SRCNAME – A RTCP Source Description Item

draft-westerlund-avtext-rtcp-sdes-srcname-03

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OVERVIEW

› IPR Declarations
› SRCNAME Proposal
› SRCNAME Open Issues
› Relation to APPID
› Next Steps
IPR Declarations

There exist IPR Declarations on draft-westerlund-avtext-rtcp-sdes-srcname-03:

– Ericsson
  › https://datatracker.ietf.org/ipr/1638/

– Microsoft
  › https://datatracker.ietf.org/ipr/1932/
This version has been scoped down

Targets the needs of Simulcast:
  – [draft-westerlund-avtcore-rtp-simulcast-03](https://example.com)

Provide a SSRC with the Identify of its:
  – Media Source
  – Encoding Configuration

Enables a RTP Receiver to immediately determine:
  – Is this an alternate encoding of a Media Source
  – What Properties does this encoding have
SRCNAME

› Media Source is the combination short source identifier
  – Scoped by CNAME
  – CNAME ensures inter endpoint uniqueness
  – Thus short token

› The Encoding Configuration Identifier
  – short token
  – Bind it to encoding configuration in signaling

› srcname = <media-source>.<encoding-id>

› Example: “a.G”
SRCNAME

› SRCNAME Distribution
  – RTCP: Default method
  – RTP Header Extension: Optional
    › draft-westerlund-avtext-sdes-hdr-ext-01
  – SDP Signaling as Source attribute: Optional
    › a=ssrc: 123456789 srcname:a.G

› Available with SSRCs in RTP/RTCP

› Intended to be persistent on per SSRC level
  – A given SSRC should not change its SRCNAME

› Conceptual Source like mixes
  – Is there own sources
  – Contributing Sources can be ID through CSRC => SRCNAME
SRCNAME Open Issue

Usage of SRCNAME on Redundancy Packets Streams
  - Examples:
    - RTP Retransmission (RFC 4588)
    - XOR FEC (RFC 5109)
  - These are one to one mappings with Source Packet Streams

Use the same SRCNAME and you know there is a relation?
  - But not what!
    - Given by RTP Payload Type in the above cases
Relation to APPID

› Assuming APPID is a indirection to SSRC
  – Could be a replacement for SRCNAME
  – Then each Simulcast Source Packet Stream needs its own APPID
  – Bind that to Media Source and Encoding Configuration

› However APPID requires:
  – A Receiver must create sufficient number of APPIDs for the Media Sources the sender have
  – That signaling can distribute the APPIDs
    › Broadcast or Multicast can fail these

› SRCNAME has explicit semantics:
  – Works in all cases independent of configuration
Next Steps

› A solution for stream correlation
  – Required if Simulcast goes forward

› APPID discussion needs to continue
  – Willing to give it some time to mature
  – APPID can solve a complementary problem
    › Provide Purpose for Simulcast Encoded Streams

› Explicit Semantics has advantages

› Please review and provide feedback

› Later consideration for adoption