Profile for DCCP Congestion Control ID 4: the Small-Packet Variant of TFRC CC.

Sally Floyd and Eddie Kohler draft-ietf-dccp-ccid4-03.txt

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DCCP Working Group, IETF

Slides: http://www.icir.org/floyd/talks.html

Changes from the March 2008 IETF:

- Changes from draft-ietf-dccp-ccid4-02.txt:
 - * Updated to refer to RFC 5348 (new TFRC spec) instead of RFC 3448 (old TFRC spec).
 - * Added a section on "Experimental Status of this Document." Feedback from Gorry Fairhurst.
 - * Minor editing, feedback from Alfred Hoenes and Gorry Fairhurst.

The change from RFC 3448 to RFC 5348:

 RFC 3448, TFRC, Proposed Standard. RFC 4342, CCID-3, Proposed Standard. RFC 4828, TFRC-SP, Experimental.
RFC 5348, TFRC, Obsoletes RFC 3448. The CCID-4 draft, for Experimental.

More on RFC 5348:

- The changes in RFC 5348 are listed in Section 9 of that document, "Changes from RFC 3448".
- I am not *aware* of any problems caused for RFC 4342 and RFC 4828 by RFC 5348.
- I have retired. I am not going to be revising RFC 4342 (CCID-3) and RFC 4828 (TFRC-SP) to refer to RFC 5348 (new TFRC) instead of RFC 3448 (TFRC).
- The CCID-4 draft is targeted for Experimental, and is "not proposed for widespread deployment in the global Internet".

Next steps:

• Ready for Working Group Last Call?

Extra slides:

Changes in RFC 5438:

- Addressing data-limited senders:
 - Changed details of sender's use of reported receive rate in limiting the sending rate.
- Allow the sender to accumulate an RTT of unused send credits.
- Incorporate higher initial windows (as in CCID-3).
- Allow coarse-grained timestamps (as in CCID-3).
- Corner cases:
 - Response when the first data packet is dropped.
 - Response when the nofeedback timer expires during slowstart, or when the sender does not yet have an RTT sample.

From earlier email:

• "CCID-3 (RFC 4342) predates RFC 5348 (the revised TFRC spec), and is written in terms of RFC 3448. (Some of the changes from RFC 3448 to RFC 5348 incorporate some of the material on CCID-3, including higher initial windows (CCID-3 Section 5) and coarse-grained timestamps (CCID-3 Section 10.2).) However, I am essentially retired (mostly using up vacation time until I will be more fully retired this May), and am not going to be taking on the chore of updating CCID-3. This is relevant to CCID-4 because much of CCID-4 says "use the specification in CCID-3 for this"."