RTP and Media Types

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Reporting on discussions with Magnus Westerlund, Steve Casner, Allison Mankin, Ned Freed, John Klensin, Harald Alvestrand and Steve Bellovin.
The text/red Media Type

- The working group recently sent draft-ietf-avt-text-red-05.txt to the IESG for publication as a Proposed Standard RFC
- IESG asked for expert review by MIME media type experts
  - (as is normal for media type registrations)
- Reviewers found a number of problems with the draft; these issues potentially affect all other RTP payload types
Registrations for text media

- The rules for registering media types under the “text” top level type are stricter than those for audio and video types.
- In particular, it is expected that text media types are “to some extent readable even without the software that interprets them”
  - RFC 2046
  - This rule is derived from email client behaviour; want to pass the message to a dumb pager if there’s no better display option
- This is clearly not the case for “text/red” or “text/parityfec”
  - Error correcting codes over a stream of unreliable datagrams
  - Require complex processing at the receiver, before text can be recovered
- The “text/t140” format is, arguably, justified
  - Packets contain plain text in UTF-8 format, and can be directly displayed immediately there are received
Domain Specific Types

• Discussion of RTP use of the “text” top level type led to a review of our other uses of media types

• It was noted that the rules for media type registrations don’t allow for domain specific types. It is not legal to register a media type saying “this type is defined only for use over RTP”
  – This conflicts with the rules in RFC 3555

• This affects all the media types registered for use with RTP
Implications and Actions

- After much discussion, concluded that it is appropriate to relax the rules for media type registrations:
  - Allow domain specific media type registrations
  - Allow complex text formats, provided they have restricted domain of applicability and do not affect backwards compatibility for email clients
  - Will be discussed on the <ietf-types@iana.org> mailing list
- These updates will allow us to continue basically unchanged with our use of media types in AVT
- But, changing the rules takes time, since it requires updates to the media type registration rules for RTP and MIME
  - Chairs, area directors, and MIME experts working to coordinate
  - This may delay the publication of draft-ietf-avt-text-red-05.txt, and may require an update to the registration guidelines in RFC 3555
Review For New Payload Formats

• In future, as new RTP payload formats are developed, we will require expert review of the media type registration
• This MUST be done by sending a copy of the registration form to the <ietf-types@iana.org> mailing list
  – Two weeks review time
• We will not forward drafts to the IESG for publication unless they have received such review