

Table of Contents

Performance of Protocols and Applications

Optimal Traffic Shaping with Deterministic Guarantees Using GPS Scheduling	1
<i>Enrique Hernández, Joan Vila, Sergio Saez, Silvia Terrasa</i> (<i>Universidad Politécnica de Valencia</i>)	
Evaluation of Video Server Capacity with Regard to Quality of the Service in Interactive News-On-Demand Systems	15
<i>J.R. Arias, F.J. Suárez, D.F. García, X.X. García, V.G. García</i> (<i>Universidad de Oviedo</i>)	
When FEC Speed up Data Access in P2P Networks	26
<i>J. Lacan, L. Lancérica, L. Dairaine (ENSICA)</i>	
Scalable Independent Multi-level Distribution in Multimedia Content Analysis	37
<i>Viktor S. Wold Eide ((Dept of Informatics / Simula Research Lab),</i> <i>Frank Eliassen (Simula Research Lab), Ole-Christoffer Granmo</i> (<i>Dept of Informatics / Simula Research Lab</i>), <i>Olav Lysne</i> (<i>Simula Research Lab</i>)	

Mobile Multimedia Systems I

A Simulation Tool for Dimensioning and Performance Evaluation of the UMTS Terrestrial Radio Access Network	49
<i>A.B. García, E. García, M. Álvarez-Campana, J. Berrocal,</i> <i>E. Vázquez (Universidad Politécnica de Madrid)</i>	
Vertical Handover Based Adaptation for Multimedia Applications in Pervasive Systems	61
<i>Jadwiga Indulska, Sasitharan Balasubramaniam</i> (<i>University of Queensland</i>)	
Avoiding DAD for Improving Real-Time Communication in MIPv6 Environments	73
<i>Marcelo Bagnulo, Ignacio Soto, Alberto García-Martínez,</i> <i>Arturo Azcorra (Universidad Carlos III de Madrid)</i>	
Design of OSGi Compatible Middleware Components for Mobile Multimedia Applications	80
<i>Heinz-Josef Eikerling, Frank Berger (Siemens SBS C-LAB)</i>	

Standards and Related Issues

- A Fast QoS Adaptation Algorithm for MPEG-4 Multimedia Applications . 92
*Nam Pham Ngoc, Geert Deconinck (Katholieke Universiteit Leuven),
 Gauthier Lafruit, Rudy Lauwereins (IMEC-DESICS)*
- A Genetic Algorithm-Based Segmentation for Automatic VOP Generation 106
Eun Yi Kim (Konkuk University), Se Hyun Park (Chosun University)
- Adaptive Motion Search Based on Block Difference and Motion Magnitude 118
*Dong-Keun Lim, Yo-Sung Ho
 (Kwangju Inst. of Science and Technology)*

Quality of Service Issues I

- Does IPv6 Improve the Scalability of the Internet? 130
Philippe Owezarski (LAAS-CNRS)
- Deploying New QoS Aware Transport Services 141
*E. Exposito, P. Sénac (ENSICA / LAAS-CNRS),
 D. Garduno, M. Diaz (LAAS-CNRS), M. Uruña
 (Universidad Carlos III de Madrid)*
- A Rate Controller for Long-Lived TCP Flows 154
*Peter Dorfinger, Christof Brandauer, Ulrich Hofmann
 (Salzburg Research)*

Video Systems and Applications

- Low-Complexity Scalable Video Coding through Table Lookup VQ and
 Index Coding 166
*Marco Cagnazzo, Giovanni Poggi, Luisa Verdoliva
 (Universita Federico II di Napoli)*
- Accuracy vs. Speed Trade-Off in Detecting of Shots in Video
 Content for Abstracting Digital Video Libraries 176
Mikolaj Leszczuk, Zdzislaw Papir (AGH University of Technology)
- Distributed Video Documents Indexing and Content-Based Retrieving 190
*Ahmed Mostefaoui (Franche Comté Computer Science Lab),
 Loic Favory (Information Systems Engineering Lab)*
- Voting Based Bandwidth Management in Multiparty Video Conferences .. 202
Mario Zuehlke, Hartmut Koenig (Brandenburg Univ. of Technology)

Quality of Service Issues II

- Considering Non-real-time Traffic in Real-Time Packet Scheduling 216
Yeonseung Ryu (Hallym University)

A Flexible Real-Time Hierarchical Multimedia Archive	229
<i>Maria Eva Lijding, Pierre Jansen, Sape Mullender (University of Twente)</i>	
Tradeoffs between Signaling and Resource Utilization in DiffServ Networks with Hierarchical Aggregation	241
<i>Susana Sargento, Rui Valadas (University of Aveiro / Institute of Telecommunications)</i>	
Robust Delay Estimation for Internet Multimedia Applications	255
<i>Kyung-Joon Park (Seoul National University), Won Jong Jeon, Klara Nahrstedt, Tamer Başar (University of Illinois), Chong-Ho Choi (Seoul National University)</i>	

Mobile Multimedia Systems II

Supporting Mobile Multicast in Mobile Networks by Considering Host Mobility	263
<i>Jin Park, Young-Joo Suh, Shin-Gak Kang (Pohang University of Science & Technology)</i>	
Fast Asynchronous Streaming Handoff	274
<i>Jinsong Lin, Glenn Glazer, Richard Guy, Rajive Bagrodia (University of California, Los Angeles)</i>	
Power Constraints: Another Dimension of Complexity in Continuous Media Playback	288
<i>Jungwan Choi, Youjip Won (Hanyang University)</i>	

Resource Management

Replica Striping for Multi-resolution Video Servers	300
<i>Minseok Song, Heonshik Shin (Seoul National University)</i>	
On Availability QoS for Replicated Multimedia Service and Content	313
<i>Giwon On, Jens Schmitt, Ralf Steinmetz (Darmstadt Univ. of Technology)</i>	
An Open Middleware Architecture for Network-Integrated Multimedia	327
<i>Marco Lohse, Michael Repplinger, Philipp Slusallek (Saarland University)</i>	

Multimedia Support

Security Attributes Based Digital Rights Management	339
<i>Cheun Ngen Chong (University of Twente), René van Buuren (Telematica Institute), Pieter H. Hartel (University of Twente), Geert Kleinhuis (KPN Research)</i>	

An Active Network Approach to Support Multimedia Relays 353
 Manuel Urueña, David Larrabeiti, María Calderón,
 Arturo Azcorra (Universidad Carlos III de Madrid),
 Jens E. Kristensen, Lars Kroll Kristensen (Ericsson Telebit),
 Ernesto Exposito (ENSICA), David Garduno, Michel Diaz
 (LAAS-CNRS)

Tutorials and Invited Program

Internet Multimedia - Streaming Media (Tutorial)..... 365
 Henning Schulzrinne (Columbia University)

Internet Middleware (Tutorial) 366
 Mikhail Smirnow (Fraunhofer Institute FOKUS)

IP Network Monitoring and Measurements: Techniques and
Experiences (Tutorial) 367
 Philippe Owezarski (LAAS-CNRS)

Media Representation Standards for the New Millennium (Tutorial) 368
 Fernando Pereira (Instituto Superior Técnico)

Author Index 371

Protocols and Systems for Interactive Distributed
Multimedia

Joint International Workshops on Interactive Distributed
Multimedia Systems and Protocols for Multimedia
Systems, IDMS/PROMS 2002, Coimbra, Portugal,
November 26-29, 2002, Proceedings

Boavida, F.; Heitor da Silva Monteiro, E.; Orvalho, J.
(Eds.)

2002, XIV, 378 p., Softcover

ISBN: 978-3-540-00169-0