

CALL FOR PAPERS

Special Issue of the International Journal on Network Management (IJNM) on *Software-Defined Networking and Network Function Virtualization for Flexible Network Management*

Publication: January 2016

Scope of the Special Issue

Economical and operational aspects motivate the demand for fundamental changes towards more flexible management solutions. This trend is stimulated by Network Virtualization and Software Defined Networks (SDN) that emerged in recent years. These technologies allow networks to be run in a more flexible and cost efficient manner. As an emerging topic, Network Function Virtualization (NFV) allows even further flexibility by migrating network functions (e.g., DHCP, PPPoE, Firewalls, DPI, SBCs) from dedicated hardware to virtual machines running on commodity hardware. Virtualized network functions are appealing to network operators since they can be migrated and flexibly adapted to current demands.

The newly achieved flexibility in network management, particularly for NFV, opens a set of currently unresolved key questions concerning *i)* function placement, *ii)* service orchestration *iii)*, reliability and *iv)* performance. How to operate virtualized network functions in a reliable manner by providing redundancy and load balancing? Can virtualized network functions provide performance guarantees required for network operations and how can such virtualized services be benchmarked and compared? Where should network functions be placed to optimize the network subject to different design criteria? How can services be orchestrated? How can network monitoring in such flexible networks be used to dynamically manage them?

This special issue aims at addressing these and related questions in virtualized networks. Contributions to the following topics are of specific interest, but are not limited to:

• SDN/NFV architectures and applications	• Reliability of virtualized network functions
• Monitoring and QoE management in virtualized networks	• SDN/NFV-based service orchestration
• Advanced content placement in virtualized networks	• SDN/NFV-based network deployment and management
• Business considerations and economic aspects	• Security Management in SDN/NFV-based systems
• Network Operating Systems and Languages	• Theoretical foundations of SDN/NFV networks
• SDN in Mobile and Wireless Networks	• Construction and deployment of Service Function Chains
• SDN/NFV Resource allocation algorithms	• Fault correlation and diagnosis in virtualized networks

Submission Guidelines

Authors should submit their papers in PDF format only to <http://mc.manuscriptcentral.com/nem>
Paper submissions should not exceed 20 pages (double-space). Author instructions are available at [http://onlinelibrary.wiley.com/journal/10.1002/\(ISSN\)1099-1190/homepage/ForAuthors.html](http://onlinelibrary.wiley.com/journal/10.1002/(ISSN)1099-1190/homepage/ForAuthors.html) and the respective LaTeX template can be found at [http://onlinelibrary.wiley.com/journal/10.1002/\(ISSN\)1099-1190/homepage/latex_class_file.htm](http://onlinelibrary.wiley.com/journal/10.1002/(ISSN)1099-1190/homepage/latex_class_file.htm)

All submissions will be peer-reviewed. In case of acceptance, the final and camera-ready version has to take into account comments of reviewers and needs to follow the template's requirements.

Important Deadlines

Submission Deadline: June 30, 2015

Notification of Acceptance: Aug 31, 2015

Final Version: Oct 15, 2015

Publication: Jan 2016

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