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)  New IETF work required
Internet drafts
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)