

2009 First International Conference on Advances in P2P Systems

(AP2PS 2009)

**Sliema, Malta
11-16 October 2009**



**IEEE Catalog Number: CFP0998H-PRT
ISBN: 978-1-4244-5084-8**

2009 First International Conference on Advances in P2P Systems

AP2PS 2009

Table of Contents

Preface

Committee

Reviewers

AP2PS 1: Performance Analysis of P2P Frameworks and Applications I

Peer Selection for Multi-source Streaming Approach on P2P File Sharing Application	1
<i>Ahmad Tajuddin Samsudin and Nanna Suryana</i>	
Performance Evaluation of a Chord-Based JXTA Implementation	7
<i>Carlo Nocentini, Pilu Crescenzi, and Leonardo LANZI</i>	
A Replica Relocation Method for Improving Search Efficiency in P2P Networks	13
<i>Toshiki Watanabe, Yong Zhao, Akimitsu Kanzaki, Takahiro Hara, and Shojiro Nishio</i>	
Caching Strategy for Scalable Lookup of Personal Content	19
<i>Niels Sluijs, Tim Wauters, Bart De Vleeschauwer, Filip De Turck, Bart Dhoedt, and Piet Demeester</i>	

AP2PS 2: Performance Analysis of P2P Frameworks and Applications II

Comparative Study of Peer-to-Peer Architectures for Scalable Resource Discovery	27
<i>Jeroen Famaey, Jef Donders, Tim Wauters, Frédéric Iterbeke, Niels Sluijs, Bart De Vleeschauwer, Filip De Turck, Piet Demeester, and Rudy Stoop</i>	
Modeling and Dynamics Analysis of P2P Networks Based on Evolutionary Games	34
<i>Seungyun Cho and Thanh Nguyen</i>	

A Novel P2P Content Sharing Scheme Supporting Multiple Services	39
<i>Jiang Wenjian, Le Lifeng, Song Yuning, and Chen Yanjun</i>	
A Review of Incentive Mechanism in Peer-to-Peer Systems	45
<i>Kan Zhang, Nick Antonopoulos, and Zaigham Mahmood</i>	
On Estimating Semantic Loss in Peer Data Management Systems	51
<i>Yannis Delveroudis, Paraskevas V. Lekeas, and Dora Souliou</i>	

AP2PS 3: Mobile P2P

Peer-to-Peer Solutions for Cellular Networks	54
<i>Andreas Berl, Hermann de Meer, and Tobias Hoßfeld</i>	
Scenario Analysis and System Dynamics in New Emerging Technology Research: Case Mobile Peer-to-Peer Content Distribution	60
<i>Juuso Karikoski, Mikko Heikkinen, and Heikki Hämmäinen</i>	
A Technique for Construction of Overlay Networks for MANETs with Consideration of Physical Network Topologies	66
<i>Yuuta Nishihara, Yusuke Yokota, and Eiji Okubo</i>	
Exploiting Traffic Sampling Techniques to Optimize Energy Efficiency in Mobile Peer Networks	72
<i>Julian K. Buhagiar and Carl James Debono</i>	

AP2PS 4: Advances in Theoretical Foundations of P2P

Mutable Peer-to-Peer File Systems: Analysis and Evaluation	78
<i>Charalampos Chelmis</i>	
A New Credit-Based Incentive Mechanism for P2P Scheduling with User Modeling	85
<i>Josep Rius, Fernando Cores, and Francesc Solsona</i>	
Using Logical Identifiers of Nodes in Replica Maintenance	92
<i>Quang Hieu Vu</i>	
A Generic and Overlay-Agnostic Publish-Subscribe Protocol	98
<i>Paulina Adamska, Adam Wierzbicki, and Tomasz Kaszuba</i>	

AP2PS 5: Service-Oriented P2P

Toward Fault-Tolerant P2P Systems: Constructing a Stable Virtual Peer from Multiple Unstable Peers	104
<i>Kota Abe, Tatsuya Ueda, Masanori Shikano, Hayato Ishibashi, and Toshio Matsuura</i>	
pService: Towards Similarity Search on Peer-to-Peer Web Services Discovery	111
<i>Gang Zhou and Jianjun Yu</i>	
Dependable Dynamic Service Integration on Service-Oriented Peer-to-Peer Networks	116
<i>Lu Liu, Jie Xu, Duncan Russell, KP Lam, Zongyang Luo, Kaigui Wu, and Dave Collins</i>	

ppBLAST: A Computational Service over Peer-to-Peer Network for BLAST	122
<i>Xinuo Chen, Stephen A. Jarvis, and Jenny Shuangyan Liu</i>	

AP2PS 6: Security, Trust and Quality of Experience in P2P Systems

Consumer Attitudes towards Different Aspects of Mobile Peer-to-Peer Services	132
<i>Mikko V. J. Heikkinen and Jukka K. Nurminen</i>	
Environmental Security in P2P Networks	138
<i>J. Díaz-Verdejo, P. García-Teodoro, and M. Soriano-Ibáñez</i>	
Algorithm-Based Fault Tolerance Applied to P2P Computing Networks	144
<i>Thomas Roche, Mathieu Cunche, and Jean-Louis Roch</i>	
Multiple Streaming at the Network Edge	150
<i>Majed Alhaisoni, Mohammed Ghanbari, and Antonio Liotta</i>	
Anomaly Detection in P2P Networks Using Markov Modelling	156
<i>J. Díaz-Verdejo, G. Maciá-Fernández, P. García-Teodoro, and J. Nuño-García</i>	

AP2PS 7: Managing P2P

Replica Placement Algorithm for Highly Available Peer-to-Peer Storage Systems	160
<i>Gyuwon Song, Suhyun Kim, and Daeil Seo</i>	
A Dynamic Cluster Construction Method Based on Query Characteristics in Peer-to-Peer Networks	168
<i>Yukie Kobayashi, Toshiki Watanabe, Akimitsu Kanzaki, Tomoki Yoshihisa, Takahiro Hara, and Shojiro Nishio</i>	
Detection of Encrypted Traffic in eDonkey Network through Application Signatures	174
<i>Mário M. Freire, David A. Carvalho, and Manuela Pereira</i>	
A Highly Robust P2P-CDN under Large-Scale and Dynamic Participation	180
<i>Manal El Dick, Esther Pacitti, and Bettina Kemme</i>	

AP2PS 8: Time-Constrained P2P Systems

FLaCoSt: A Novel Peer to Peer Architecture for Video Streaming in a Next Generation Network	186
<i>Jaime Garcia-Reinoso, Alex Bikfalvi, Ivan Vidal, and Francisco Valera</i>	
Evaluation of a Server-Free VoD Application in an In-building Scenario	192
<i>Juan Pedro Muñoz-Gea, Josemaria Malgosa-Sanahuja, Pedro Jose Piñero-Escuer, and Antonio M. Martinez-Rojo</i>	
The Distance-Availability Weighted Piece Selection Method for BitTorrent: A BitTorrent Piece Selection Method for On-demand Streaming	198
<i>Petter Sandvik and Mats Neovius</i>	
Calling Procedures in Hybrid SIP Network	203
<i>A. Campi and F. Callegati</i>	

Author Index