Loss Detection and Congestion Control

draft-iyengar-quic-loss-recovery-01
Draft Outline

- Design of the QUIC Transmission Machinery
- Loss Detection
- Congestion Control
  - Will describe how to do NewReno congestion control for QUIC
- TCP Mechanisms in QUIC
  - Source TCP RFCs, drafts, papers for repurposed mechanisms
Loss Detection

- Separates Loss Detection from Loss Recovery
  - Recovery in main protocol draft

- Similar in spirit to TCP Rack
  - draft-ietf-tcpm-rack-01 (adopted by tcpm wg)
  - RACK uses time-ordering instead of TCP sequence numbers

- QUIC packet-number is time-ordered
Work to be done (major items)

- Describe algorithm in more detail
  - Rationale for constants

- Describe RTT measurement
  - RFC 6298 algorithms repurposed for QUIC

- Describe NewReno congestion control
  - RFC 5681 algorithms repurposed for QUIC