

# Workshop on Reducing Internet Latency

17-18 September 2013

London, England

## Introduction and Scope

Latency tends to have been sacrificed in favour of headline bandwidth in the way the Internet has been built. This two-day invitation-only workshop aims to galvanise action to fix that. All layers of the stack are in scope.

Latency is an increasingly important topic for networking researchers and Internet practitioners alike. Data from Google, Microsoft, Amazon and others indicate that latency increases for interactive Web applications result in less usage and less revenue from sales or advertising income. Whether trying to provide platforms for Web applications, high-frequency stock trading, multi-player online gaming or 'cloud' services of any kind, latency is a critical factor in determining end-user satisfaction and the success of products in the marketplace. Consequently, latency and variation in latency are key performance metrics for services these days.

But latency reduction is not just about increasing revenues for big business. Matt Mullenweg of WordPress motivates work on latency reduction well when he says, *"My theory here is when an interface is faster, you feel good. And ultimately what that comes down to is you feel in control. The [application] isn't controlling me, I'm controlling it. Ultimately that feeling of control translates to happiness in everyone. In order to increase the happiness in the world, we all have to keep working on this."*

Invitations to attend the workshop will depend on receipt of a position paper. In a spirit of co-ordination across the industry, submissions are encouraged from developers and network operators as well as the research and standards communities.

A wide range of latency related topics are in scope including, but not limited to:

- surveys of latency across all layers
- analyses of sources of latency and severity/variability
- the cost of latency problems to society and the economy, or the value of fixing it
- principles for latency reduction across the stack
- solutions to reduce latency, including cross-layer
- deployment considerations for latency reducing technology
- benchmarking, accreditation, measurement and market comparison practices

## Submissions

This is an invitation-only workshop. Prospective participants must submit short (up to 2 pages) position papers outlining their views on a specific aspect of the overall scope. The emphasis here is on relevance and brevity - you do not need to write a lot of text, just demonstrate that you have thought about the problem space and have something interesting to say on the topic.

Please send position papers in PDF format to: [latency@isoc.org](mailto:latency@isoc.org)

Participant numbers will be limited to focus on discussion and identifying actions rather than slideware.

Accepted position papers will be made public. A report on the workshop will be published after participants have agreed the content. Therefore, it will be possible to state views during the workshop without them being publicly attributed.

## Important Dates

Position paper submission deadline: **23 June 2013**

Paper acceptance notification: **28 June 2013**

Workshop dates: **9am, Tuesday 17th to 5pm, Wednesday 18th September 2013 (subject to change)**

## Program committee

Mat Ford, Internet Society, co-chair

Bob Briscoe, BT, co-chair

Gorry Fairhurst, University of Aberdeen

Arvind Jain, Google

Jason Livingood, Comcast

Andrew McGregor, Google

## Workshop venue and other details

**Venue:** London (exact location to be confirmed)

**Registration fee:** nil

**Recommended accommodation:** To be confirmed

The workshop is sponsored by the Internet Society, the RITE project, Simula Research Labs and the TimeIn project. The Internet Society will host a workshop dinner on the Tuesday evening.