Second Workshop on Challenged Networks (CHANTS) 2007

Co-located with Mobicom 2007, 14 September 2007, Montréal, QC, Canada

Workshop URI: http://chants-2007.netlab.tkk.fi/
Submission URI: http://www.edas.info/5526
Submission deadline: 23 May 2007 (extended)

Challenged networks are characterized by a heterogeneous mix of nodes and widely varying network conditions. Nodes in today's challenged networks often include mobile nodes, space-based nodes, sensor/actuator nodes and other devices. Performance of the network paths interconnecting such nodes can be highly varying in terms of bandwidth, latency, disruption characteristics and security requirements. Conventional Internet access in performance-limited environments such as developing countries can also be regarded as challenged networks as can be ad-hoc communication between personal devices.

The Internet protocol architecture suffers some problems when used in a challenged network setting. For example, when disconnection and reconnection is common or link performance is highly variable or extreme, one or more of the traditional Internet protocols do not work well. In this workshop following CHANTS 2006 and WDTN 2005, we wish to explore ongoing efforts in dealing with physical networks that operate significantly differently from wired, connected networks and the protocol architectures and algorithms used to deal with such situations. Techniques for making applications tolerant to disruptions and/or high delays are also in scope.

We specifically solicit papers in the following areas:

- Characterization of performance-challenged networks e.g. network measurements
- Networking systems operating over unusual/challenged networks
- Protocol design and evaluation of operations over challenged networks
- System architecture and design for challenged networks
- Applications in challenged networks
- Robust network application design and implementation techniques
- Delay tolerant and disruption tolerant networks (DTN)
- Configuration and management of challenged networks

Submissions may include presentations of specific systems or performance measurements, as well as architectural papers addressing new concerns. Papers that bring out problems in the existing proposals for challenged networks or that report operational experience will be favored. Selected papers will be forward-looking, will describe their relationship to existing work, and will have impact and implications for ongoing or future research. We aim to accept approximately 12 papers, and to have a highly interactive workshop focusing on evolving this area of network research and continuing to build its community.

In addition, we seek submission of demo proposals, also to be reviewed by the TPC. The demo proposals shall present recent practical results from the area of challenged networks. In exceptional cases, where live demos are simply not practical to present, poster or video presentations of practical results are acceptable, too.

Paper format and submission instructions:

Submitted papers must be no more than 8 pages long, two columns, with no characters in smaller than 10 point fonts, and must fit properly on US "Letter"-sized paper (8.5x11 inches). Margins must be of 1 inch on all edges (top, bottom, left, and right) of each page.

Demo proposal abstracts (to be published as part of the proceedings) shall not be longer than 3 pages plus 1 page description of the precise setup and requirements.

All paper submission will be handled via EDAS (http://edas.info/5526). Papers will be reviewed single blind.

Important Meeting Dates:

Paper submission deadline:	23 May 2007 (extended)
Demo submission deadline:	4 June 2007
Notification of acceptance:	18 June 2007
Camera ready due:	13 July 2007

Workshop Chairs:

Jörg Ott	Helsinki University of Technology (TKK)
Rajesh Krishnan	BBN Technologies

Steering Committee:

Kevin Almeroth, University of California, Santa Barbara
Mostafa Ammar, Georgia Institute of Technology
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Technical Program Committee:

See web page.