App Interaction - IETF 96 - Berlin

• draft-ietf-rmcat-app-interaction was split into
  3 separate drafts, per IETF 92 decision
  • CC-application interaction (e.g. W3C API)
  • CC-codec interaction
    • draft-ietf-rmcat-cc-codec-interactions-02
  • CC framework of solution candidates
    • draft-zhu-rmcat-framework-00

• draft-ietf-rmcat-cc-codec-interactions-02
  – Allowed Rate is the primary interaction
  – Most other interactions removed, and more may be removed following review of the new framework draft.
draft-ietf-rmcat-coupled-cc-02

• -01, presented at IETF95:
  – Applied coupled-cc to both NADA and GCC and added text on how to apply the algorithm
  – Updated the variable names to make it inline with the recent NADA and GCC drafts
  – Marked passive version as highly experimental & moved it to appendix
  – Connection to the prioritization text in [I-D.ietf-rtcweb-transports]

➤ We answered to a WG chair query on March 22nd that we think this is ready for WGLC.

• -02, submitted after IETF95:
  – “keep-alive” update with cosmetics (mainly references)
No changes since IETF’95

Feedback provided according to draft-dt-rmcat-feedback-message-00 and draft-ietf-rmcat-rtp-cc-feedback-01 seems fine (no changes to the SBD draft are required)

We think the document is ready for working group last call
RMCAT Eval Criteria

• Jitter model updated

• Do we need, any of the following:
  • Loss model?
  • Background UDP?
draft-ietf-rmcat-wireless-tests

- No updates
- Ready for a formal wg review
draft-ietf-rmcat-eval-test-03
Updates and issues

• No updates since last meeting
• Ingemar raised issues with test case 5.7 Media flow competing with short TCP flow
  • Confusion on the short TCP model
    • Both eval-test and eval-criteria defines TCP model
  • The current short TCP model in eval-test appears as long TCP model capturing all the available capacity leaving no room for media flow.
    • Mainly due to bigger download object size
• The short TCP model in eval-criteria still results in bursty transmission which saturates the link capacity
What should we do?

• The test case describes the short flow might appear to be as long flow.

• However, we have a separate test case on competing long TCP flow, hence there is very little incentive in having a short TCP flow model to be appeared as long TCP flow.

• How should we model the short TCP flow?
  • We tried to get traces from browser vendors, we end up only getting reference to HTTPArchieve.
  • From there we took the object size in the eval-criteria.

• We should not engineer the test case to make the media congestion control look better but the model should be realistic.
Updates on draft-ietf-rmcat-gcc-02

Stefan Holmer, Google
Luca De Cicco, Gaetano Carlucci, Saverio Mascolo, Politecnico di Bari
Updates since IETF 95

- Section about the pacing mechanism added
  - Encoded Media is divided in groups of packets.
  - Groups of packets are sent every $\Delta T = 5\text{ms}$.

- Section about pre-filtering added
  - Pre-filtering makes GCC more robust on Wi-Fi networks.
  - Merges groups of packets that arrive in a burst and handles them as one event.
  - Details presented at the ANRW workshop. Slides and paper shared on list.
Future Work

- Add a section about the start-up phase.
- Improve the loss-based controller.
- Possibly consider improvements for mobile networks.