RTP Header Extension For SDES ITEMS

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

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Overview

▶ Proposal
▶ Motivations
▶ Technical Details
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An RTP header extension for Source Description (SDES) items

Has been brought up in various discussions
  - Let's do it!

Initial Proposal in draft-westerlund-avtext-sdes-hdr-ext-01

Adopt it as WG item and work together on a solution?
A few different proposals suggest new SDES items that would benefit from a header extension:

- APPID ([draft-even-mmusic-application-token-01](https://datatracker.ietf.org/doc/html/draft-even-mmusic-application-token-01))

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](https://datatracker.ietf.org/doc/html/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:**

<table>
<thead>
<tr>
<th>URN</th>
<th>SDES Item</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>urn:ietf:params:rtp-hdrext:sdes:name</code></td>
<td>NAME</td>
<td>[RFC3550]</td>
</tr>
<tr>
<td><code>urn:ietf:params:rtp-hdrext:sdes:email</code></td>
<td>EMAIL</td>
<td>[RFC3550]</td>
</tr>
<tr>
<td><code>urn:ietf:params:rtp-hdrext:sdes:priv</code></td>
<td>PRIV</td>
<td>[RFC3550]</td>
</tr>
</tbody>
</table>
Wg Adoption?

› So is this a good idea?

› WG Adoption?