Updates on draft-ietf-rmcat-gcc-01

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Updates since IETF 93

- The arrival time filter has been made scalar.
  - This simplifies the filter without impacting performance.
  - Filter no longer taking payload size into consideration:
    \[ d(i) = \frac{L(i)}{C} + m(i) + v(i) \]

- TFRC rate control limit has been removed.
  - Experimental evaluation has shown that the minimum limit of the TFRC rate control at the loss-based controller has no effect.

- More meaningful names for some variables.
Future Work

- Improve the loss-based controller.
  - Too aggressive, goal is to make it nicer to TCP.

- Add a Section on the Pacing mechanism.

- Add a Section on the Start-up phase.

- Consider improvements for mobile networks.
Backup slides
Emulator: TestBed settings

- Chromium version: **M45**
- Video Encoder: VP8
- Video sequence: **fourpeople_1280x720_30.yuv**
- Max-Min Video Encoder bitrate range: 50-2000 kbps
- Signalling: [https://apprtc.appspot.com/](https://apprtc.appspot.com/)

WAN Emulation:

- iproute2: tc+tbf module to set link capacity $b$ constraint and buffer $Tq$ size on Node 1
- NetEm to set propagation delay on Node 2

Bottleneck parameters:

- Drop tail
- Queueing size: 300ms
- Min one-way path latency: 25ms
GCC Emulation - Evaluation test 5.6

Old Version

New Version