Source-Specific SDP Attributes

Jonathan Lennox

draft-lennox-mmusic-sdp-source-attributes-01.txt
Source-Specific Attributes: Review

• RTP allows multiple sources in an RTP session, but SDP has no way to signal this.
• Solution: define an SDP attribute for characteristics of a source.

\[
\text{m=video 49170 RTP/AVP 96} \\
\text{a=rtpmap:96 H264/90000} \\
\text{a=ssrc:12345 cname:stream1@example.com} \\
\text{a=ssrc:67890 cname:stream2@example.com}
\]

• Map SDP “source-specific” attributes into the ssrcc attribute.
• This generalizes material that was previously in the RTP Single-Source Multicast draft.
Changes from draft -00

- Removed source attributes not needed for stream interpretation.
  - Removed: information, bandwidth, sendrecv, sendonly, recvonly, inactive, charset, sdplang, lang, framerate, quality.
  - Remaining: cname, fmtp, previous-ssrc.
  - ssrc-group (a media attribute) also remains.
Source-specific `fmtp`:

- Describes source-specific codec parameters.
  - Parameters describing the stream sent.
  - Motivation: H.264 sprop-* parameters
- If you have multiple sources, out-of-band parameters may not be the same for each source.
  - E.g., video switching, multiple cameras.
    ```
    m=video 49170 RTP/AVP 96
    a=rtpmap:96 H264/90000
    a=fmtp:96 packetization-mode=1
    a=ssrc:12345 cname:stream1@example.com
    a=ssrc:12345 fmtp:96 sprop-parameter-sets=XXX
    a=ssrc:67890 cname:stream2@example.com
    a=ssrc:67890 fmtp:96 sprop-parameter-sets=YYY
    ```
- This draft doesn’t define any (codec-specific) usages of source-specific `fmtp`.
- Need to figure out backward compatibility issues.
AVT Working Group

• Have any RTP architectural issues been overlooked?
• Are there any AVT objections to this proceeding in MMUSIC?
• AVT will remain responsible for reviewing the draft.
• RTCP-SSM will normatively depend on this.