Internet Congestion Control Research Group

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RG Status

• Documents
  – RFC 5783 on “Congestion Control in the RFC Series” was published in February
  – Draft on Open Issues in CC Research has needed votes from IRSG, publication request issued to IESG by IRTF chair on 14 July

• Experimental CC Specifications
  – MuITFRC: proposed for DCCP, but determined to be more appropriate for ICCRG’s expertise to work on for Experimental RFC; reviews received in ICCRG, update will be presented today
  – TCP Proposals: CUBIC, H-TCP: ball is with the authors. Compound-TCP: awaiting activity from TCPM chairs.
Internet Capacity Sharing Architecture (ICSA) Design Team Status update

• Pricise statement of transport scaling problem (in progress)
  – particularly interaction between flow start and ongoing flows
  – Flow/user/ISP isolation question
  – isolation technology (e.g. WFQ, AFD) aims to constrain multiplexing
  – flows that can time-shift (e.g. LEDBAT) cannot see when to do so
  – congestion policing aims to allow time-shifting
  – and ultimately protects any flow/user/ISP from others
  – model encompassing both in progress: to enable comparison

• Internet Capacity Sharing Architecture I-D
  – no progress (requires resolution of isolation question)

• ConEx IETF w-g chartered
  – controversy during chartering
  – guarantees strong IESG and IAB interest in an ICSA Architecture I-D

• Advert: "Congestion economics" IAB plenary, Thu pm.
Meetings

• Today’s agenda
  – MulTFRC update, 10 minutes
  – News from CAIA's newtcp project -- delay-based TCP and improved instrumentation of FreeBSD's TCP stack, 10 minutes
  – TCP modifications to reduce thin-stream latency, Andreas Petlund, 20 minutes
  – Seeding TCP retransmission timer using SYN/SYNACK RTT sample, Yu-chung Cheng, 15 minutes
  – A Simulation Study on Increasing TCP's IW - Preliminary Results, Ilpo Jaervinen, 30 minutes
  – Scaling IW with Internet scale, Matt Mathis, 10 minutes
  – Increasing TCP's Initial Window, Nandita Dukkipati, 45 minutes

• Next meeting (tentative)
  – probably co-located with PFLDNet (dates tbd), Franklin & Marshall College in Lancaster, Pennsylvania