L4S & AccECN Interop Event @ IETF Hackathon

IETF 120
20–26 July 2024
Vancouver, Canada
Hackathon Plan

• What problem were you working on?
  • L4S Congestion Control coexistence
  • TCP AccECN

• Network Setup for Testing
  • GPON network emulator with L4S
  • Nokia Wi-Fi AP with L4S

• L4S Congestion Control Implementations
  • Netflix Simple Rate Control
  • UDP-Prague (new open source CCA)
  • Apple QUIC-Prague
  • Linux TCP Prague
    • New v6 kernel patches!

Interop testing runs all week:
  Sat – Sun: @ Hackathon
  Mon – Fri: Brighton Room (4th floor)

Relevant RFCs:
9330, 9331, 9332
draft-ietf-tcpm-accurate-ecn-30
What got done, so far

- **New set of L4S patches for ARM / kernel v6**
  - GitHub link above
  - Includes:
    - AccurateECN
    - TCP Prague
    - Dual-PI2
- Integration and Testing of [New Open Source UDP-Prague](#) CC Object
  - For applications, including video, QUIC, webRTC, etc.
  - New features to be added, please try it and send comments
  - Integration in [iPerf2](#)
    - As: “--udp-l4s” & “--udp-l4s-video” options
- Added ECN support to TCP BlackBox Logging on FreeBSD.
- Validated incremental improvement of Netflix Simple Rate Control with L4S
# Wrap Up

<table>
<thead>
<tr>
<th>Team members:</th>
<th>Scott Danahy, Netflix</th>
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<tbody>
<tr>
<td>Bob McMahon, Broadcom</td>
<td>Stuart Cheshire, Apple</td>
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<td>Chia-Yu Chang, Nokia</td>
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<td>Greg White, CableLabs</td>
<td><strong>First timers @ IETF/Hackathon:</strong></td>
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<td>Koen De Schepper, Nokia</td>
<td>Scott Danahy</td>
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<td>Michael Tüxen, FH-Münster</td>
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<td>Paul-Louis Ageneau, Netflix</td>
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<td>Peter Lei, Netflix</td>
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<td>Rod Grimes, FreeBSD</td>
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