Why SDP URLs are a bad idea

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What is the purpose of a URL?

- A URL is a reference to data on the net.
- The actual data can change.
 - URLs at third party sites referencing the data remain unchanged.
- A URL references a single medium.
 Text, audio, etc.
- For multiple media there is normally a control medium.
 - rtsp://foo.domain.org/movie.rtsp

What is the purpose of SDP

- Depends slightly on context. In the context of SAP:
 SDP provides sufficient information to join a multicast multimedia session.
 - Media types, codecs, protocols.
 - Provides encryption keys.
 - Provides codec intialization information.
 - Provides RTP payload type binding.

SDP is like a URL

• It provides a reference to a session.

SDP is not like a URL

• SDP provides a fanout point to multiple media.

- One external reference to SDP
- SDP provides references to the individual

streams.

• SDP is tightly coupled to the session being described.

▶ It is not a simple reference to the data.

- Without the correct SDP initialization data, you often can't decode the streams.
 - Unlike with HTTP, the streams themselves aren't self describing.

SDP is not like a URL

- If the data changes (change of codec, new medium added, change of codec initialization parameter) you need to also change the SDP.
 - Thus the SDP should be under the same administrative control as the media streams.
- URLs appear on third party sites.
 Different administrative control from the data.
- SDP is like MIME in HTTP.

SDP and the Web.

Recommendation:

- Put a URL in a web page specifying HTTP or RTSP.
- The HTTP or RTSP then returns the SDP.
 This provides the important indirection.
- Then join the streams.

Data URL type

- If you really need to embed SDP in a web page, the data URL type is now a IETF Proposed Standard.
 - Absolutely no need for SDP URL type.
- But I don't recommend using it.