



THE POWER OF GLOBAL COMMUNICATIONS

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The 5th IEEE International Workshop on Management of Emerging Networks and Services (IEEE MENS 2013)

in conjunction with IEEE GLOBECOM 2013, 9-13 December, Atlanta, Georgia, USA

http://grtc.uha.fr/MENS2013/

Both, end-to-end transport network architectures and associated management architectures are going through transformations, as new requirements in network management and control are continuously amended by emerging network and computing models, advances in autonomic networking, network virtualization, cloud computing, SDN (Software-Driven/Software-Defined Networking), including wireless sensor networks, ad hoc networks, overlay networks, grid networks, optical networks, multimedia networks, storage networks, Machine-to-Machine (M2M) communication networks, the convergence of next generation networks (NGN), Future Internet, SON (Self-Organizing Networks), or even nano-networks, etc. On the other hand, research communities and industry are seeing the need to increasingly work together to bring about faster pace to standardization and adoption of new technologies, including the launching of standardization activities for future networks, since the joint efforts are critical in fostering innovation and deployment of new technologies by industry. To mention a few initiatives that are calling for collaboration between academia and industry, the activities of the ETSI AFI Group on Autonomic Future Internet are producing specifications that can be adopted by both the academia and industry in order to research and develop inter-operable autonomic and self-managing networks. The other initiative that works closely with AFI and other standardization groups such as 3GPP, TMF and ITU-T, is the NGMN NGCOR initiative on the emerging vision of converged management of fixed and mobile networks for OPEX reduction. In all these initiatives there are emerging hot topics that require the attention of research communities, towards researching solutions that are aligned by standardized frameworks in order to guarantee interoperability in emerging and future network technologies. Also, increasingly ubiquitous network environments require new management strategies, which can cope with resource constraints, multi-federated operations, scalability, dependability, context awareness, security, mobility and probability etc. To bring complex network systems under control, it is necessary for the IT industry to move to autonomic management and control, autonomic features in both the data and control planes of the network. context-aware management and self-management systems in which technology itself is used to manage technology. Though the field has matured and standards are emerging in ETSI AFI, new theoretical approaches are still needed in resolving the challenging problems in network management including network architectural reference models that incorporate autonomic, cognitive and self-management principles. According to both industry and academia, the next steps that must be pursued is the adoption of a commonly-shared unifying reference model for autonomic networking, cognitive networking and self-management (such as the GANA—"Generic Autonomic Networking Architecture" Reference Model from ETSI AFI) by all stakeholders (including research communities), to enable quicker pace to researching within standardized frameworks and implementing interoperable self-managing networks. This workshop will provide a forum to researchers to propose theories and technologies on the management of emerging networks and services, share their experience of IT and telecommunications industries and discuss future management solutions for emerging networks and services. The workshop will also give the opportunity for the various communities and stakeholders to show results of adopting the ETSI AFI GANA Reference Model in research work and prototyping, while at the same time presenting and discussing the ways in which various research results can be contributed to the evolution of the Reference Model (as it becomes a commonly-shared framework for autonomics, cognitive networking and self-management).

TOPICS

Authors are invited to submit papers in theories and techniques for the management of emerging networks or related areas. Topics of the workshop include but are not limited to:

- Management of Emerging Networks and Services
- Management of Next-Generation Networks

- Management of Ad-hoc/Mesh Networks
- Management of 3G/4G Networks
- Management of Sensor Networks
- Resource Management of Wireless Networks
- Management of Virtualized Networks, Virtualized Resources and Virtualized Network Functions
- Management of Overlay Networks
- Management of VPN
- Management of P2P Networks
- Management of Grid Architecture
- Management of Multimedia Networks
- Management of Satellite Networks
- Management of Optical Networks
- Management of Cognitive Networks
- Management of Future Internet
- Management of Clouds
- Management of Machine-to-Machine (M2M) communication systems and networks
- Converged Management of Fixed and Mobile Networks: Solutions for NGMN NGCOR Project
- Federation Models and Federated Management of Heterogeneous Networks
- Evolution of Information Models and Data Models
- Adoption and application of the ETSI AFI GANA Reference Model for the Self-Managing Future Internet
- Network and Protocols Evolutions towards the Self-Managing Future Internet
- Evolving IPv6 Protocols towards IPv6++ for advanced Self-Managing Network Features
- Software-Driven/Software-Defined Networking (SDN) Management & Control
- OpenFlow Networking and Management
- Policy-based Network Management
- Bio-inspired Network Management
- AI Approaches for Network Management
- Control Theory for Network Management
- New Theory for Network Management
- Autonomic Management and Communication
- Self-management (Self-*) and Initiatives towards Standardization
- Context-aware Management
- Converged Networks and Services
- Management of SON (Self-Organizing Networks) Functions
- Reports on New Management Challenges in IT and Network Industries
- QoS & Performance Management in Emerging networks
- Security Management of Emerging Networks and Services
- Mobility management
- Managing energy consumption in resource constrained networks
- Metrics, Techniques, and Experiments for Evaluating Network Management Architectures
- Experimental Platforms that Support Network Management Research

SUBMISSION

IEEE MENS 2013 only accepts original, previously unpublished papers. Concurrent submission to GLOBECOM and other conferences or journals is not allowed. Prospective authors are encouraged to submit papers in IEEE style up to 5 pages, but one additional page is allowed with additional publication fee. You may use the standard IEEE Transactions templates for Microsoft Word or LaTeX formats found at http://www.ieee.org/web/publications/authors/transjnl/index.html. Only PDF files are accepted for paper review and must be submitted through EDAS (http://edas.info/N15055).

An accepted paper must be registered before the registration deadline. An accepted paper should be presented at the

workshop. Failure to register before the deadline will result in automatic withdrawal of the paper from the workshop proceedings and the program. All accepted and presented papers will be included in the IEEE GLOBECOM proceedings and available through IEEEXplore. GLOBECOM has the right to remove an accepted and registered but not presented paper from the IEEEXplore.

IMPORTANT DATES

Submission due: extended to July 7th, 2013 Accept notification: September 1st, 2013 Camera Ready: October 1st, 2013

GENERAL CO-CHAIRS

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