TCP Alternative Backoff with ECN (ABE)

draft-ietf-tcpm-alternativebackoff-ecn-06

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Thank you for comments!

• We had a detailed review from Michael Scharf before WGLC and updated the draft

• During WGLC, from Richard Scheffenegger:
  – Some of the I-D references are already RFCs (also M. Tüxen)
  – "I'm wondering if some generic rules-of-thumb, as to what a reasonable beta_loss vs. beta_ecn adjustment would be in this RFC might be in order (although I agree, that CCs should come up with reasonable guidance there)."
    • Our answer: it really depends on the CC
    • Note: our draft already says "The results of these tests indicate that CUBIC connections benefit from beta_{ecn} of 0.85 (cf. beta_{loss} = 0.7)"
Comments from Markku Kojo

1. Wrong statement in section 4.1 ("Why Use ECN to Vary the Degree of Backoff?") related to timeout
   – We'll remove this paragraph

2. Specify what happens when cwnd == ssthresh
   – Suggest to be conservative + conform with previous versions: Congestion Avoidance only, which is only clearly the case when cwnd > ssthresh
   – Explain that there is a "grey area" that, in RFC 5681 style, "may benefit from additional attention, experimentation and specification."
   – Suggest to include cwnd <= ssthresh in this
Comment from Markku Kojo /2

• Concern about lower bound of 2*SMSS
  – We will clarify that our modified backoff factor applies to adjusting ssthresh and cwnd upon receipt of ECN mark
  – As before, cwnd may be reduced below ssthresh

• ABE is **only** about changing the backoff factor