Options for Multiplexing Multiple Media Flows in RTP

draft-westerlund-avtcore-multiplex-architecture-01

Bo Burman / Ericsson
Colin Perkins / University of Glasgow
Magnus Westerlund / Ericsson

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

Document Content

› 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

WG Adoption

› 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