

Video Frame Info RTP Header Extension

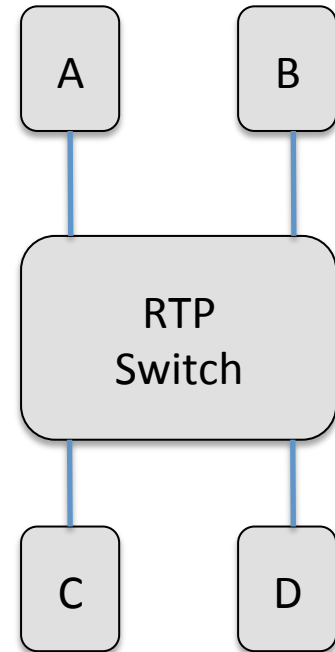
draft-berger-avtext-framemarking-01

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Main Motivation

Payload-Agnostic RTP Switch

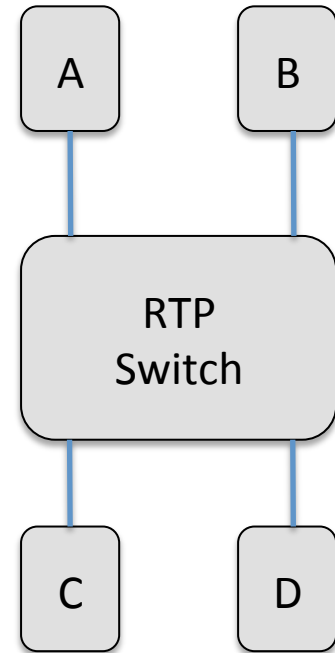
- Payload may be encrypted
 - Avoid decryption cost to improve switch scale and latency
- Payload may be encrypted end-to-end
 - Impossible to decrypt / inspect payload without end-to-end keys
- Payload may be unknown format
 - Codec-agnostic switching can support any format, old or new



More Motivations

Smarter RTP Switch

- Clean video switching at intra-frames
- Better recovery during packet loss
- Drop least important packets during congestion
- Drop scalable enhancement layers for constrained endpoints



Smarter Endpoints

- Better recovery during packet loss

Changes from -00 version

- Fixed length (2 byte) header extension
- Removed optional, codec-specific part
- Defined a general Layer ID field for all codecs
- Defined Layer ID usage for H.264/5, VP8/9
- Verified no Vidyo IPR applies

Next steps

- Add a new milestone for this?
RTP header extension for Video Frame Info
- Adopt as WG item?
- Addresses needs in PERC and AVTCORE
draft-aboba-avtcore-sfu-rtp