

# Capacity Sharing Workshop ACM SIGCOMM 2014 August 18 Chicago, Illinois, USA



### **CALL FOR PAPERS**

## **Capacity Sharing Workshop (CSWS'14)**

in conjunction with ACM SIGCOMM 2014 conference, on August 18, Chicago, Illinois, USA.

Changing usage behavior, increasing demand for bandwidth as well as a continuous trend towards virtualizing networks and network functions raise questions on how to share limited capacity resources fairly and more efficiently while maintaining the best possible Quality of Experience (QoE) for users. While efficiency is most important when resources are spare, fairness need to be evaluated based on the different quality requirements of the various Internet services that we have today. For example, the Internet, especially the mobile Internet, was mostly engineered to provide a low loss service, low-latency services are not well supported today. In data centers, virtualization and high utilization promise economic benefits. However, effective, yet practical capacity sharing between tenants and applications is an important requirement. This has led to the development of enhancements in capacity sharing, especially congestion control mechanisms – some of these mechanisms are domain-specific, others lend themselves to adoption or generalization for inter-connected networks.

The objective of this workshop is to bring together researchers in the area of network and transport protocols in the Internet as well as data centers and their applications to advance the state of research on capacity sharing. We solicit contributions on the state-of-the-art, results of ongoing research, open issues, trends and new ideas. We want to encourage researchers to consider the problem space over all layers.

#### **Topics**

Topics of particular interest include, but are not limited to

- Network, transport, and application layer as well as cross-layer solutions, e.g. in the area of AQM, congestion control, or connection start-up
- Application-layer models and requirements especially for interactive and real-time media services in fixed and mobile networks
- Context-aware resource allocation especially in cellular/fixed access networks and fixed/mobile convergence
- Multi-tenancy capacity sharing and isolation in virtual networks
- Approaches to reduce latency with or without network support (e.g ECN) and latency measurements
- QoE/QoS mapping, metrics and measurements
- Traffic management, classification and characterization in the Internet and data centers
- Fairness definitions and economic aspects on capacity sharing
- Related standardization activities, projects and regulatory constraints

**Important Dates** 

Paper Submission up to:

March 14, 2014

**Notification of Acceptance:** 

April 25, 2014

**Camera-ready Papers Due:** 

May 23, 2014

Workshop Date:

August 18, 2014

#### **Submission**

Submissions must be original, unpublished work, and not under consideration at another conference or journal. Submitted papers must be at most six (6) pages long, including all figures, tables, references, and appendices in two-column 10pt ACM format. Please see the workshop webpage for further guidelines: http://conferences.sigcomm.org/sigcomm/2014/

#### **Workshop Co-Chairs**

Mirja Kühlewind, IKR University of Stuttgart, Germany Dirk Kutscher, NEC Europe Labs Heidelberg, Germany



