SDP
draft-ietf-mmusic-sdp-new-21.txt

Colin Perkins
Status

- Three revisions since San Diego IETF meeting
  - 19 on 11 August
  - 20 on 19 September
  - 21 on 25 October

- More changes outstanding… :-(

Changes in -19

Section 5.4:
- Note that “i=” is not suitable for parsing by automata

Section 5.7:
- Clarify meaning of “slash notation”

Section 5.8:
- Add normative references to RS, RR and TIAS bandwidth modifiers

Section 5.9:
- Clarify that time in SDP is represented as unlimited length text strings that don't wrap in 2036 (unlike 64 bit binary NTP timestamps)

Section 5.12:
- For “k=clear:” clarify that key is interpreted as text according to charset
- Note that “k=base64:” should be used if key contains non-text characters.
Changes in -19 (cont’d)

Section 5.14:
- Rewrite description of the <proto> field in “m=” lines for clarity (move some of the text to IANA considerations)
- Rewrite description of the <fmt> field in “m=” lines for clarify, moving much of the text to the description of the “a=rtpmap:” attribute

Section 9.2:
- Clarify that any type of RFC is sufficient to register a new network or address type

ABNF:
- Disallow extensions to “k=”
- Relax syntax of phone numbers to allow forms other than full E.164 numbered preceeded by a “+” (to match section 5.6)
- Allow non-IP multicast address formats, to match unicast rules
- URIs may now contain literal IPv6 addresses. Catch up with RFC 2732 which updates RFC 2396
Changes in -20

- Remove the underspecified “control” and “data” media types, aligning the SDP media types with MIME media types.
  - If there is a use for these media types, they can be registered separately; they've been removed here in the interests of getting the base spec out.
Changes in -21

Section 4.1:
- Clarify that the transport port for unicast IP sessions is the remote transport port.

Section 5.1:
- Clarify that the media description is optional.

Section 5.7:
- Clarify that “this memo only defines IP4 and IP6”, rather than “currently only IP4 and IP6 are defined”.

Section 5.7:
- Note that TTL scoping is NOT RECOMMENDED for multicast, and one should use admin-scoped addresses instead.

Section 5.8:
- Clarify that the bandwidth is in kilobits per second unless otherwise specified in the definition of a new <bwtype> modifier.
Changes in -21 (cont’d)

Section 5.9:
  – Clarify that the end time SHOULD be specified unless a session is unbounded.

Section 5.12:
  – Remove example of SIP-over-TLS, since that’s not end to end

Section 5.13:
  – Remove example of use of attributes.

Section 5.14:
  – Clarify behaviour when two RTP sessions share the same transport address.
  – Add reference to the “application” top-level MIME type for “udp” proto.

Section 6:
  – Generalise “a=orient” slightly.
  – Remove references to the unregistered and obsolete “wb” application.
  – Specify that “a=maxptime” is an integer multiple of the frame size for frame based codecs
Changes in -21 (cont’d)

Section 7:
– Reference SIP & offer/answer security considerations
– Note that firewall holes should only be opened when the user can be appropriately authenticated and is authorized to do so.

ABNF:
– A comment suggested that UDP ports should either be 0 or in the range 1024-65535. This conflicts with existing usage (e.g. port 9 is used by comedia) and wasn't mandated by the text. Remove comment; allow any UDP port.
– Allow DNS names for multicast groups
– A comment in the definition of “sess-version” noted that 0 indicates a new session. This conflicted with section 5.2, which said that an NTP-format timestamp SHOULD be used. Accordingly, remove comment.
– Allow 127.0.0.1 as a valid IPv4 address
To do...

- Handle internationalized DNS names?
- Layered coding
  - Allocation of consecutive multicast addresses may be problematic?
  - Is “a=rtcp:” fully specified for layered coding?
- Direction attributes (“a=recvonly”, etc.):
  - Do the offer/answer semantics need to be discussed? Referenced?
- Is more context needed, to explain how SDP is used in practice?