RTP Media Congestion Avoidance Techniques (rmcat)

IETF 112, November 2021

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Note Well

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- BCP 54 (Code of Conduct)
- BCP 78 (Copyright)
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Administrativa

- This meeting is being recorded
- Need a note taker

- Mailing list: http://www.ietf.org/mailman/listinfo/rmcat
- Today's slides: https://datatracker.ietf.org/meeting/112/materials.html#rmcat

Agenda

1. Administrativa and introduction -- chairs (5 min)
2. Update on status of RMCAT algorithms (30 min)
    a) Introduction -- chairs
    b) SCReAM (RFC 8298): experiments and future -- Ingemar Johansson
    c) Update on SBD (RFC 8382) -- David Hayes
3. RTCP feedback for congestion control -- Colin Perkins (15 min)
4. Wrap up of activities -- chairs (10 min)

Recap of wg activities and status

Algorithm Candidates & Related Documents

- RFC 8298: Self-Clocked Rate Adaptation for Multimedia, 2017-12
- RFC 8698: Network-Assisted Dynamic Adaptation (NADA): A Unified Congestion Control Scheme for Real-Time Media, 2020-02
- RFC 8699: Coupled Congestion Control for RTP Media, 2020-01
- RFC 8382: Shared Bottleneck Detection for Coupled Congestion Control for RTP Media, 2018-06

Recap of wg activities and status

Requirements and Evaluation Documents

- RFC 8836: Congestion Control Requirements for Interactive Real-Time Media, 2021-01
- RFC 8593: Video Traffic Models for RTP Congestion Control, 2019-05
- RFC 8867: Test Cases for Evaluating Congestion Control for Interactive Real-Time Media, 2021-01
- RFC 8868: Evaluating Congestion Control for Interactive Real-Time Media, 2021-01
- RFC 8869: Evaluation Test Cases for Interactive Real-Time Media over Wireless Networks, 2021-01

Recap of wg activities and status

Active wg document on feedback

- Sending RTP Control Protocol (RTCP) Feedback for Congestion Control in Interactive Multimedia Conferences, draft-ietf-rmcat-rtp-cc-feedback-04, recently updated
- Was waiting for “RTP Control Protocol (RTCP) Feedback for Congestion Control” (RFC 8888)

Status of RMCAT algorithms

- SCReAM (RFC 8298) – Update by Ingemar
- NADA (RFC 8698)
  - Implementation of NADA in the open-source Mozilla browser (Dec 2020)
  - No known ongoing activities
- Coupled CC (RFC 8699)
  - Research ongoing on coupling video and data flows in Chromium
- SBD (RFC 8382) – Update by David