Options for Multiplexing Multiple Media Flows in RTP

draft-westerlund-avtcore-multiplex-architecture-01

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Outline

› Purpose
› Why is a document needed?
› Content
› Updates
› WG Adoption
Purpose

To publish a document that provides RTP application designers with information about:
  - The existing RTP multiplexing points
    - RTP Session
    - SSRC
    - Payload Type
  - The implications of making a particular choice
  - Guidance on how to make good choices

To accomplish this purpose we believe there should be:
  - Objective descriptions and analyses
  - WG consensus on content
Why is a document needed?

› RTP [RFC1889] was originally written more than 16 years ago:
  - The world has changed since then. Considerations that weren’t important then may be today
  - What was selected to be documented of the motivation for design or recommendation may no longer be the only relevant things

› We now have a richer environment with more RTP/RTCP extensions, and signaling methods

› RTP is still used in a wide variety of applications and topologies

› Applications using multiple media streams appear to be on a rise

› Better documentation
  - Allows extension writers like this WG to make less mistakes
  - Lets application designers get more out of RTP
RTP Multiplexing Points
High level options when having multiple media streams
RTP Topologies including some that aren’t in RFC 5117
Discussion of aspects of multiple media streams
  - RTP/RTCP
  - Interworking
  - Signaling
  - Network
  - Security
Arch-types that are contrasted in implications
Guidelines
Proposal for future Work
Summary of Updates

› New Introduction making purpose of document clearer
› New section on Arch-types
  ‒ Including an RTP session with multiple media types
› New discussion topics
  ‒ Interworking
  ‒ Media Stream Usage
  ‒ Complexity implications of security
› Moved Payload Type multiplexing to an appendix
We believe clearer guidance on options for multiplexing in RTP is needed by the community

- To understand the trade-off between various alternatives
- To document options for new application categories, and understand their impact on the installed base

To move forward, community consensus is needed on these issues

- Recommend this draft be developed as a WG item
- Co-authors with different viewpoints should be added
- Feedback should be incorporated