RFC5033bis Overview

Martin Duke & Gorry Fairhurst, eds. IETF 119

Goals: update proposal criteria to reflect...

- The 2024 Internet
- Proponents that can deploy and test at global scale
- Current standards have bad habits; conservatism perpetuates those habits

And just make it less painful

Non-goals

- A congestion control tutorial
- A cutting-edge, innovative document
- Create barriers to approaching the IETF

"This document is meant to reduce the barriers to entry for new congestion control work to the IETF. As such, proponents ought not to interpret these criteria as a checklist of requirements before approaching the IETF. Instead, proponents are encouraged to think about these issues beforehand, and have the willingness to do the work implied by the remainder of this document."

- Multicast
- AQM

Sec 2. Experimental vs. PS

- No internet-scale deployment = SHOULD be Experimental
- internet-scale deployment = MAY go for PS
- Experimental SHOULD NOT be the default, SHOULD be measured when enabled

3.1 Single-Algorithm Criteria

- Congestion Collapse
- Bufferbloat
- Self-fairness
- new/short-lived flows

3.2 Mixed Algorithm Criteria

- General-purpose CCs: not strict Reno- and Cubic- fairness
- Real-time CCs this is hard to nail down
- Short/Long flows

4. Mandatory Scenarios: General Internet cases

- Tail-drop queues
- Wired paths
- Wireless paths
- Tunnels

5. Special Cases

- AQM
- Varying Delay
- IoT
- High Delay
- Misbehaving Nodes
- Packet Reordering
- Transient Events
- Sudden Changes in the Path
- Multipath

Status

WGLC complete, but still accepting comments

What's still out there? Should we proceed?