Audio/Video Transport Working Group

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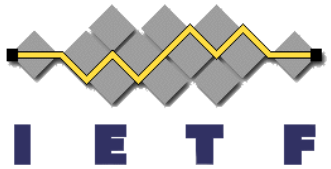
http://www.ietf.org/html.charters/avt-charter.html

Jabber room: xmpp:avt@jabber.ietf.org

Audio:

Palos Verdes: http://videolab.uoregon.edu/events/ietf/ietf777.m3u

California D: http://videolab.uoregon.edu/events/ietf/ietf774.m3u



Agenda - Wednesday

13:00 Introduction and Status Update (Chairs, 15)

13:15 AVT Restructure (Robert Sparks,15)

13:30 Rapid Synchronization with RTP Multicast Sessions (Begen, 25)

13:55 RTCP port for SSM Sessions (Begen, 5)

14:00 Port Mapping Between Unicast and Multicast RTP Sessions (Begen, 20)

14:20 MPEG2-TS Preamble (Van Caenegem + Chairs, 40)

15:00 End

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Agenda - Thursday

15:10 Introduction and Status Update (Chairs, 5)

15:15 RTCP Receiver Report for Feedback Storm Suppression (Qin Wu, 10)

15:25 Keep-alive Mechanism for RTP (Xavier Marjou, 20)

15:45 Support for multiple clock rates in an RTP session(M. Petit-Huguenin, 10)

15:55 Proxy Rapid Acquisition of Multicast RTP Sessions(Jinwei Xia, 10)

16:05 End

Document Status

- Charter updated - http://www.ietf.org/dyn/wg/charter/avt-charter.html

- RFC Published
  - RFC 5760 draft-ietf-avt-rtcpssm
  - RFC 5725 draft-ietf-avt-post-repair-rtcp-xr
  - RFC 5584 draft-ietf-avt-rtp-atrac-family

Document Status

- In Publication states

  - draft-ietf-avt-rtp-and-rtcp-mux – will be RFC 5761 but waiting for ICE
  - draft-ietf-avt-dtls-srtp – will be RFC 5764 (AUTH48)
  - draft-ietf-avt-seed-srtp – will be RFC 5669 (AUTH48) waiting for draft-ietf-avt-register-srtp

  - draft-ietf-avt-rtp-ipmr – waiting for AD Go-Ahead
  - draft-ietf-avt-app-rtp-keepalive – IESG processing – need to resolve comments
  - draft-ietf-avt-rtcp-guidelines-03 – Publication request
  - draft-ietf-avt-rtp-rfc3984bis-09 – ready to go ahead.

Document Status

- Waiting for proto write-up
  - draft-ietf-avt-forward-shifted-red
  - draft-ietf-avt-srtp-not-mandatory
  - draft-ietf-avt-rapid-rtp-sync
  - draft-ietf-avt-rtp-gsm-hr
  - draft-ietf-avt-register-srtp

Other drafts

- draft-ietf-avt-rtp-svc– need update to follow 3984bis.
- draft-schmidt-avt-rfc3016bis-02 – adopted as WG item
- draft-ietf-avt-rtp-h264-rcdo-05 – need to resolve parameters duplication with 3984bis
- draft-ietf-avt-srtp-big-aes-03 –Need a milestone then start WGLC.

draft-ietf-avt-multicast-acq-rtcp-xr-00

- RTP receivers joining a multicast session experience
  - Varying join delays
  - Pretty random acquisition delays
- For quality reporting, monitoring and diagnostics purposes, it is useful to gather their “acquisition” experiences
- This document
  - Defines a new RTCP XR block type for multicast acquisition
  - Defines SDP signaling and registers the new block type with IANA

  → This report block can be used by all RTP receivers, whether they are doing a simple multicast join, using RAMS or any other method
- The document is ready for WGLC.

ECN for RTP
draft-ietf-avt-ecn-for-rtp

- No major issues encountered
- A few open issues remaining
  - Fragmentation and Reassembly in Translators
  - Generating RTCP ECN Feedback in Translators
  - Generating RTCP ECN Feedback in Mixers
  - SDP examples
- Distinction between ECN marking for RTP and congestion control
  - CC not only based on ECN
  - Treat CC related to this in a separate ID

Encrypted Key Transport draft-ietf-avt-srtp-ekt-00

- Standardizes changing SRTP keys in SRTP or SRTCP
  - Conferencing, speaker joins/leaves
- Authors will improve text around DTLS-SRTP

- Issue for Working Group: MIKEY
  - Authors lack experience with MIKEY
  - Proposal: not include MIKEY in this document

Milestones with candidate drafts

- draft-begen-avt-rams-scenarios
- draft-hoene-avt-rtp-sbc
- draft-legrand-rtp-isac
- draft-lennox-avt-srtp-encrypted-extension-headers
- draft-ott-avt-rtcp-overlay-multicast
- draft-trainor-avt-rtp-aptx
- draft-wang-avt-rtp-mvc
- draft-zfang-avt-rtp-evrc-nw

- draft-xu-avt-dra – did not go through AVT review

After the meeting the chairs will ask whether the drafts provide the basis for a WG solution to these items.

Other drafts for consideration

- draft-yang-avt-rtp-synced-playback-04
  - This is an extension to RAMS allowing synchronization between the primary multicast stream and the RTP_Rx view.
  - Was updated based on comments, please review and send any comment to the list.

Encrypted Header Extensions in SRTP

draft-lennox-avt-srtp-encrypted-extension-headers-01

- SRTP doesn't encrypt RTP header extensions
  - Only authenticates
- Sometimes information in them is sensitive
  - E.g., audio levels
- Draft provides a mechanism to encrypt RFC 5285 header extensions
  - Additional SRTP keystream applied to header extension
- Current draft allows encrypting some extensions while leaving others in the clear
  - Adds some complexity, but allows third-party monitoring, easier backward compatibility

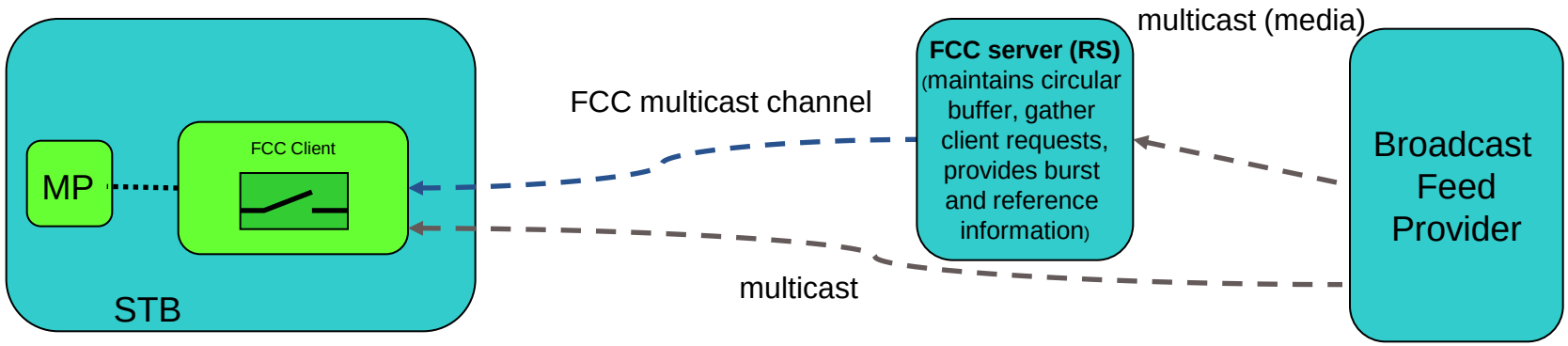
Splicing for MPEG2–TS Problem Statement in RTP Sessions

draft-xia-avt-splicing-for-mpeg2ts-ps-00

- Example adding advertisements
  - AD Server and Splicer negotiate how to insert AD content into MPEG2 output multiplexed stream in Splicer
  - In IPTV, Splicer needs to coordinate underlying RTP layer to be compatible with MPEG2-TS when perform splicing
- Using fix gap size in primary channel is not feasable since the amount of Insertion packets is variable due to different entropy coding
- Potential solution
  - Splicer is a specific RTP Translator
  - re-encode AD data packets into primary program
  - assigns new sequence numbers to the outgoing data packets
  - Shortcoming
    - Additional overhead on Splicer to decoding and re-encoding even if splicing no more occurs again
    - Splicer may serve a large amount of primary programs simultaneously

Multicast-based RAMS (ERAMS)

draft-johansson-avt-mcast-based-rams



- ERAMS = Extension to RAMS framework
  - Most of the procedures in ERAMS already covered by RAMS
  - ERAMS adds the following to the RAMS protocol
    - 3xx redirect response code
    - Two new TLV field types to RAMS-R and RAMS-I
- FCC server uses RAMS unicast when request rate is low
  - Function according to RAMS specification
- FCC switches to ERAMS when request rate is high
  - The FCC server gathers a number of RAMS-R for the same channel
  - Each RAMS-R is responded with a RAMS-I that indicates the ERAMS multicast channel
  - After a waiting period (Td) the ERAMS multicast is started
  - Peak load on FCC server is scaled down in direct proportion to the number of users that share the same ERAMS multicast channel(s)
    - Unicast traffic between the FCC server and the STB across the access network is also reduced.
- Request to make draft-johansson-avt-mcast-based-rams an AVT WG item
  - Questions/Comments welcome on the AVT list or mailto:ingemar.s.johansson@ericsson.com