L4S Low Latency Low Loss Scalable throughput

BoF Meeting

19th July 2016

Berlin, Germany

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AD: Mirja Kühlewind (Transport)

- Note takers
- Jabber
 - start your jabber comments with "[mike]" if you want them spoken at the mike
- Please say your name at the mike

Note Well

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What is L4S?

- "Low Latency Low Loss Scalable throughput"
- Latency (queueing delay) is the factor limiting application performance
- L4S is a set of technologies to address this:
 - An updated transport protocol in end hosts
 - A new queueing algorithm (AQM) in bottleneck links
 - A new way of identifying 'L4S traffic' vs 'existing traffic' (for coexistence /incremental deployment)

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Experimental work (implementations)
Internet drafts

New IETF work required

Purpose of L4S BoF

- Inform IETF community about L4S
- Seek feedback about
 - Do people think the work is worth pursuing?
 - Do people think it is worth IETF time?
 - Which individuals would like to help with the work?
 - Which individuals are willing to help with reviews of documents?
- What this BoF is NOT about!
 - The BoF is NOT going to discuss how to organise the work within the IETF
 - main options are: new WG; do in existing WGs, mainly tsvwg, tcpm & aqm; or something in between
 - Please contact Mirja to input your view (assuming work goes ahead in the IETF)

Agenda

- 1. [5mins] Introduction Chairs
- 2. [15mins] The problem and very high-level solution Bob Briscoe
- 3. [15mins] Demo: L4S in action Koen De Schepper
- 4. [5mins] L4S Applicability to Mobile, without flow inspection Kevin Smith
- 5. [5mins] L4S in a 4G/5G context Ingemar Johansson
- 6. [5mins] DCTCP evolution Praveen Balasubramanian
- 7. [25mins] Discussion about the technology
- 8. [10mins] Work required by the IETF Marcelo Bagnulo
- 9. [25mins] Discussion about the work required by IETF
- 10. [10mins] Polls (Chairs)