

draft-rosenberg-mmusic-sdp-offer-answer-00.txt

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IETF 52

History

- RFC2543 had appendix B, which specified SDP usage
- As bis evolved, this section become more independent and moved towards a well-defined offer/answer model
- Agreement at IETF 51 in both mmusic and sip to extract to separate doc and progress in mmusic
- NB: sip-bis depends on this draft!! Thus, this draft is needed for 3gpp R5

Open Issues

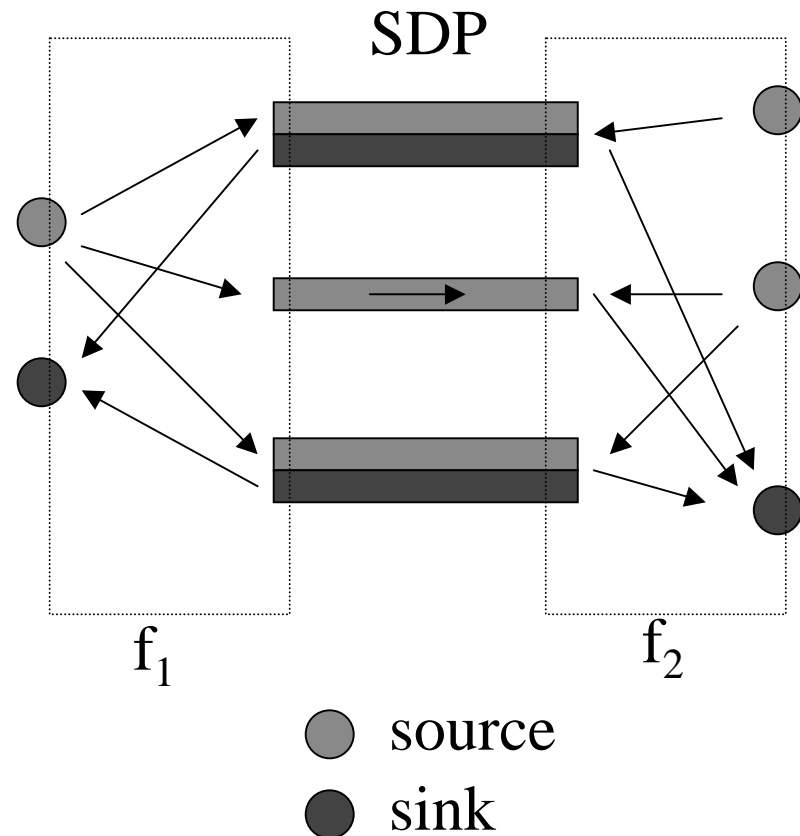
- Allow changes in the media type (audio/video) of a stream?
 - Example usage is voice->fax
 - Only really reasonable if SIP issue #24 allows for replacing streams
 - If you change audio to message, its same as a new stream in the old slot
 - Proposal is to allow
 - I say yes
- Offerer prepared to receive media when it sends offer, even in bidirectional streams
 - Flemming argues it should be prepared to both send and receive
 - Seems academic point to me

Multiple streams of same type

- What is meaning when there are multiple streams of the same type?
 - Spec says to send a copy of your media on each, and mix media received on each
 - Clearly specific to audio, doesn't make sense for
 - Video or IM
 - Cases where there are multiple media sources/sinks

Proposal

- Model is
 - Element has sources (green) and sinks (blue) for each type
 - Streams are uni or bi-directional
- Requirement
 - Media received on a stream **MUST** get sent to one or more sinks
 - Sources **MUST** go to one or more stream
 - When more than one source transmits on a stream, it must be “combined” in some implementation specific way
 - When more than one stream transmits to a sink, it must be “combined” in some implementation specific way
 - Mapping of sources/sinks to streams beyond the above rules is local policy



f_1 and f_2 are surjections

Synchronizing Codec Changes

- A and B are in a session X, Y codecs
- A offers B new SDP with new codecs Y,Z
 - B answers with Y,Z
- Issue: when can A and B cease being prepared to use X?
 - If there is no overlap – its easy – when media from new codec arrives
- If there is overlap
 - Proposal I: when a non-overlapping codec is received, OR 1 minute passes
 - Timer based stuff ugly
 - Proposal II: answerer includes SN of first packet sent after answer was sent
 - Offerer can stop when it receives that packet
 - Only works for answerer

Unidirectional codecs in a bidirectional stream

- Motivation
 - PC phone calls media server
 - PC phone can send DTMF, can't receive
 - MS can receive DTMF, not send
 - Would like PC to use some codec when sending voice, switch to rfc2833 for DTMF
- Question
 - How to represent?
- Current text
 - Offerer omits rfc2833 entirely
 - Answerer adds rfc2833
 - Semantic: codecs not in offer, added to answer, on a sendrecv stream, are recv only
 - Problem: makes interpretation context dependent
 - Breaks 3pcc

Other proposals

- Offerer includes rfc2833 anyway, even though it can't receive it
- Answerer can't insert it unless it can BOTH send and receive it
 - My preference
- Rfc2833 in NEITHER offer or answer
 - MS adds an extra m line through a new offer
 - Extra m line is recvonly with rfc2833
 - Use FID to group them
 - Complex
- Others?