Evaluating Congestion Control for Interactive Real-time Media

http://tools.ietf.org/html/draft-singh-rmcat-cc-eval-04 IETF88, Vancouver 06 November, 2013 Varun Singh, Joerg Ott

Changes since -03 version

- Clarified Metrics:
 - Convergence time
 - Bandwidth utilization
- Fairness Criteria changed to Fairness Test
- only DropTail for now.

Open Issues

• Short TCP flows

Proposal:

- modeled as a sequence of file downloads interleaved with idle periods
- File sizes: uniform distribution between 100KB to 1.5MB.
- Idle period: exponential distribution with the mean value of 10 seconds.

Evaluation Methodology

- No Traffic Generator
 - Application generates rates estimated by the congestion controller.
- Media Traffic Generator
 - Application generates rates as close to the estimated rate.
 - Discussed traffic model (3rd Nov), may appear as a separate draft.
- Real sequences
 - Applications generates rates based on type of video sequence (codec) and estimated rate by the congestion controller.

Next Steps

- Scenarios and expected behaviour are catalogued at
 - https://sites.google.com/site/ietfrmcatsolutionevaluations/
 - Currently, contains scenarios that already have experimentation results.
- Adopt as WG item?