RTP Header Extension For SDES ITEMs

draft-westerlund-avtext-sdes-hdr-ext-01

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Overview

- Proposal
- Motivations
- Technical Details
- Adoption

Proposal

- An RTP header extension for Source Description (SDES) items
- Has been brought up in various discussions
  - Lets do it!
- Initial Proposal in draft-westerlund-avtext-sdes-hdr-ext-01
- Adopt it as WG item and work together on a solution?

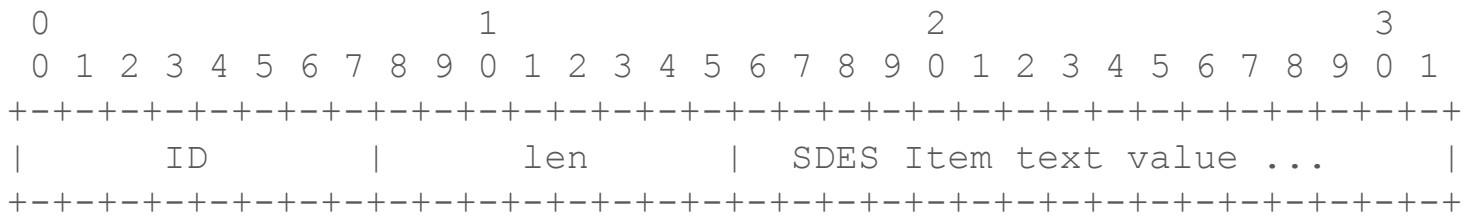
Motivation

- A few different proposals suggest new SDES items that would benefit from a header extension:
  - APPID (draft-even-mmusic-application-token-01)
  - SRCNAME (draft-westerlund-avtext-rtcp-sdes-srcname-03)
- RFC 6051 – RTP header extension for Rapid Synchronisation of RTP Flows provide equivalent to RTCP Sender Report, but not CNAME
  - To enable this to be used in context when also the CNAME information can't provided earlier than the timing information.
- Unclear of the evolution of MSID in SDP (draft-ietf-mmusic-msid-01), may also require in-band signaling?

Motivation

- RTP/RTCP Mechanism needed when signaling can't provide the information:
  - Dynamic group memberships
  - Multicast/Broadcast
  - Signaling node may not have access to actually used SSRCs at time of signaling
- Fate sharing in delivery between media and relation information
- AVPF ACKs can inform sender when Header Ext is received
- RTP Header Extensions are useful when RTCP delivery is not timely enough:
  - New SSRC in a session
  - New Endpoint joins multiparty session
- RTCP may not be timely enough when:
  - RTP Packet streams are to be decoded directly on reception
  - They have relations that SDES items expresses, e.g.
    - CNAME gives synchronization context

Technical Details



- Put the SDES item string in RTP header extension:
  - String can be up to 255 bytes, use 1 or 2-byte headers as appropriate for SDES items intended to use in RTP session
  - Header Extension ID maps to SDES Item type via URN
  - Len: Number of bytes in SDES Item String
- Future Extensibility
  - New SDES Items registers a URN and can then use the header extension

Technical Details

- URN Proposal
  - RTP Header Extensions are registered in URN space:
  - urn:ietf:params:rtp-hdrext:
  - Proposes to allocate urn:ietf:params:rtp-hdrext:sdes to SDES items.
- Resulting URNs:

URN	SDES Item	Reference
urn:ietf:params:rtp-hdrext:sdes:cname	CNAME	[RFC3550]
urn:ietf:params:rtp-hdrext:sdes:name	NAME	[RFC3550]
urn:ietf:params:rtp-hdrext:sdes:email	EMAIL	[RFC3550]
urn:ietf:params:rtp-hdrext:sdes:phone	PHONE	[RFC3550]
urn:ietf:params:rtp-hdrext:sdes:loc	LOC	[RFC3550]
urn:ietf:params:rtp-hdrext:sdes:tool	TOOL	[RFC3550]
urn:ietf:params:rtp-hdrext:sdes:note	NOTE	[RFC3550]
urn:ietf:params:rtp-hdrext:sdes:priv	PRIV	[RFC3550]
urn:ietf:params:rtp-hdrext:sdes:h323-caddr	H323-CADDR	[Vineet_Kumar]
urn:ietf:params:rtp-hdrext:sdes:apsi	APSI	[RFC6776]

Wg Adoption?

- So is this a good idea?
- WG Adoption?