment vendors. LANOMS is an event open to participants from all over the world interested in research or commercial liaisons in Latin America, which is one of the fastest growing regions in the world in networking and telecommunications.

The Technical Program of LANOMS 2005 includes the presentation of technical papers, posters, application papers, tutorials, invited speeches, and panels. Each submitted paper has been reviewed by three experts in the area. Sixteen full papers (16) out of thirty five (35) submissions have been accepted for publication. In addition, authors of nine (9) submissions have been invited to publish their work as short papers and present them in poster sessions.

The full paper presentations are organized in four sessions. Papers in session *Mobile and Wireless* have been contributed by Liotta et al. on IP Technologies for Mobile VPNs, by Costa Junior et al. on Data Reception Rates and Energy Consumption of Mobile Devices employing IPSec, by Zimer et al. on RSVP version 2 Protocol in Infra-structured Mobile Networks, and by Silva et al. on Wireless Sensor Network Management Protocols. Papers in session *Security* include contributions by Proença Jr. on Anomaly Detection, by Laborde et al. on Formal Security Policy Refinement, by Zhang et al. on Firewall Filtering Rules, and by Kreutz et al. on Integrated and Automated Network Management. Papers included in session *Policy-based Management* have been contributed by Majidian on Semantic Ordering, by Pereira et al. on a Notification Correlation Architecture, by Verdi et al. on Grooming in Optical Networks, and by Vieira on Smooth TPC. Papers grouped in session *Monitoring and Measurement* include contributions by Lima et al. on Evaluating Speech Quality in Voice over IP, by Bohnert et al. on Admission Control for a Class-based QoS, by Vieira on Metaheuristics for Topological Design, and by Pinho et al. on Performance of Video-on-Demand Systems.

The poster presentations have been organized in two sessions with contributions on Call Accounting in VoIP, Policies for Large-scale Service Management, Accounting and Characterization of the Use of Computational Grids, Policy-Based Management of Inter-

domain Communications Security, Policy-based Resolution, Fault Prediction on Optical Networks, Policy Engineering for Security, User-centric QoS, and Security Policies.

For the applications track, four (4) contributions, from a separate submission process, have been accepted to be published and presented at the Symposium. They compose the applications session, addressing an Extraction and Classification Method for Self-Management, Policies with Emphasis on QoS, a GUI for Layered Network Topology and Connections in ATM Networks, and Autonomic Computing.

A highlight of the Technical Program are the three tutorials and two invited speeches presented by Bert Wijnen on IETF and the Operations and Management Area, by Guy Pujolle on Strategies for Telecommunication Networks, by Marcus Brunner on Autonomic Network Management, by Felix Wu on Deriving Unknown Vulnerabilities from Zero-Day Exploits, and by Antonio Liotta on Mobile Peer-to-Peer Networking.

We gratefully acknowledge the hard work of the Technical Program and Organizing Committees in the process of selecting the papers and helping to shape the program and activities. We thank the authors for the high quality of their contributions and our distinguished invited speakers for their invaluable talks. Finally, we show gratitude to our patrons: National Council for Scientific and Technological Development (CNPq), HP Brazil Research & Development, iVirtua, and Fundação de Amparo à Pesquisa do Estado do Rio Grande do Sul (FAPERGS).

Porto Alegre, August 2005.

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