RFC 5681bis TCP Congestion Control

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TCP Congestion Control

Currently RFC 5681 Draft Standard

Obsoleted RFC 2581 Proposed Standard

Obsoleted RFC 2001 Proposed Standard

TCP Congestion Control

- Goal: Move to Internet Standard
- Roll in one existing (verified) errata:
 https://www.rfc-editor.org/errata_search.php?rfc=5681
 - And see next slide...
- From the original authors, Mark and Ethan will contribute. Also asked Vidhi,
 Neal, Jana for help. (I will act as editor.)
- We have a repo at https://github.com/NTAP/rfc5681bis
- Should TCPM do this?

Open Question: setting ssthresh

- RFC 5681 says
 ssthresh = max (FlightSize / 2, 2*SMSS)
- AFAIK all major stacks that implement CUBIC do ssthresh = cwnd * β_{cubic}
- RFC 7661 (Experimental) already allows FlightSize ≤ ssthresh ≤ cwnd
- RFC 9002 (QUIC; Proposed Standard) uses cwnd
- Does this motivate any changes for RFC 5681bis?