RTP with TCP Friendly Rate Control

draft-ietf-avt-tfrc-profile-09.txt
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Overview

- Discussion on draft-ietf-avt-tfrc-profile-09 is ongoing in the AVT working group.

- draft-ietf-avt-tfrc-profile-09 details how the feedback and information exchange needed by the TFRC mechanism can be supported RTP/RTCP.

- Relies on:
  - RFC 4585: Extended RTP Profile for RTCP-Based Feedback (RTP/AVPF)
  - RFC 3536: SDP Bandwidth Modifiers for RTCP Bandwidth
  - draft-ietf-avt-rtp-hdrext (in IESG review): A general mechanism for RTP Header Extensions.

\[ x = f(s, RTT, p) \]

sender \[ p, x_{\text{recv}}, t_{\text{delay}}, t_i \] receiver

\[ \text{RTT, } t_i, s_i \]
Changes since -07

- A number of changes have been made, thanks to feedback and reviews from Gorry Fairhurst, Colin Perkins, and Magnus Westerlund.

- MANY nits, RFC keyword usage and editorial fixes

- DCCP related changes:
  - Updates to Section 3 to reflect all additional features offered when using DCCP CCID-3 transport versus TFRC/RTP
  - The draft now references RFC 3448bis
  - Added informative references:
    - The DCCP RFCs (RFC 4336, RFC 4340-42)
    - The RTP over DCCP draft (draft-ietf-dccp-rtp-07)
Changes since -07

- RTP/AVPF related changes:
  - Emphasis that any AVPF based profile can be used (section 1)
  - Added text on the mapping of the RTP SSRCs to the TFRC RTCP feedback (section 6):
    - RTCP feedback packets can be compounded from one sender for multiple media sources (SSRCs). However, TFRC is a unicast congestion control scheme, the draft now stipulates that:
    - “all messages in the compound RTCP packet MUST share the same media source SSRC”
  - Added section on SDP Offer/Answer model (section 8)
  - Clarifications on IANA registrations (section 9)
  - Recommended use of the SAVPF profile in instances where the TFRC feedback messages may be compromised (section 10)
Questions, Comments?