

# Table of Contents

## Service Management

A QoS Network Management System for Robust and Reliable Multimedia Services.....	1
<i>Shirshanka Das, Kenshin Yamada, Heeyeol Yu, Scott S. Lee, Mario Gerla (University of California, Los Angeles, USA)</i>	
Federated Accounting Management System Architecture for Multimedia Service Usage Management.....	12
<i>Bharat Bhushan, Thomas Gringel (Fraunhofer-FOKUS, Germany), Conor Ryan, Eric Leray, Eamonn de Leastar, James Cloney (TSSG, Ireland)</i>	
Policy-Based Quality of Service and Security Management for Multimedia Services on IP Networks in the RTIPA Project.....	25
<i>Valérie Gay, Sandrine Duflos, Brigitte Kervella, Eric Horlait (Laboratoire d'Informatique de Paris 6, France), Gladys Diaz (L2TI - Institut Galilée - Université Paris 13, France)</i>	
Formal Modeling of Service Session Management.....	36
<i>Minh van Le, B.J.F. van Beijnum, B.L. de Goede (University of Twente, The Netherlands)</i>	

## Management of Wireless Multimedia

Network Requirement for Management of Multimedia over Wireless Channel	49
<i>Bing Zheng (New Focus, USA), Mohammed Atiquzzaman (University of Oklahoma, USA)</i>	
Agile Systems Manager for Enterprise Wireless Networks .....	62
<i>Sandeep Adwankar, Venu Vasudevan (Motorola Labs, USA)</i>	
System Performance of HiperLAN/2.....	77
<i>Kamiran Haider, Hamed S. Al-Raweshidy (University of Kent at Canterbury, England)</i>	

## Bandwidth Sharing Protocols

Streaming Media Congestion Control Using Bandwidth Estimation.....	89
<i>Nadeem Aboobaker, David Chanady, Mario Gerla, M.Y. Sanadidi (University of California, Los Angeles, USA)</i>	
Signaling Protocol for Session-Aware Popularity-Based Resource Allocation.	101
<i>Paulo Mendes, Henning Schulzrinne (Columbia University, USA), Edmundo Monteiro (University of Coimbra, Portugal)</i>	

## Distributed Video Architectures

- A Scalable Video Server Using Intelligent Network Attached Storage . . . . . 114  
*Guang Tan, Hai Jin, Liping Pang (Huazhong University of Science and Technology, Wuhan, China)*
- On Proxy-Caching Mechanisms for Cooperative Video Streaming in Heterogeneous Environments . . . . . 127  
*Naoki Wakamiya, Masayuki Murata, Hideo Miyahara (Osaka University, Japan)*

## Management Systems

- Using CORBA's Advanced Services to Enhance the Integrity of QoS Management Programmable Networks . . . . . 140  
*Qiang Gu, Alan Marshall (The Queen's University of Belfast, Ireland)*
- Remote Multicast Monitoring Using the RTP MIB . . . . . 154  
*Julian Chesterfield, Bill Fenner, Lee Breslau (AT&T Labs—Research, USA)*
- Active Technology as an Efficient Approach to Control DiffServ Networks: The DACA Architecture . . . . . 170  
*Nadjib Achir, Nazim Agoulmine, Mauro Fonseca, Yacine Ghamri-Doudane, Guy Pujolle (Pierre et Marie Curie University, Paris, France)*
- Efficient Implementation of Packet Scheduling Algorithm on High-Speed Programmable Network Processors . . . . . 184  
*Weidong Shi, Xiaotong Zhuang, Indrani Paul, Karsten Schwan (Georgia Institute of Technology, USA)*

## Differentiated Network Services

- Distributed Dynamic Capacity Contracting: A Congestion Pricing Framework for Diff-Serv . . . . . 198  
*Murat Yuksel, Shivkumar Kalyanaraman (Rensselaer Polytechnic Institute, Troy, USA)*
- Fair Stateless Aggregate Traffic Marking Using Active Queue Management Techniques . . . . . 211  
*Abhimanyu Das, Debjyoti Dutta, Ahmed Helmy (University of Southern California, USA)*
- A Dynamic Marking Scheme of Assured Service for Alleviating Unfairness among Service Level Agreements . . . . . 224  
*Seung-Joon Seok, Seok-Min Hong, Chul-Hee Kang (Korea University, Korea), Sung-Hyuck Lee (Samsung Advanced Institute of Technology, Korea)*

Minimizing Transmission Costs through Adaptive Marking in Differentiated Services Networks .....	237
<i>Chen-Khong Tham, Yong Liu (National University of Singapore, Singapore)</i>	

Dynamic QoS Adaptation Using COPS and Network Monitoring Feedback	250
<i>Toufik Ahmed, Ahmed Mehaoua (University of Versailles, France), Raouf Boutaba (University of Waterloo, Canada)</i>	

## User Level Traffic Adaptation

Design and Implementation of an Application Layer Protocol for Reducing UDP Traffic Based on User Hints and Policies .....	263
<i>William Kulju (IBM Toronto Laboratory, Canada), Hanan Lutfiyya (University of Western Ontario, Canada)</i>	

A Management Framework for Service Personalization .....	276
<i>Govindan Ravindran, Muhammad Jaseemudin, Abdallah Rayhan (Ryerson University, Toronto, Canada)</i>	

Efficient Access Using Hierarchical WML Decks for Multimedia Services under Wireless and Mobile Networks .....	289
<i>Dae-gun Kim (Korea Telecom, Seoul), Seung-Jin Lee (LG Electronic Inc, Anyang, Korea), Lynn Choi, Chul-Hee Kang (Korea University, Seoul, Korea)</i>	

Roaming Scenarios Based on SIP .....	302
<i>Andrea Floris, Luca Veltri (CoRiTeL, Rome, Italy)</i>	

## Multicast Congestion Control

Low-Weight Congestion Control for Multi-sender Applications .....	315
<i>Jeremiah Scholl, Peter Parnes (Luleå University of Technology, Sweden)</i>	

Routing-Based Video Multicast Congestion Control .....	328
<i>Jun Peng, Biplab Sikdar (Rensselaer Polytechnic Institute, Troy, USA)</i>	

Random Early Detection Assisted Layered Multicast .....	341
<i>Yung-Sze Gan, Chen-Khong Tham (National University of Singapore, Singapore)</i>	

Author Index .....	355
--------------------	-----

Management of Multimedia on the Internet  
5th IFIP/IEEE International Conference on Management  
of Multimedia Networks and Services, MMNS 2002,  
Santa Barbara, CA, USA, October 6-9, 2002.  
Proceedings  
Almeroth, K.C.; Hasan, M.Z. (Eds.)  
2002, XI, 356 p., Softcover  
ISBN: 978-3-540-44271-4