

Contents

Resource Allocation

Optimizing Multi-tenant Cloud Resource Pools via Allocation of Reusable Time Slots	3
<i>Leonardo P. Tizzei, Marco A.S. Netto, and Shu Tao</i>	
Dynamic Scheduling in Real Time with Budget Constraints in Hybrid Clouds.	18
<i>Ovidiu-Cristian Marcu, Catalin Negru, and Florin Pop</i>	
Cost-Aware VM Placement Across Distributed DCs Using Bayesian Networks	32
<i>Dmytro Grygorenko, Soodeh Farokhi, and Ivona Brandic</i>	
Cost-Efficient CPU Provisioning for Scientific Workflows on Clouds	49
<i>Ilia Pietri and Rizos Sakellariou</i>	
Cost Estimation for the Provisioning of Computing Resources to Execute Bag-of-Tasks Applications in the Amazon Cloud	65
<i>Pedro Álvarez, Sergio Hernández, Javier Fabra, and Joaquín Ezpeleta</i>	

Service Selection in Clouds

Service Quality Assurance in Multi-clouds	81
<i>Dana Petcu</i>	
Employing Relevance Feedback to Embed Content and Service Importance into the Selection Process of Composite Cloud Services.	98
<i>Dimosthenis Kyriazis, Nikolaos Doulamis, George Kousiouris, Andreas Menychtas, Marinos Themistocleous, and Vassilios C. Vescoukis</i>	
The Open Service Compendium: Business-Pertinent Cloud Service Discovery, Assessment, and Selection	115
<i>Mathias Slawik, Begüm İlke Zilci, Fabian Knaack, and Axel Küpper</i>	

Energy Conservation and Smart Grids

Optimizing Data Centres Operation to Provide Ancillary Services On-Demand	133
<i>Marcel Antal, Claudia Pop, Dan Valea, Tudor Cioara, Ionut Anghel, and Ioan Salomie</i>	

A Specification Language for Performance and Economical Analysis of Short Term Data Intensive Energy Management Services	147
<i>Alberto Merino, Rafael Tolosana-Calasanz, José Ángel Bañares, and José-Manuel Colom</i>	

Utility-Based Smartphone Energy Consumption Optimization for Cloud-Based and On-Device Application Uses.	164
<i>Baseem Al-athwari and Jörn Altmann</i>	

Optimizing the Data Center Energy Consumption Using a Particle Swarm Optimization-Based Approach.	176
<i>Cristina Bianca Pop, Viorica Rozina Chifu, Ioan Salomie Adrian Cozac, Marcel Antal, and Claudia Pop</i>	

Towards an Energy-Aware Cloud Architecture for Smart Grids.	190
<i>Richard Kavanagh, Django Armstrong, Karim Djemame, Davide Sommacampagna, and Lorenzo Blasi</i>	

Applications: Tools and Protocols

Diameter of Things (DoT): A Protocol for Real-Time Telemetry of IoT Applications	207
<i>Soheil Qanbari, Samira Mahdizadeh, Rabee Rahimzadeh, Negar Behinaein, and Schahram Dustdar</i>	

Automatic Performance Space Exploration of Web Applications	223
<i>Tanwir Ahmad, Fredrik Abbors, and Dragos Truscan</i>	

E-Fast & CloudPower: Towards High Performance Technical Analysis for Small Investors	236
<i>Mircea Moca, Darie Moldovan, Oleg Lodygensky, and Gilles Fedak</i>	

Community Networks

Towards Incentive-Compatible Pricing for Bandwidth Reservation in Community Network Clouds.	251
<i>Amin M. Khan, Xavier Vilaça, Luís Rodrigues, and Felix Freitag</i>	

On the Sustainability of Community Clouds in guifi.net.	265
<i>Roger Baig, Felix Freitag, and Leandro Navarro</i>	

Legal and Socio-Economic Aspects

Cloud Providers Viability: How to Address it from an IT and Legal Perspective?	281
<i>Cesare Bartolini, Donia El Kateb, Yves Le Traon, and David Hagen</i>	

Evolution of the Global Knowledge Network: Network Analysis of Information and Communication Technologies' Patents	296
<i>Kibae Kim</i>	
A Revised Model of the Cloud Computing Ecosystem.	308
<i>Sebastian Floerecke and Franz Lehner</i>	
Author Index	323

Economics of Grids, Clouds, Systems, and Services
12th International Conference, GECON 2015,
Cluj-Napoca, Romania, September 15-17, 2015, Revised
Selected Papers
Altmann, J.; Silaghi, G.C.; Rana, O.F. (Eds.)
2016, XV, 323 p. 82 illus., Softcover
ISBN: 978-3-319-43176-5