IMAP4 revision 2

draft-ietf-extra-imap4rev2-07.txt Alexey Melnikov Barry Leiba

Goals - general

- Make life easier for <u>client</u> developers who would be able to only implement IMAP4rev2 in the future
 - But try not to boil the ocean in the process
- Easy to implement for IMAP4rev1 server implementors, as they do most of the new things included in IMAP4rev2 already
- IMAP4rev2 can co-exist with IMAP4rev1 on the same port

Changes done in WG -07 since -04

- Clarified when PERMANENTFLAGS needs to be returned
- Clarified that modified UTF7 is only needed for IMAP4rev1 compatibility
- Removed LSUB command, added extended LIST
- Removed CHECK command
- Replaced DIGEST-MD5 SASL mechanism with SCRAM-SHA-256
- Marked FETCH RFC822, RFC822.TEXT and RFC822.HEADER as deprecated (== to be removed in next revision of IMAP)
- Addressed smaller comments from Timo and Arnt

Future directions - add/ clarify

- Clarify the most problematic areas, such as
 - BODYSTRUCTURE (parsed MIME structure) is still quite buggy in some implementations
- Restrict Extended LIST to a single list pattern (more restrictive than LIST-EXTENDED, but easier to implement)
- Combine frequently used operations (STATUS + LIST)
- Clarify when BINARY FETCH can be used: only leaf body parts? What about message/global?
- Allow SEARCH to do more intelligent matching (not just substring)
- Clarify what SEARCH NEW means with \Recent

Open Issues

- SEARCHRES? (Search for messages, use "\$" to reference them in subsequent FETCH, STORE, COPY, SEARCH)
- Add STATUS DELETED (number of messages with \Deleted flag)?

Next steps

- Do remaining changes (see previous slides)
- Address remaining comments from Arnt and Timo
- WGLC before Christmas 2019!

Slides on past changes

Changes done in WG -04 since -02

- Added MOVE
- Require all unsolicited updates to include UID
- Got rid of LSUB (use LIST SUBSCRIBED), SEARCH responses (ESEARCH responses can be used instead), \Recent flag and associated responses, UNSEEN response code on SELECT/EXAMINE.
- Clarified RFC 2231 compliance when returning Content-Type and Content-Disposition parameters

Changes done before WG -00 (1 of 2)

- Included errata for RFC 3501
- Updated TLS recommendations (as per UTA WG)
- Added RFC 5530 (IMAP Response Codes), pieces of ABNF for extending IMAP from RFC 4466.

Changes done before WG -00 (2 of 2)

- Merged in "popular" IMAP extensions which
 - Make the protocol more symmetrical (UNSELECT, UIDPLUS, CLOSED response code)
 - Avoid the need for clients to guess server configuration (NAMESPACE, SPECIAL-USE, bits of LIST-EXTENDED)
 - Make responses more compact/less chatty (ESEARCH)
 - Use ENABLE
 - Other optimizations (SASL-IR, LITERAL+)
 - IDLE
- See Appendix B in the draft for the full list

Changes done in WG -00

- Added \$MDNSent and \$Forwarded IMAP keywords to the base specification (as SHOULD support.
 Upgrade to MUST?)
- Extended tagged-ext-simple ABNF non terminal to allow number64
- Added official registrations for IMAP/IMAPS ports with IANA.