



WebRTC Media Transport and Use of RTP

draft-ietf-rtcweb-rtp-usage-12

Colin Perkins – University of Glasgow
Magnus Westerlund – Ericsson
Jörg Ott – Aalto University

Changes in -11

- Incorporates results of discussion at IETF 88:
 - Receivers MUST support multiple synchronisation contexts (CNAMEs) per sender in a single RTP session; senders MAY use multiple CNAMEs
 - Update WebRTC API mapping, based on the current working draft API from the W3C
 - Proposals in W3C to remove the MediaStream concept from that API; if that occurs, this draft will have to be updated to match
 - Update text on forwarding MediaStreamTracks from one PeerConnection to another
 - Endpoint doing forwarding acts as back-to-back receiver and sender
 - Need to be able to handle outgoing stream as a MediaSource, i.e., be capable of transcoding the media to suit outgoing requirements, including bit-rate adaptation
 - Assorted editorial fixes and minor cleanups

Changes in -12

- Addresses remaining open issues:
 - Made use of SLI and RPSI feedback messages RECOMMENDED rather than OPTIONAL, based on list discussion
 - Defer to draft-ietf-rtcweb-security-arch for definitions of mandatory cipher suites, DTLS-SRTP protection profiles, key management, etc.
 - Clarify that the RTP packet stream association with MediaStreamTracks is the one that MSID provides
 - Add a WebRTC API requirement regarding CSRC list handling
 - Remove reference to the shim-based approach to running multiple RTP sessions on a single transport-layer flow
 - Remove discussion of simulcast
 - Leaves some comments in Section 12.1 regarding simulcast with existing functionality
 - Remove section 5.2.4 on Associating RTP Media Streams and Signalling Contexts, should be part of the WebRTC signalling specification
 - Assorted editorial fixes

Open Issues and Next Steps

- Open issue:
 - Metadata carried in RTP header extensions can be sensitive
 - Already RECOMMENDED that client-to-mixer and mixer-to-client audio level information sent in header extension is encrypted using RFC6094
 - Expand this recommendation to all RTP header extensions?
- Otherwise, authors have no open issues – review and/or working group last call solicited