RTP Media Congestion Avoidance Techniques (rmcat)

Chairs:

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Administrativa

Today's slides

http://datatracker.ietf.org/meeting/94/materials.html#tsv

Remote participation

Audio: http://ietf94streaming.dnsalias.net/ietf/ietf947.m3u

Meetecho: http://www.meetecho.com/ietf94/rmcat

Jabber chat

xmpp:rmcat@jabber.ietf.org?join

Mailing list

http://www.ietf.org/mailman/listinfo/rmcat

WG Document Status

Requirements, interfaces & evaluation

```
draft-ietf-rmcat-cc-requirements-09 [RFC Ed Queue > 300 days: MISSREF]
draft-ietf-rmcat-eval-criteria-04 [updated, co-editor needed]
draft-ietf-rmcat-cc-codec-interactions-01 [new, reviews needed]
draft-ietf-rmcat-eval-test-02 [reviews needed]
draft-ietf-rmcat-wireless-tests-00 [upcoming merge with draft-fu-rmcat-wifi-test-case]
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Algorithm candidates & Co

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draft-ietf-rmcat-nada-01 [updated]
draft-ietf-rmcat-scream-cc-02 [updated]
darft-ietf-rmcat-gcc-01 [new]
draft-ietf-rmcat-sbd-03 [updated]
draft-ietf-rmcat-coupled-cc-00 [new]
```

Expired

draft-ietf-rmcat-rtp-cc-feedback-00 [waiting for input from candidates]

Drafts Status

Evaluation

draft-zhu-rmcat-video-traffic-source-02

draft-fu-rmcat-wifi-test-case-01 [upcoming merge with draft-ietf-rmcat-wireless-tests]

Algorithm candidates & co

draft-singh-rmcat-adaptive-fec-02

Interactions and signaling

draft-holmer-rmcat-transport-wide-cc-extensions-01 [updated]

Missing

draft-singh-rmcat-cc-app-interactions

eval-criteria (1/2)

- Major update in -04
 - -See diff: https://tools.ietf.org/rfcdiff?url2=draft-ietf-rmcat-eval-criteria-04.txt
- Guidelines are removed
 - -Reason: overlap with requirements
 - -Group has made progress on
 - Wireless test-cases
 - Simulating video

eval-criteria (2/2)

- Added:
 - -Short TCP model (as discussed in Prague, IETF93)

- Minor updates pending
 - -Add details to Google's Jitter model
 - -Metrics...
 - Add more as evaluations mature

Milestone Update

Adopt first WG draft on requirements Done Adopt first WG draft on evaluation criteria Done Adopt first WG draft of RTCP extensions for use with congestion control algorithms and interactions Done between applications and RTP flows (if needed) Adopt first congestion control candidate as WG draft Adopt first WG draft on identifying and controlling groups of flows Done **Dec 2015** Submit requirements and evaluation criteria to IESG as Informational **Dec 2015** Submit identifying and controlling groups of flows to IESG for Experimental publication **Dec 2015** Submit first congestion control candidate to IESG for Experimental publication **Dec 2015** Submit interactions between applications and RTP flows to IESG as Informational **Dec 2015** Submit RTCP extension requirements for use with congestion control algorithms to AVTCORE (if needed) Feb 2016 Publish first draft of evaluation results Feb 2016 Publish first draft of Standards Track congestion control algorithm Feb 2016 Publish first draft of techniques to detect, instrument or diagnose failing to meet RT schedules **Jun 2016** Submit techniques to detect, instrument or diagnose failing to meet RT schedules to IESG as Informational Oct 2016 Submit congestion control to IESG for Proposed Standard

Reviews

- draft-ietf-rmcat-cc-codec-interactions-01
 - -Better before, but no later than January 29
 - -Names: Stefan H, Bo, Michael R, Randell
- draft-ietf-rmcat-eval-test-02
 - Better before, but no later than January 29
 - -Names: Safiqul, Stefan, Randell

Agenda Mon, Nov 2

15:20 WG Status & Agenda Bashing (*Chairs*)

15:40 Test Cases for Evaluating RMCAT Proposals (incl. Wireless Networks) (*Zahed Sarker*) draft-ietf-rmcat-eval-test-02 and draft-ietf-rmcat-wireless-tests-00

16:00 RTP Extensions for Transport-wide Congestion Control (*Stefan Holmer*) draft-holmer-rmcat-transport-wide-cc-extensions-01

16:20 Shared Bottleneck Detection for Coupled CC for RTP Media (*David Hayes*) draft-ietf-rmcat-sbd-01

Agenda Fri, Nov 6

09:00 Intro & Wrap-Up Monday meeting (Chairs)

09:10 Update on Video Traffic Source Model for RMCAT Evaluation (*Xiaoqing Zhu*) draft-zhu-rmcat-video-traffic-source-02

09:25 Coupled congestion control with GCC (*Safiqul Islam*) draft-ietf-rmcat-coupled-cc-00

09:55 Update on GCC (*Stefan Holmer*) draft-ietf-rmcat-gcc-01

10:15 Updated evaluation results on NADA (*Xiaoqing Zhu*) draft-ietf-rmcat-nada-01

10:45 Updates on SCReAM - An implementation experience (*Zahed Sarker*) draft-ietf-rmcat-scream-cc-02

11:05 Considerations for draft-singh-rmcat-cc-app-interactions (Varun & Stefan)

RMCAT Generic Feedback Message(s)

- Give usage of common feedback message(s) a try.
 - Varun-RMCAT list: "Main reason is that endpoints implementing any of the RMCAT algorithms can interoperate with each other"
 - Means that all RMCAT CC algs need rely on the <u>same set of</u> information content and rate and timing from receiver
 - Differences in RMCAT CC algs only on sender side

Way forward ?

- Requirements to be considered in each CC algs draft
- Draft-ietf-rmcat-rtp-cc-feedback draft to analyse required feedback rates and timing as well as content – and point to existing remedies and/or what new needed.
 - Do this now or wait until we are closer to knowing which CC algs that go for standards track?