DART: Discussion of draft

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Brief history

- Goal: “a document that explains the limitations that exist with DiffServ when used with RTP in general as well in the specific RTCWeb cases.”
- draft-york-dart-dscp-rtp
  - Author team: David Black, Cullen Jennings, Paul Jones, Dan York
  - 00: First version
  - 01: Flesh out content
  - 02: Minor edits, terminology alignment
- Now adopted as WG document
  - 00 WG version coming after this meeting

UDP Multiplexing Topics (1)

- One RTP session per UDP 5-tuple, not multiple
  - draft-westerlund-avtcore-transport-multiplexing: Expired proposal, unclear future
- How many DTLS sessions per UDP 5-tuple?
  - Can DTLS demux multiple sessions?
- How many TCP or SCTP sessions per 5-tuple?
  - TCP and SCTP can each demux multiple sessions
  - But how to demux RTP vs. TCP vs. SCTP over UDP?

UDP Multiplexing Topics (2)

- SCTP/DTLS/UDP: Aggressive use of RFC 5764
  - Original Intent: DTLS + SRTP
  - Security keying + secured media on same UDP 5-tuple

- Add mention of RTCP multiplexing with RTP?

Drop Precedence

- Example: AF class - three drop precedence levels
  - E.g., AF3x = {AF31, AF32, AF33}
  - Packet reordering within AF class: Prohibited
- Design rationale: Media traffic (RTP)
  - Drop less important data more often
  - Example: Mark video frame types differently
- What about SCTP or TCP session?
  - Resulting drop likelihood is some sort of mix
  - (With thanks to Karen Nielsen for noticing)
- Can also use drop precedence with class selector DSCPs
  - Can also use priority, packet reordering always possible

RFC 2119 Keywords

- draft-york-dscp-rtp written as Standards Track
  - Uses MUST/SHOULD/MAY keywords
  - Official dart WG draft: Will be Informational RFC
- Two choices (Section 4 Recommendations):
  1. Leave MUST/SHOULD/MAY
     Explain their use in an Informational document
  2. Remove MUST/SHOULD/MAY
     Find different words that are clear and emphatic

Which Transport Protocols?

- Draft focuses on TCP, UDP and SCTP
- What else should be added?
  - DCCP?
  - Hint: Send Text! ☺

Use by other drafts

- draft-ietf-tsvwg-rtcweb-qos
- draft-ietf-rtcweb-transports

Anything Else?