Update on TCP Alternative Backoff with ECN (ABE)
draft-khademi-alternativebackoff-ecn

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REDUCING INTERNET TRANSPORT LATENCY

SEVENTH FRAMEWORK PROGRAMME

I-D's Scope

- **An *experimental* update to RFC3168:** updates the TCP sender-side reaction to a congestion notification received via ECN

- **RFC3168 Section 6.1.2:**

"If the sender receives an ECN-Echo (ECE) ACK packet...the indication of congestion should be treated **just as a congestion loss** in non-ECN-Capable TCP. That is, the TCP source **halves** the congestion window *cwnd* and reduces the slow start threshold *ssthresh*."

- **Update to RFC3168 Section 6.1.2:**

"If the sender receives an ECN-Echo (ECE) ACK packet...the indication of congestion **SHOULD** induce **a less conservative reaction** than loss: the TCP source multiplies the congestion window *cwnd* **with 0.8** and reduces the slow start threshold *ssthresh*."

Status of the I-D

- **Discussions on the TCPM ML (up to IETF Prague):**
  - Addressed Mark Allman's comments with regards to $beta_{ecn}$ as a percentage
  - Review from Anil Agarwal is responded

- **Discussions on the ICCRG ML (after IETF Prague):**
  - Responded to comments from Michael Scharf and Bob Briscoe

- **Submitted -01:**
  - Some editorial work, more elaborative text on the rationale behind ABE in Introduction (Section 1) and Discussion (Section 2)
  - Discussion (Section 2) explains:
    - where ABE can be useful (lightly multiplexed, high-BDP access links)
    - ABE is *practical* rather than *ideal* (static beta rather than an adaptive one)
    - The choice of multiplier (no change to $beta_{loss}$)
  - should -> SHOULD in the update of RFC3168 (Section 3)
  - The proposed update is "experimental" rather than standard-track

Q&A