
EUNICE 2005: NETWORKS AND APPLICATIONS TOWARDS A UBIQUITOUSLY CONNECTED WORLD

IFIP – The International Federation for Information Processing

IFIP was founded in 1960 under the auspices of UNESCO, following the First World Computer Congress held in Paris the previous year. An umbrella organization for societies working in information processing, IFIP's aim is two-fold: to support information processing within its member countries and to encourage technology transfer to developing nations. As its mission statement clearly states,

IFIP's mission is to be the leading, truly international, apolitical organization which encourages and assists in the development, exploitation and application of information technology for the benefit of all people.

IFIP is a non-profitmaking organization, run almost solely by 2500 volunteers. It operates through a number of technical committees, which organize events and publications. IFIP's events range from an international congress to local seminars, but the most important are:

- The IFIP World Computer Congress, held every second year;
- Open conferences;
- Working conferences.

The flagship event is the IFIP World Computer Congress, at which both invited and contributed papers are presented. Contributed papers are rigorously refereed and the rejection rate is high.

As with the Congress, participation in the open conferences is open to all and papers may be invited or submitted. Again, submitted papers are stringently refereed.

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EUNICE 2005: NETWORKS AND APPLICATIONS TOWARDS A UBIQUITOUSLY CONNECTED WORLD

***IFIP International Workshop on Networked
Applications, Colmenarejo, Madrid/Spain, 6-8 July,
2005.***

Edited by

Carlos Delgado Kloos

Universidad Carlos III de Madrid, Spain

Andrés Marín

Universidad Carlos III de Madrid, Spain

David Larrabeiti

Universidad Carlos III de Madrid, Spain



Springer

Library of Congress Control Number: 2005937058

EUNICE 2005: Networks and Applications Towards a Ubiquitously Connected World

Edited by Carlos Delgado Kloos, Andrés Marín, and David Larrabeiti

p. cm. (IFIP International Federation for Information Processing, a Springer Series in Computer Science)

ISSN: 1571-5736 / 1861-2288 (Internet)

ISBN-10: 0-387-30815-6

ISBN-13: 9780-387-30815-6

Printed on acid-free paper

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Printed in the United States of America.

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Dedication

to Pedro J. Lizcano Martín

Contents

Contributing Authors	ix
Preface	xi
NETWORK DESIGN AND PERFORMANCE	1
1. Design and Evaluation of a Burst Assembly Unit for Optical Burst Switching on a Network Processor	3
2. Analyzing Packet Interarrival Times Distribution to Detect Network Bottlenecks	17
3. Tunable Least Served First: A New Scheduling Algorithm with Tunable Fairness	31
ROUTING	43
4. Dynamic Routing in QoS-Aware Traffic Engineered Networks	45
5. Implementation of an IPv6 Multihoming Ingress Filtering Compatibility Mechanism Using Automatic Tunnels	59
6. A BGP Solver for Hot-Potato Routing Sensitivity Analysis	75
7. A Framework for Cooperative Inter-Domain QoS Routing	91
8. IPv6 Deployment, Not Only a Network Problem	105

9. Topology Discovery Using an Address Prefix Based Stopping Rule	119
MOBILE AND WIRELESS NETWORKS	131
10. Practical Evaluation of a Network Mobility Solution	133
11. Error-aware Scheduling and its Effect on Efficiency and Fairness	145
12. A QoS-Aware Ad Hoc Wireless Network for Isolated Rural Environments	157
13. Energy Efficiency in Wireless Sensor Networks Using Mobile Base Station	173
14. A Survey on MAC Protocols for Ad Hoc Networks with Directional Antennas	187
MIDDLEWARE AND APPLICATIONS	201
15. Advanced Collaborative Services Provisioning in Next Generation Networks	203
16. The Impact of Content Distribution on Structured P2P Networks in Mobile Scenarios	219
17. Performance Management of Peer-to-Peer Distributed Hash Tables	233
18. Exploiting the Overhead in a DHT to Improve Lookup Latency	247
19. DNS: A Statistical Analysis of Name Server Traffic at Local Network-to-Internet Connections	255
20. An API for IPv6 Multihoming	271
21. SAMSON: Smart Address Management in Self-Organizing Networks	285
Keyword Index	299

Contributing Authors

Avallone, Stefano	45
Bagnulo Braun, Marcelo	271
Barcenilla, Carlos	59
Bernardos, Carlos Jesús	133
Bettstetter, Christian	187
Biczók, Gergely	285
Brandhorst, Chris	255
Calderón, María	133
de la Oliva, Antonio	133
de Miguel, Tomás P.	59, 105, 203
de Salazar, Rodrigo	157
Domingo-Pascual, Jordi	91
Donnet, Benoit	119
Doyen, Guillaume	233
Fernández, David	59, 105
Festor, Olivier	233
Fodor, Kristóf	285
Fonte, Alexandre	91
Friedman, Timur	119
G. Marqués, Antonio	145
Galán, Fermín	203
García-Martínez, Alberto	271
Gerevich, János L.	285
Gómez, Miguel	203
Hauger, Simon	3
Hofstätter, Q.	219

Junghans, Sascha	3
Kellerer, W.	219
Kögel, Jochen	3
Köhn, Martin	3
Krupp, Dániel	285
Kuipers, Fernando	45
Kunzmann, Gerald.....	247
Larrabeiti, David	31, 145
León, Ángel	31
Martínez-Yelmo, Isafas	271
Masip-Bruin, Xavier.....	91
Monteiro, Edmundo.....	91
Nataf, Emmanuel.....	233
Necker, Marc C.	3
Pras, Aiko	255
Quoitin, B.	75
Schollmeier, Rüdiger.....	219, 247
Seoane, Joaquín.....	157
Serrano, Pablo	31, 145
Simó, Javier	157
Stanchina, Sylvain.....	3
Sugár, Krisztián.....	285
Tandel, S.....	75
Tapiador, Antonio	59
Tarlano, A.....	219
Urueña, Manuel.....	145
Van Mieghem, Piet.....	45
Varga, Pal	17
Vass, Dorottya.....	173
Ventre, Giorgio.....	45
Vida, Rolland.....	173
Vidács, Attila.....	173
Vilzmann, Robert	187
Vincze, Zoltán	173
Walid, Omar	59, 105
Yannuzzi, Marcelo	91
Zöls, S.....	219

Preface

EUNICE is a network of Universities throughout Europe. The EUNICE network has been created to foster the mobility of students, faculty members and research scientists working in the field of information and communication technologies and to promote educational and research cooperation between its member institutions. The prime means for implementing these goals is the annual Summer School organized by the member institutions.

From its conception, the EUNICE Summer Schools were designed as unique events where the joint participation of PhD students and supervisors working in the field of information and communication technologies (ICT) is the key to create an event that goes far beyond a conventional international workshop. Furthermore, the Summer School is an open forum for the cooperation of the European member institutions and any other organisation interested European academic/research centre at all levels. This cooperation is paramount to successfully construct and participate in the European Higher Education Area, and especially, to achieve easy and effective exchange of research activities.

This year, the eleventh edition of the EUNICE Summer School took place in Colmenarejo (Madrid/Spain) from 6 to 8 July 2005, organized by the Department of Telematics Engineering of the Universidad Carlos III de Madrid. It was devoted to the theme of *Networked Applications*. Participants have shared their vision on advanced engineering features such as ubiquitous computing, full mobility and real-time multimedia, into real services,

applications, protocols and networks. Communication engineering and telematics research efforts are making sci-fi scenarios a reality in our lives.

The Technical Program Committee assigned three qualified reviewers to each of the 54 papers submitted. The quality of the submissions was high, as expected in a conference of professional researchers. The outcome of the peer review process was that 35 full papers and 10 short papers were selected.

Besides paper sessions, the Summer School offered three excellent invited talks: *SIP: a Standardization Update*, by Gonzalo Camarillo, head of the Advanced Signalling Research Laboratory of Ericsson in Helsinki; *Intra-domain Traffic Engineering - Principles, Algorithms and Toolbox*, by Guy Leduc, head of the Research Unit in Networking in the University of Liège; and *Interoperable Middleware for Ambient Intelligence Systems*, by Valerie Issarny, head of the ARLES INRIA research project-team at INRIA-Rocquencourt.

This book constitutes a post-proceedings volume for the Summer School. Out of the accepted papers the authors of the 21 best-qualified in the review process were given the opportunity to revise their paper once more on the basis of the feedback received at the Summer School. In this way, this volume constitutes an excellent snapshot of the State of the Art in the research field of Telematics, watched from the perspective and activity of young researchers in Europe.

We wish to thank the members of the Technical Programme Committee for their excellent job in the review process. The full list is the following:

- Carlos Delgado Kloos, Universidad Carlos III de Madrid, Spain (Conference chair)
- David Larrabeiti, Universidad Carlos III de Madrid, Spain (Programme Committee co-chair)
- Andrés Marín, Universidad Carlos III de Madrid, Spain (Programme Committee co-chair)
- Finn Arve Agesen, University of Trondheim, Norway
- Sebastian Abeck, Universität Karlsruhe, Germany
- Arturo Azcorra, Universidad Carlos III de Madrid, Spain
- József Bíró, Budapest University of Technology and Economics, Hungary
- Rolv Braek, University of Trondheim, Norway
- Tomás de Miguel, Technical University of Madrid, Spain

- Irek Defee, Tampere University of Technology, Finland
- Jörg Eberspächer, Technical University of Munich, Germany
- Serge Fdida, U. Paris Pierre et Marie Curie, France
- Olivier Festor, Université Henri Poincaré - Nancy, France
- Edit Halász, Budapest University of Technology and Economics, Hungary
- Jarmo Harju, Tampere University of Technology, Finland
- Tamas Henk, Budapest University of Technology and Economics, Hungary
- Sandor Imre, Budapest University of Technology and Economics, Hungary
- Yvon Kermarrec, ENST Bretagne, France
- Yevgeni Koucheryavy, Tampere University of Technology, Finland
- Paul Kühn, University of Stuttgart, Germany
- Frank Li, University of Oslo, Norway
- Pedro Lizcano, Telefonica I+D, Spain
- Pekka Loula, Tampere University of Technology, Finland
- Jean-Philippe Martin-Flatin, CERN, Switzerland
- Maurizio Munafo, Politecnico di Torino, Italy
- Joao Orvalho, University of Coimbra, Portugal
- Zdzislaw Papir, AGH University of Science and Technology, Poland
- Aiko Pras, University of Twente, The Netherlands
- Andras Racz, Ericsson Research, Hungary
- Sebastià Sallent, Polytechnic University of Catalonia, Spain
- Jorge Sá Silva, University of Coimbra, Portugal
- Dimitrios Serpanos, University of Patras, Greece
- Mikhail Smirnov, Fraunhofer FOKUS, Germany
- Ioannis Stavrakakis, U. of Athens, Greece
- Burkhard Stiller, University of Zurich and ETH Zurich, Switzerland
- Samir Tohme, Université de Versailles St Quentin, France
- Marten van Sinderen, University of Twente, The Netherlands
- Giorgio Ventre, University of Naples, Italy
- Gennady Yanovsky, St. Petersburg State University of Telecommunications, Russia

The financial support given by Spanish Ministry of Education and Science and by the Department of Telematics Engineering of the Universidad Carlos III de Madrid is also gratefully acknowledged. The co-sponsors of EUNICE 2005 were the IST E-NEXT Network of Excellence,

the IST UBISEC project, IFIP WG6.6, WG6.4, and WG6.9, and the Universidad Carlos III de Madrid. Special thanks to all of them for their support, especially with invited lecturers and students grants.

We also want to highlight the outperforming efforts of the Organising Committee. Without their support, the editing of the proceedings, and the local arrangements for the Summer School would not have been possible. Their commitment to this event has shown us that producing scientific work and planning social activities can be carried out by the same team. Their names are:

- Celeste Campo, Universidad Carlos III de Madrid, Spain (Organizing Committee co-chair)
- Ricardo Romeral, Universidad Carlos III de Madrid, Spain (Organizing Committee co-chair)
- Iria Estévez-Ayres, Universidad Carlos III de Madrid, Spain
- Manuel Urueña, Universidad Carlos III de Madrid, Spain

Finally, our warmest thanks go to professors Dr. Jarmo Harju and Dr. Edit Halász, organisers of the two previous editions, for their helpful advice to keep the quality and philosophy of EUNICE.

Many thanks go also to Springer staff for the preparation of this book, in particular, to Amy Brais and Jennifer Evans.

This volume is dedicated to *Pedro J. Lizcano Martín*, a good friend and excellent professional, director for the Research Center of Telefónica I+D in Barcelona (Spain), and for some time also professor at the Universidad Carlos III de Madrid, who recently passed away. He served in the Programme Committee of the Summer School. May his intellectual brightness and energy be an example for all of us.

Carlos Delgado Kloos, Andrés Marín, David Larrabeiti
Universidad Carlos III de Madrid
Colmenarejo, August 2005