

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

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