Signaling of layered and multi description media in Session Description Protocol –

draft-schierl-mmusic-layered-codec-01.txt

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draft version 00: Changes

- Title changed
- Added signaling for in-media stream multiplexing:
 - Implicit SSRC multiplexing (for RTP)
- Removed media describing attributes (fgs, res...)
- Removed 'Equal dependency' scenario
- Extended definition section
- Examples for Multi Description Coding (MDC), new use-case for layered transport
- Editorial improvements

Signaling 1: media stream dependency

- Extended SDP grouping (RFC3388):
 DDP 'Decoding Dependency' group
- Media streams identified by mid
- Additional media level attribute:
 a=depend:... followed by type and mids
- Types:
 lay layered decoding dependency
 mdc multi description decoding depend.

Signaling 2: in-media stream dependency

- Decision for SSRC multiplexing (IETF66).
- Implicit SSRC multiplexing idea:
 - Operation points of layered media implicitly assigned to increasing SSRCs with increasing importance.
 - No SSRC values in SDP!
 - Works for MDC as well
 - Identification of senders by CNAME (Hari)

Signaling 2: in-media stream dependency (cont.)

- New media level attribute:
 a=ssrcmux:... followed by number of media operation points (SSRCs)
- Additionally to be used with a=depend:lay-ssrc for layered decoding dependency.

Signaling 3: backward compatible base-layer

- Backward compatibility problem (e.g. O/A)
- E.g. SVC media stream contains H.264 compliant base-layer
- Base-layer offered twice in multicast scenario
- With same transport parameters, but different payload, codec specific parameters etc.

Open issues:

- Should SSRC multiplexing go into the mmusic draft or into avt SVC payload draft only or into a separate one?
- Should implicit SSRC multiplexing be used?
- Or preferred explicit mechanism including SSRC assignment?
- If it stays in mmusic draft, should it become a general mechanism? Maybe also valid for other transport protocols.

Thanks for your attention!

Dependencies

