Message Body Handling in SIP draft-camarillo-sip-body-handling-01.txt

Gonzalo.Camarillo@ericsson.com

Body Handling in SIP

- There seems to be interest within the SIP community in clarifying how message bodies are handled in SIP
- Does the WG want to work on it as a WG effort?

Level of Support for Multipart

- SIP UAs SHOULD be able to parse 'multipart' MIME bodies, including nested body parts.
 - Proposal: make it a MUST
- UAs SHOULD support the 'multipart/mixed' and 'multipart/alternative' MIME types.
 - 'multipart/mixed' is the default multipart
 - Support for 'alternative' important for session description format migration
 - Proposal: make it a MUST

Nested Body Parts

Current text

- UAs SHOULD NOT use a 'multipart' body when there is only one body part
- UACs SHOULD NOT nest one 'multipart/mixed' within another unless there is a need to reference the nested one (i.e., using the Content ID of the nested body part)
- UAs SHOULD NOT nest one 'multipart/ alternative' within another

• RFC 2046

 Experience has shown that a "multipart" media type with a single body part is useful for sending non-text media types.

Proposal

 Remove the first statement (first bullet above) and reference RFC 2046.

Alternative and Content-Type

- Current text
 - The body parts within a 'multipart/alternative'
 MUST all have different content types.
- This is only valid for the 'session' disposition type
- Proposal
 - The body parts within a 'multipart/alternative' whose disposition type is 'session' MUST all have different content types.

Handling Parameter

- Current reference: RFC 3204
- The official definition is RFC 3459
- Proposal:
 - Reference RFC 3459 as well

Content-Disposition in Multiparts

- Proposal for 'multipart/alternative'
 - Same content disposition as all the body parts within the multipart/alternative
- Multipart/mixed
 - Default would be 'render'
 - Semantically, it may not be correct
 - Content-Disposition is needed to mark the multipart as required or optional
 - The handling parameter is a Content-Disposition parameter
 - Proposal
 - We do not define a new disposition type. We use 'render' and clarify that the disposition types that really matter are those of the body parts within the 'multipart/mixed'

Content-Transfer-Encoding

- RFC 2045
 - A binary transfer encoding cannot be used because email transport is not 8-bit safe
- RFC 3204
 - Uses a binary transfer encoding
- MSRP
 - The transfer encoding for binary payloads is always binary
- Proposal
 - The transfer encoding for binary payloads in SIP messages SHOULD be binary

Encrypted Body Parts

- Proposal
 - Clarify that UASs that cannot decrypt a body part return a 493 (Undecipherable) response

415 Response Code

- Content and disposition types are supported within a context
- How to report unsupported types within the context?
- Current approach
 - 415 (Unsupported Media Type)
 - But its Accept header field may carry all the content types present in the request

Alternative

- New response code 4xx (Content or Disposition Type not Supported in this Context)
- It is more explicit but probably not enough
- The UAC will not likely be able to do anything more useful than if it had received a 415

Proposal

Keep the current approach and add clarifications

References to Body Parts

Current text

- If a body part is not referenced in any way, the UA processes the body part as indicated by its disposition type and the context in which the body part was received
- If the SIP message contains a reference to the body part, the UA processes the body part according to the reference and the disposition type of the body part.

Discussion

- This means that a UA would need to parse all body parts to find references between them before being able to fully process them
- Are we OK with this?

Proposal

We keep the current proposal and clarify its implication