Guidelines for Internet CC
draft-fairhurst-tsvwg-cc

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Overview

• The IETF has said much about Congestion Control (CC).

• The general recommendation of RFC8085 is to leverage existing CC methods…. but that isn’t always the way to go.

• I decided to write ~4 page document on the core things that would encourage a CC to "play well”

• The RFCs already say this stuff…

• Well…. , and it took more than 4 pages!
-00 Initial draft

  Consumed 26 key RFCs looking for wisdom - it was there, but scattered.

-01 More coherent

-02 to Fix some annoying typos

-03 Starvation, FEC, RFC5783

-04 Where we are today…
Section 3: Principles of Congestion Control

- There are a diversity of Path Characteristics
- Flow multiplexing and congestion can be annoying
- Most important is to avoid congestion collapse
Section 4: Guidelines for Performing CC

- Connection Initialisation (“RTO”, “IW”)
  - Using Path Capacity (“CC”, “Bursts”)
  - Timers and Retransmission
  - Responding to (potential) Congestion (congestion, ECN)
  - Using More Capacity (“Slow-start”, etc)
  - Network Signals (Trust)
  - Protection of Protocol Mechanisms (“on path”, “off path”)
Where does this lead?

This could lead to a change to BCP41 (RFC2914)
Questions to WG

Will / has anyone read this?

Does anyone care?

Who will help me? … or should I spend my time otherwise?

Can we do this work in tsvwg?