

# 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 dependency
- Removed media describing attributes (fgs-capability, resolution), should go into a separate draft
- Removed – ‘Equal dependency’ scenario
- Extended definition section
- Examples for Multi Description Coding (MDC)
- New use-case for layered transport
- Editorial improvements throughout the document

# Signaling 1 (*from version-00*): media stream dependency

- Distribution of layered/mdc media stream onto different m-lines
- Extended SDP grouping (RFC3388):  
*DDP* – ‘Decoding Dependency’ group
- Media streams identified by *mid*
- Additional media level attribute:  
*a=depend:TYPE \*(mid)*
- *TYPE*:  
*lay* – layered decoding dependency  
*mdc* – multi description decoding depend.

# Signaling 2 (*new*): in-media stream dependency

- Preference for SSRC multiplexing (IETF66)
- Preference for explicit SSRC signaling (IETF67)
- Out-of-band SSRC
- SSRC must still be useable for differentiation between sources (cameras, etc.) of a participant
- SSRC should also be used for differentiation between layers
- Announced SSRC maybe out of date!
- Collision problem: Yes, need to further think about it
- But, that all are avt related issues.

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

- New media level attribute for in-stream dependency signaling:

*a=instreamdpd:TYPE ID SSRC \*(DPD-ID)*

*TYPE:* /ay-ssrc, mdc-ssrc

*ID:* identifying SSRC for referencing purpose

*SSRC:* actual SSRC value

*DPD-ID:* Depending SSRCs, identified by *ID*

- Multiple of that attribute per m-line
- Allows for mixing with media stream dependency signaling

# Signaling 3: backward compatible base-layer

- SVC media stream contains H.264 compliant base-layer
- How to guarantee backward compatibility with old receivers?
- Base-layer announced twice:  
two m-lines with same transport address,  
but different payload, codec specific parameters and  
dependency signaling etc.

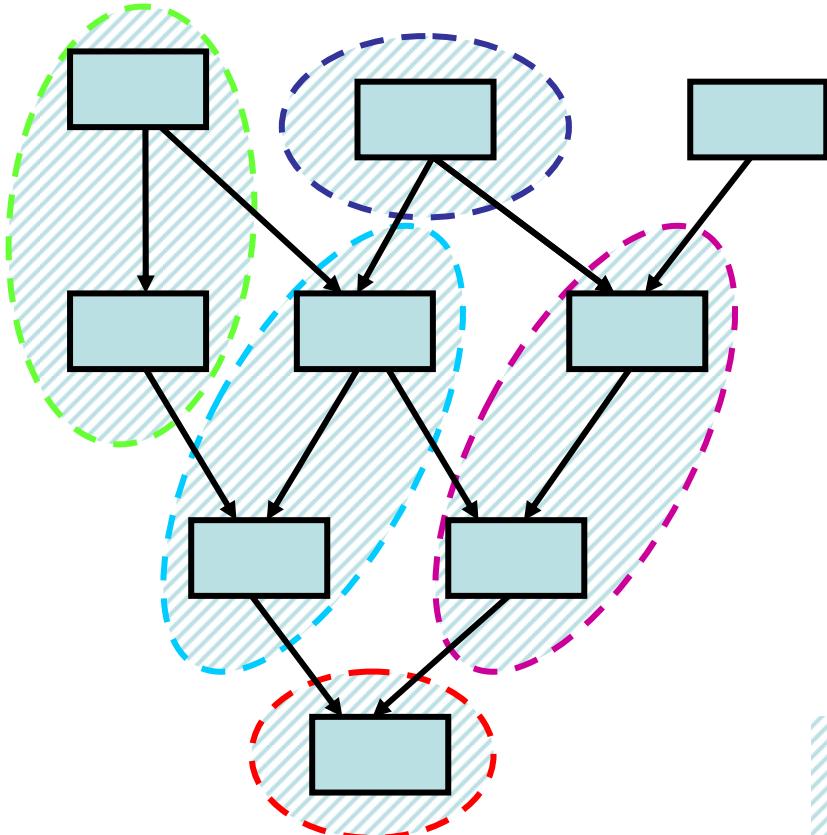
# Open issues/TBD:

- Should SSRC signaling go into the mmusic draft?
- The answer in avt: Yes
- What's with mmusic?
- TBD: Work out generic and more matured SSRC signaling solution, since presented one: quick and ...

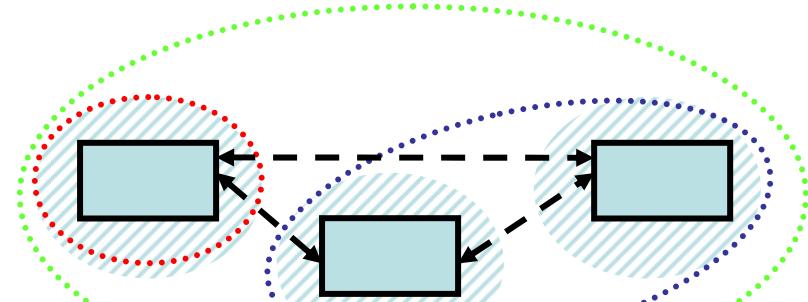
# Thanks for your attention!

# Dependencies

Hierarchical



Multi Description



media  
stream