Call for Demonstrations – Network Functions Virtualization

IEEE GLOBECOM 2013 Industrial Forum & Exhibits

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http://www.ieee-globecom.org/2013/demos.html

Network Functions Virtualization (NFV) aims to address network infrastructure problems with a large variety of proprietary hardware appliances by leveraging standard IT virtualization technology to consolidate many network equipment types onto industry standard high volume servers, switches and storage, which could be located in Datacenters, Network Nodes and in the end user premises. NFV is independent of and complementary to Software Defined Networks (SDN). This call is for ***practical demonstrations*** of novel approaches to NFV addressing challenges such as, but are not limited to:

- Achieving high performance virtualized network appliances, which are portable among different virtualization infrastructures, and with different IaaS implementations,
- Achieving co-existence with proprietary hardware based network platforms whilst enabling an efficient migration path to fully virtualized network functions on COTS platforms which re-use Operations Support Systems or Business Support Systems (OSS/BSS),
- Aligning OSS/BSS functions as virtualized functions on the same COTS IT infrastructure,
- Managing and orchestrating many virtual network appliances, particularly alongside legacy management systems,
- Security policy enforcement and deployment validation,
- Ensuring the appropriate level of resilience to hardware and software failures to enable scaling of network function virtualization,
- Integrating multiple virtual appliances from different vendors,
- Portability/Interoperability issues,
- Interconnection and federation of NFV-based networks,
- Performance tests and trade-offs, e.g., NIC acceleration vs. "standard" hardware,
- Migration and co-existence of legacy & compatibility with existing platforms,
- Automation (including auto-localization, auto-scaling, and self-healing of virtual appliances),
- Security & resilience of virtualized networking functions,
- Simplicity of virtualized networking operations,
- Network and service stability, reliability, and diagnostics in virtualized environments,
- Techniques for service assurance, fault monitoring and isolation, test and diagnostics in a virtualized network infrastructure,
- Minimizing energy consumption,
- Novel network topologies and network features only made possible by virtualization.

Submission Instructions

Academic and industry researchers are encouraged to submit their indications of interest to present demonstrations to the IEEE GLOBECOM NFV Technical committee via EDAS at http://edas.info/N15161 by **5PM EST 6th September 2013** for review. The indication of interest should include:

- the names, affiliations, and email addresses of authors,
- the goals of the NFV demo, related to the NFV themes identified above,
- information about the equipment to be used for the demo/exhibition,
- space needed and setup time required,
- any related publications or technical reports,
- a URL with any additional information, if needed.

All submissions must be written in English with at most 3 pages in length, including figures, and in PDF format only. The members of the TPC will review all demo submissions and the review results will be provided to the authors along with the notification. Note that demonstrations should be configured to run in a cloud environment accessible via Internet and presented from the exhibit space floor on the demonstrator's laptop. Also, an author of an accepted demo is required to register for the conference at the full or limited (member or non-member) rate and present the demo at the IEEE GLOBECOM 2013 conference.

Important Dates

Submission deadline: September 6, 2013
Notification of acceptance: September 20, 2013
Final Submissions: September 25, 2013

This call is technically endorsed by the Technical Steering Committee of the European Telecommunications Standard Institute (ETSI) NFV Industry Specification Group (ISG) to encourage the engagement of the research community and foster open innovation in the field of NFV.

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