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) = ~~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

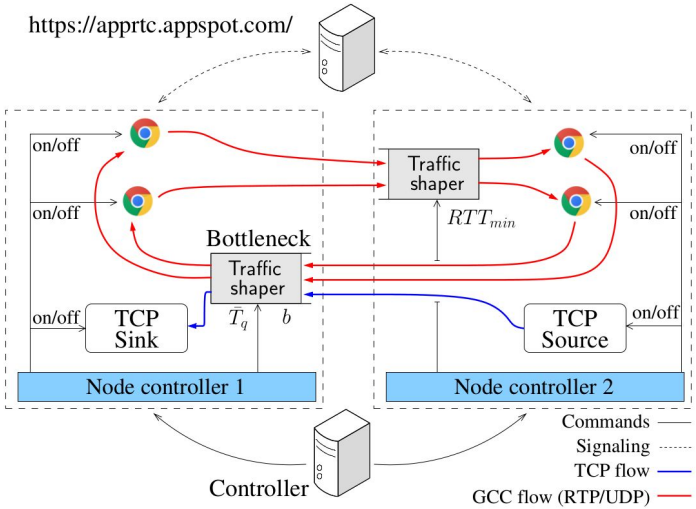
- Improve the loss-based controller.
  - Too aggressive, goal is to make it nicer to TCP.
- Add a Section on the Pacing mechanism.
- Add a Section on the Start-up phase.
- Consider improvements for mobile networks.

Google

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/



WAN Emulation:

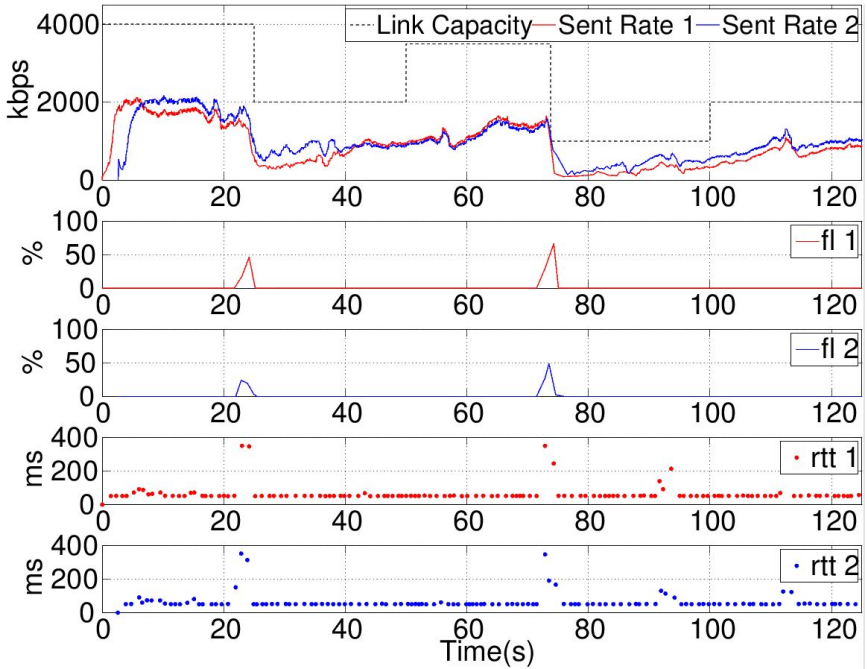
- iproute2: tc+tbf module to set link capacity *b* constraint and buffer *Tq* size on Node 1
- NetEm to set propagation delay on Node 2

Bottleneck parameters:

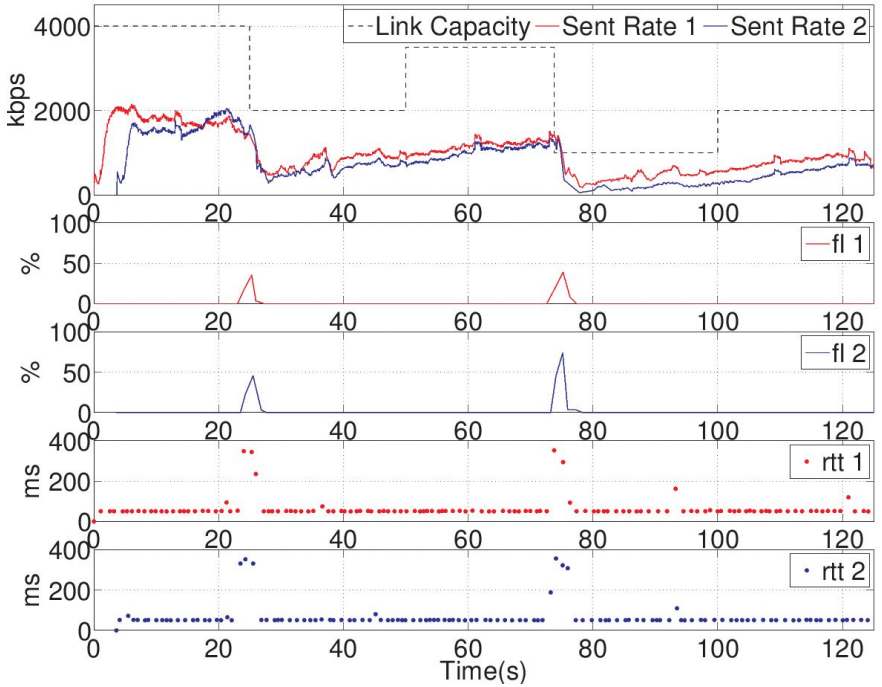
- Drop tail
- Queueing size: 300ms
- Min one-way path latency: 25ms

GCC Emulation - Evaluation test **5.2**

Old Version

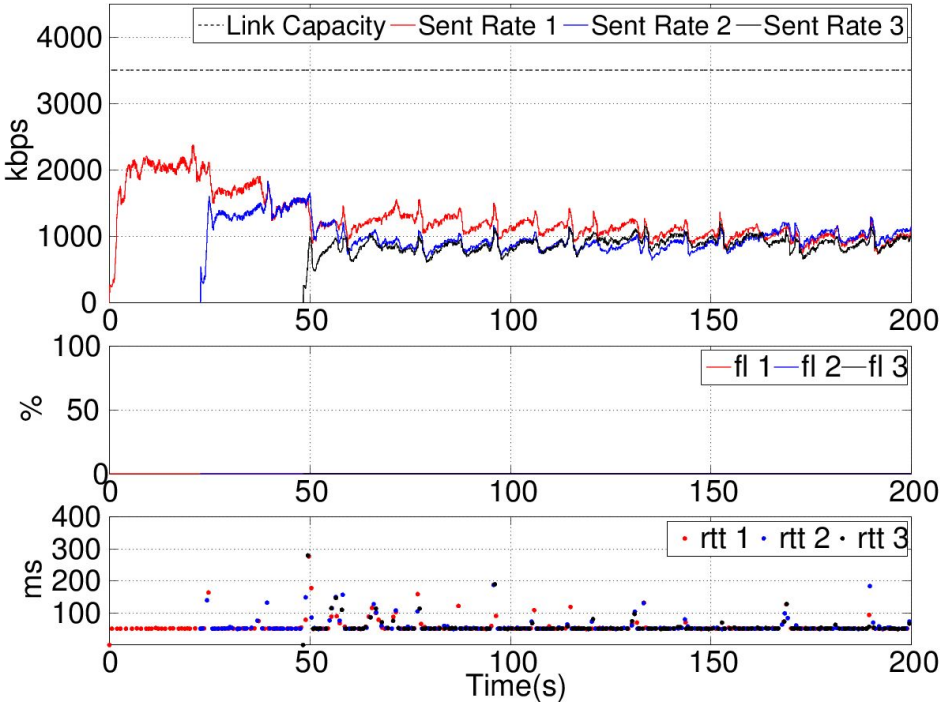


New Version



GCC Emulation - Evaluation test **5.4**

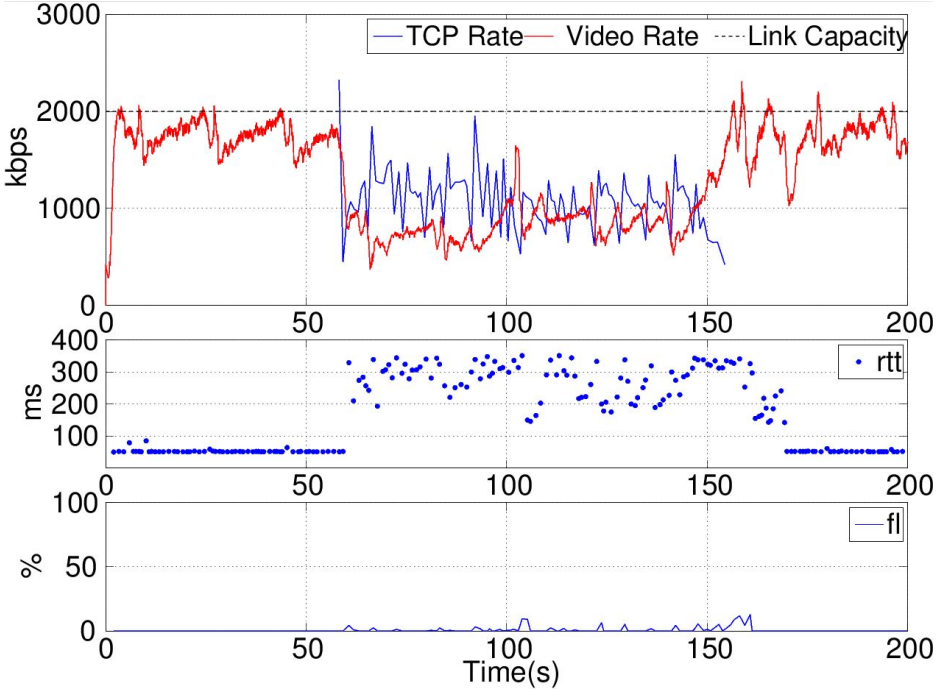
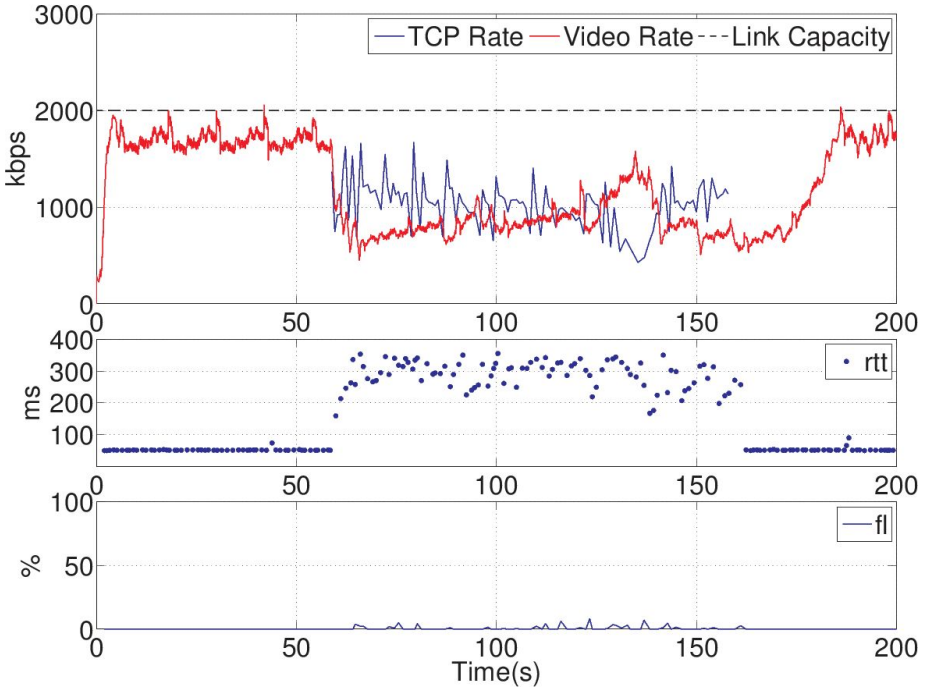
Old Version



New Version

GCC Emulation - Evaluation test **5.6**

Old Version



New Version