## App Interaction - IETF 96 - Berlin

- draft-ietf-rmcat-app-interation 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 22<sup>nd</sup> that we think this is ready for WGLC.

- -02, submitted after IETF95:
  - "keep-alive" update with cosmetics (mainly references)

#### Shared Bottleneck Detection for Coupled Congestion Control for RTP Media

draft-ietf-rmcat-sbd-04

David Hayes (SRL), Simone Ferlin (SRL), Michael Welzl (UiO), and Kristian Hiorth (UiO)

- 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)

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• We think the document is ready for working group last call



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## 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-evaltest-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.

#### Google



#### Updates on draft-ietf-rmcat-gcc-02

Stefan Holmer, Google Luca De Cicco, Gaetano Carlucci, Saverio Mascolo, Politecnico di Bari

#### Google

#### Updates since IETF 95

#### • Section about the pacing mechanism added

- Encoded Media is divided in groups of packets.
- Groups of packets are sent every  $\Delta T = 5$ 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.