Cloud computing, networking, and their related service management including grid computing (as appropriate) have recently emerged out of marketing hype to viable computing/networking tools for reducing infrastructure deployment and service management costs without sacrificing the quality of service/experience (QoS/E).

Although the virtualization of computing and networking resources, and their self-organizing interconnection is at the heart of it, the methods/mechanisms/tools that are used to expose (visualization) resources and their utilization (the application programming interfaces of APIs) for developing anything (*) as a service (*aaS) are still ad-hoc and/or proprietary in nature. Security, privacy, and multi-tenancy support requirements add another dimension to the already complex set of Cloud — computing and networking — management problems.

This JNSM SI on CCNS management will include invited and referee-recommended papers on the following topics:

- **Cloud Applications and Services**
  - Any computing, data-storing, and networking as a service
- **API for enabling Cloud-based Services**
  - Public, Private, and Hybrid (toolkit approach) APIs
- **Virtualization (of any and all resources) and Hosting**
  - Virtualization of Clients/Desktop, Applications, Services, and Databases
  - Distributed Intra- and Inter-Domain Storage/FileSystems/Database
  - Distributed Intra- and Inter-Domain Scheduling of resources
  - Resources Mobility and Multi-tenancy
- **Protocols and Interoperability**
  - Adaptive Protocols for Generic Cloud Services
  - Inter-Domain Service-Specific Adaptive Protocols
- **Private, Public, Community, Hybrid Clouds**
  - Addressability, Networking Extensions, Service Quality Agreement
- **Cloud Service Logging and Monitoring**
  - Including Auditing and Verification
- **Soft and Hard Privacy and Security for Cloud-based Services**
  - Process, Practice and Mechanisms
- **Risk, Resiliency, and SLA (RRS) of Services in Clouds**
  - Risk-tolerance, MMTF, MMTR, etc. for Components and Apps/Services (End-to-End)
- **Cloud Service and Infrastructure Management**
  - Including Visualization, Automation, Debugging and Diagnosis
- **Reports from CCNS management Experiments and Filed Deployments**
  - University, Consortia, Industry/ Field Trials, etc.
- **Mobility Management in Cloud Computing**
• Cloud service hosting mobility and service migration
• Elastic computing using mobile codes
• Policy management in Cloud computing
• Regulations and export control of using Cloud computing

Guest editor(s):
• Bhumip Khasnabish, ZTE USA, Inc. (vumip1@gmail.com)
• Dijiang Huang, Arizona State University, USA (Dijiang.Huang@asu.edu)
• Xiaoying Bai, Tsinghua University, China (baixy@tsinghua.edu.cn)
• Paolo Bellavista, Università degli Studi di Bologna, Italy (paolo.bellavista@unibo.it)
• Bruno Schulze, National Lab. for Scientific Computing - LNCC, Brazil (schulze@lncc.br)
• Gregorio Martinez, University of Murcia, Spain (gregorio@um.es)
• Nikos Antonopoulos, University of Derby, UK (N.Antonopoulos@derby.ac.uk)

Paper submission date: June 15, 2011
Notification of acceptance: November 30, 2011
Final paper due: April 15, 2012
Publication date: September 2012