Call For Papers

First Workshop on Software-Defined Internets of the Future - WSDIF 2014

Co-located with the 11th IEEE International Conference on Mobile Ad hoc and Sensor Systems (MASS) 2014 - Philadelphia, Pennsylvania - October 28 - 30, 2014.
http://inrg.cse.ucsc.edu/ wsdif/

Some of the challenges future internets will face, i.e., scale and complexity, are a direct result of the enormous success of their predecessor, the Internet. Most of the "action" fueling these challenges has been taking place at the network "edges" driven by an ever increasing use of "smart" mobile devices (e.g., smart phones, tablets, etc.) and ubiquitous access to the communication infrastructure (especially through wireless communication). Another major driving force behind this "evolutionary step" towards future internets is the development and deployment of increasingly sophisticated network applications ranging from cloud-based services, "smart" spaces (e.g., smart home, smart buildings, smart neighborhoods and grids, etc), health care delivery, law enforcement and emergency services, as well as the so-called Internet of Things - IoTs.

The growing need to facilitate networks, in particular, the Internet, to evolve, motivated the emergence of the Software-Defined Networking (SDN) paradigm. The SDN paradigm has been proposed as a way to facilitate and foster Internet evolution by enabling innovation through network programmability. SDN's premise is to decouple the network control- and data-planes and thus make deploying new network services and protocols viable. However, SDN techniques to-date have mostly targeted "managed networks". As such, they do not address the scale, heterogeneity and administrative decentralization of future networked environments, in particular when considering internets consisting of infrastructure–less based, self–organizing, and wireless heterogeneous networks.

This timely workshop aims to present and discuss recent developments in, and challenges raised by, programmable internets of the future. We thus invite researchers and practitioners to submit original work in the following topics. The workshop's goal is to provide a forum for researchers and practitioners to introduce and discuss new ideas to address issues such as control scalability and performance in distributed environments; present proposals and deployment experiences of new management software for distributed control (logically centralized, physically distributed); describe new architectural concepts and protocols for SDN-based inter-domain communication; offer new insights on SDN applications to smart environments and Internet of Things.

Scope

The WSDIF 2014 invites submissions of manuscripts that represent significant, novel and unpublished research contributions.

Topics of interest include, but are not limited to:

- **SDN architectures**.
- **Distribution of control in SDN**.
- **Security of SDN infrastructure and applications**.
- **SDN in challenged and heterogeneous networks**.
- **SDN in "user centric networks" - UCNs**.
- **SDN-based location and mobility services**.
- **Practical experiences in deployment of SDN-based technology and applications in a distributed fashion**.
- **Programmable networking approaches to address challenges in: mobile, mesh, cellular, sensor and ad-hoc networks**.
- **QoS in SDN-based solutions**.
- **Protocols and algorithms for inter- and intra-domain control communication**.
- **Evaluation tools, simulation tools, and testbeds**.

Submissions

All submissions should be written in English and are restricted to **6 pages** (IEEE Computer Society Proceedings Manuscripts style: single-spaced, double-column pages using 10pt size fonts on 8.5 x 11 inch pages, with side-margin at least 1 inch, including all figures, tables, and references). Authors can get up to 2 additional pages at US$150 per page.

Link for submission

- http://edas.info/N18141

Important Dates

- Paper submission deadline: **July 20, 2014**.
- Paper acceptance notification: **August 10, 2014**.
- Camera ready manuscript submission: **August 21, 2014**.

Workshop Organization

- Thierry Turletti, INRIA Sophia Antipolis, France, Thierry.Turletti[at]inria.fr
- Bruno Nunes, INRIA Sophia Antipolis, France, bruno.astuto-arouche-nunes[at]inria.fr
- Katia Obraczka, UC Santa Cruz, katia[at]soe.ucsc.edu