Signaling media decoding dependency in Session Description Protocol (SDP) – draft-schierl-mmusic-layered-codec-03

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draft version 01, 02: Changes

- Extended section on Offer/Answer, declarative usage
- Removed SSRC mux in -02, also removed from (related) draft on RTP Payload for SVC – draft-ietf-avt-rtp-svc-01
- Original SSRC mux use-case for SVC: Adaptation of encrypted and authenticated content without being in the security context.
- Found out: Not possible, since RTCP feedback is also authenticated within SRTP – But for adaptation RR has to be re-written
- That means: Not possible to cover full SRTP functionality
- Remaining use-case:
  1. Adaptation of encrypted media stream without authentication
  2. Adaptation of media stream without parsing Payload header in strongly restricted use-cases
- Are these compelling use cases for AVT?
- More details in draft-ietf-avt-rtp-svc-01 presentation
Open issues/TBD:

- Should we roll up the SSRC discussion? See presentation: draft-lennox-mmusic-sdp-source-attributes-00
- TBD:: Capability Negotiation interaction/issues
- Planned: Integration of mechanism proposed in draft-schmidt-mmusic-media-dependency-00 indicating relations between medias of different types, e.g. subtitling text stream for a video stream

- I will ask for working group status in MMUSIC, since basic mechanism (SDP dependency grouping + dependency attrib.) seems to be stable
Thanks for your attention!
Signaling: media stream dependency \textit{(stable since -00)}:

- **Session multiplexing:**
  Distribution of layered/mdc media stream onto different m-lines

- **Extended SDP grouping** (RFC3388):
  \textit{DDP} – ‘Decoding Dependency’ group

- **Media streams identified by** \textit{mid}

- **Additional media level attribute:**
  \texttt{a=depend:TYPE *(mid)}

- **\textit{TYPE}:**
  - \texttt{lay} – layered decoding dependency
  - \texttt{mdc} – multi description decoding depend.
Dependencies

Hierarchical

Multi Description

AVT IETF68 - T. Schierl, et.al. - draft-schierl-mmusic-layered-codec-03