

Table of Contents

Localization and Mobility Management

Markov Localization of Wireless Local Area Network Clients	1
<i>Michael Wallbaum, Torsten Wasch</i>	
A Topology Based Localization in Ad Hoc Mobile Sensor Networks	16
<i>Sridhar Gangadharpalli, Uday Golwelkar, Sridhar Varadarajan</i>	
Gcmob: A Group Mobility Pattern Generator to Evaluate Mobile Ad Hoc Networks Performance	29
<i>Juan-Carlos Cano, Pietro Manzoni, Miguel Sanchez</i>	
Activity-Based User Modeling in Service-Oriented Ad-Hoc-Networks	43
<i>Tobias Breyer, Michael Klein, Philipp Obreiter, Birgitta König-Ries</i>	

MAC and Radio Resource Management

Media Access Control Schemes for Mobile Ad Hoc Networks	57
<i>Chun-Hung Lin, Chien-Yuan Liu</i>	
Throughput Evaluation and Enhancement of TCP Clients in Wi-Fi Hot Spots	73
<i>Raffaele Bruno, Marco Conti, Enrico Gregori</i>	
An Adaptive IEEE 802.11 MAC in Multihop Wireless Ad Hoc Networks Considering Large Interference Range	87
<i>Tzu-Chieh Tsai, Chien-Ming Tu</i>	
A Distributed Algorithm for Bandwidth Allocation in Stable Ad Hoc Networks	101
<i>Claude Chaudet, Isabelle Guérin Lassous, Janez Žerovnik</i>	

Bluetooth Scatternets

Locally Optimal Scatternet Topologies for Bluetooth Ad Hoc Networks	116
<i>Tommaso Melodia, Francesca Cuomo</i>	
An On-Demand Bluetooth Scatternet Formation Algorithm	130
<i>Elena Pagani, Gian Paolo Rossi, Stefano Tebaldi</i>	

Ad Hoc Routing I

GPS-Based Route Discovery Algorithms for On-Demand Routing Protocols in MANETs	144
<i>Mehran Abolhasan, Tadeusz Wysocki</i>	
Dynamic AODV Backup Routing in Dense Mobile Ad-Hoc Networks	158
<i>Wen-Tsuen Chen, Wei-Ting Lee</i>	
Multipath Power Sensitive Routing Protocol for Mobile Ad Hoc Networks	171
<i>Anand Prabhu Subramanian, A.J. Anto, Janani Vasudevan, P. Narayanasamy</i>	

Security, Applications, and Service Support

Dependable and Secure Data Storage in Wireless Ad Hoc Networks: An Assessment of DS ²	184
<i>S. Chessa, R. Di Pietro, P. Maestrini</i>	
A Comparative Analysis on Performance of Mobile IP with Paging Support	199
<i>Hung Tuan Do, Yoshikuni Onozato</i>	
Preventive and Corrective Protection for Mobile Ad Hoc Network Routing Protocols	213
<i>Ricardo Staciarini Puttini, Ludovic Mé, Rafael Timóteo de Sousa Jr.</i>	
Dynamic Service Adaptation for Runtime System Extensions	227
<i>Robert Hirschfeld, Katsuya Kawamura, Hendrik Berndt</i>	

Ad Hoc Routing II

Flood Filtering and Route Selection for Energy-Efficient On-Demand Routing in Wireless Ad Hoc Networks	241
<i>Tran Minh Trung, Seong-Lyun Kim</i>	
High Throughput Route Selection in Multi-rate Ad Hoc Wireless Networks	253
<i>Baruch Awerbuch, David Holmer, Herbert Rubens</i>	
A Three-Tier Framework Supporting Soft QoS Routing in MANET	271
<i>Xin Jin, Hongbo Wang, Yaoxue Zhang, Bin Meng</i>	

MAC Analytical Models

Achieving Maximum Throughput and Service Differentiation by Enhancing the IEEE 802.11 MAC Protocol	285
<i>Bo Li, Roberto Battiti</i>	

Throughput of the Multi-hop Slotted Aloha with Multi-packet Reception	301
<i>M. Coupechoux, T. Lestable, C. Bonnet, V. Kumar</i>	

On Demand Internet Access

WIDE: Wireless Information Delivery Environment in Distributed Hot Spots	315
<i>Mehmet Yunus Donmez, Sinan Isik, Cem Ersoy</i>	

Smart Wireless Access Points for Pervasive Computing	329
<i>Roel Ocampo, Hermann de Meer</i>	

NAT-Based Internet Connectivity for On-Demand Ad Hoc Networks	344
<i>Paal Engelstad, Geir Egeland</i>	

Poster Session

Efficient Management of Domain Foreign Agents in Mobile Computing Environment Using Load Balance	359
<i>Yong Chul Kim, Min Gyo Chung, Jun Hwang</i>	

Node Synchronization Based Redundant Routing for Mobile Ad-Hoc Networks	365
<i>Wonjong Noh, Yunkuk Kim, Sunshin An</i>	

A New Backoff Algorithm to Guarantee Quality of Service over IEEE 802.11 Wireless Local Area Networks	371
<i>Kil-Woong Jang</i>	

A Light Protocol for Distance Estimation in Bluetooth Mobile Ad-Hoc Networks	377
<i>Felipe Gil-Castañeira, Francisco Javier González-Castaño</i>	

Access Router Discovery and Selection in Advanced Wireless Networks	383
<i>N. Blefari-Melazzi, D. Di Sorte, M. Femminella, L. Piacentini, G. Reali</i>	

Enhancing HIPERLAN/2 Security Aspects	389
<i>Josep L. Ferrer-Gomila, Guillem Femenias, Magdalena Payeras-Capellà</i>	

Analytical Modeling of a Traffic Differentiation Strategy for 802.11 395
 Luca Vollero, Giulio Iannello

Author Index 401

Wireless On-Demand Network Systems

First IFIP TC6 Working Conference, WONS 2004,

Madonna di Campiglio, Italy, January 21-23, 2004,

Proceedings

Battiti, R.; Conti, M.; Lo Cigno, R. (Eds.)

2004, XIV, 410 p., Softcover

ISBN: 978-3-540-20790-0