

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