Audio/Video Transport Working Group

43rd IETF, Orlando 10-11 December 1998

Stephen Casner -- Cisco Systems
Colin Perkins -- UCL

Mailing list: rem-conf[-request]@es.net

Thursday Agenda

Introduction and status	5
Transport of DTMF & MF tones	20
 RTP multiplexing proposals 	35
» Rosenberg, Subbiah, Hoshi, Handley	
» Discussion	20
 MPEG4 payload format 	20
 Generic payload format 	20

Friday Agenda

 RTP spec and profile issues 	30
» SSRC sampling draft	5
» Additional SDES items	5
 Drafts to act upon 	15
» RTP MIB; Format Guidelines; QCELP	
 Payload formats for loss tolerance 	15
» FEC; Reed-Solomon; Interleaving	
 AVT revised charter bashing 	15

Status of RTP

- RFC1889, 1890 published as Proposed Standards in January 1996
- Internet-Draft revisions for Draft Std.
 - » Spec is draft-ietf-avt-rtp-new-02.ps,txt
 - » Profile is <u>draft-ietf-avt-profile-new-04.ps,txt</u>
- Spec is complete, Profile needs more
- Plan: Complete profile, then Last Call for Draft Standard

If you haven't read it yet...

Please see <u>draft-ietf-avt-rtp-new-02.txt</u> sections:

- Sec 0: Resolution of open issues
- Sec 6.2: RTCP Transmission Interval
- Sec 6.3: RTCP packet send and receive rules
 » Especially the MUST / SHOULD / MAY's
- Appendix B: Changes from RFC1889
- Extra credit: check code in Appendix A

RTP Drafts in Process

- RFCs recently published:
 - » 2429 H.263+ payload format
 - » 2431 BT.656 payload format
 - » 2435 JPEG video payload format
 - » 2448 AT&T's Error Resilient Video Transmission Technique
- Drafts submitted for publication:
 - » IP/UDP/RTP header compression: at IESG

Drafts to act upon

- RTP MIB Ready for last call?
- Guidelines for RTP payload formats draft-ietf-avt-rtp-format-guidelines-01.txt,.ps
- PureVoice (QCELP) payload format draft-mckay-qcelp-01.txt
 - » Some issues raised during WG Last Call ...

Recent Changes to RTP Spec

- SSRC sampling algorithm removed to separate "experimental" draft as agree in Chicago
- Keep only "unconditional reconsideration"
- IANA Considerations section added; no longer suggest experimental registration of values
- Y2036 [in]consequences explained
- Thorough reading and conversion to MUST, SHOULD, MAY
 - » Please see if you agree!!
 - » Should now be ready for last call
 - » Need careful check of code in appendix

New SDES items - separate draft

- Nickname -- useful for chat or wb labels
- Homepage -- URL for sender's home page
- Personal_Image -- URL for sender's image
- Active_media -- to avoid need to join mcast group if desired source is not active on that group
 - » Shall we proceed with these?
 - » What status?
- Also suggested earlier: Organization

Recent Changes to RTP Profile

- New policy stated more clearly: No additional static payload types will be added.
- Change bars now for all since RFC

Changes Still Needed

- Complete use of MUST, SHOULD, MAY
- Allow default 5% RTCP bandwidth to be overridden (agreed SDP BW modifiers for explicit RTCP sender and receiver BW should be defined in a separate document)
- May need changes for generic formats, but can we proceed without them?
- Need point person for MIME registration!

Encodings as MIME Subtypes

- MIME major type on m= (audio, video)
- What about audio+video types?
- Encoding (subtype) in a=rtpmap
- Need to register all encodings listed --do this via profile doc itself?
 - » What about conflicts: PCMU=audio/basic?
- What new info is bound to the name for RTP purposes? Just payload format?

New AVT Charter

- Old charter is way out of date:
 - » Last existing milestone is 1993
 - » Says only define experimental protocols
- New charter proposed, now in IESG
 - » Reflect current state of RTP
 - » Set milestones for remaining work
 - » Lay out expectations for future work

Charter Goals and Milestones

- Dec 98 Working group last call on parity FEC draft
 - Working group last call on guidelines for payload format writers
 - Compressed RTP draft to RFC (done but waiting on other documents)
- Jan 99 Submit revised draft on PureVoice (qcelp) payload format (to address WG last call comments)
 - Submit revised payload for MPEG4 elementary streams
 - Submit revised RTP MIB and issue working group last call
 - Analysis/simulation of multiplexing payload format proposals
- Feb 99 Submit revised SSRC sampling draft
 - Submit revised R-S draft
 - Submit revised multiplexing draft(s)
 - Submit RTP MIB to IESG for publication as an RFC
 - Submit revised A/V profile draft
 - Submit revised DTMF payload format draft, ready for WG last call
 - Submit RTP implementation checklist draft

Goals and Milestones (2)

- Mar 99 Working group last call on revised SSRC sampling draft
 - Decide how to proceed with multiplexing protocol: one generic payload format or a number of application specific formats
 - Working group last call on RTP and A/V profile
 - Continue work on generic payload format draft
- Apr 99 Revise MPEG4 payload format document
 - Submit final revisions of selected multiplexing protocol draft
- Jul 99 Prepare MPEG4 implementation results ready for working group last call
 - Working group last call on multiplexing payload format

It is expected that the group will recharter around this time, based on the decisions about the generic and multiplexing payload formats, and the possible need to define other payload formats (eg: for new media types).