IMAP4 revision 2

draft-ietf-extra-imap4rev2-17.txt
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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 -17 since -15

- Clarified text on UIDVALIDITY and that UIDs don't get reused on EXPUNGE

- Unsolicited LIST responses used on CREATE/RENAME/SELECT/EXAMINE to announce canonical mailbox name. Added OLDNAME extended data item.

- Allow unsolicited LIST responses in other IMAP sessions announcing mailbox creation/deletion/rename

- Added missing IANA considerations for LIST Selection Options, LIST Return Options, LIST extended data items

Changes done in WG -17 since -15 (continued)

- Minor ABNF fixes: some non terminals missing, like "tag-string" and "vendor-token"

- Clarified that BODY and TEXT search keys don't have to use substring search

- Updated "text" non terminal ABNF to allow for UTF-8

Open Issues

- Should we guarantee that no further system flags will be defined in the future?

- Can multiple response data for a single SEARCH command be returned in separate ESEARCH responses?

- Old text in SELECT command description about UIDNEXT or UIDVALIDITY not being present

- Always require untagged LIST on SELECT/EXAMINE (whether or not the server normalized the mailbox name)?

- 64 bit message/body part sizes allowed?

Backward compatibility with IMAP2bis: should we allow for UIDNEXT or UIDVALIDITY be omitted?

- Section 6.3.2 current says:

  - Note that **earlier versions** of this protocol only required the FLAGS and EXISTS untagged data; consequently, client implementations SHOULD implement default behavior for missing data as discussed with the individual item.

- and

  - OK [UIDNEXT <n>] The next unique identifier value. Refer to Section 2.3.1.1 for more information. **If this is missing, the client can not make any assumptions about the next unique identifier value.**

- Section 6.3.2 current says:

  - OK [UIDVALIDITY <n>] The unique identifier validity value. Refer to Section 2.3.1.1 for more information. **If this is missing, the server does not support unique identifiers.**

Multiple ESEARCH responses for a single SEARCH command and the same correlator?

- Currently:

  - C: A283 SEARCH RETURN () FLAGGED SINCE 1-Feb-1994 NOT FROM "Smith"

  - S: * ESEARCH (**TAG** "A283") ALL **2,10:11**

- instead of (for example)

  - S: * ESEARCH (**TAG** "A283") ALL **2**

  - S: * ESEARCH (**TAG** "A283") ALL **10:11**

- **Recommendation**

  - **Disallow the latter option - easier to process on clients.**

- Note, that extensions are different, e.g. multimailbox search (RFC 7377) already uses separate ESEARCH response for each mailbox

  - Each has different MAILBOX correlator

  - C: tag1 ESEARCH IN (mailboxes "folder1" subtree "folder2") unseen

  - S: * ESEARCH (**TAG "tag1" MAILBOX "folder1" UIDVALIDITY 1**) UID ALL 4001,4003,4005,4007,4009

  - S: * ESEARCH (**TAG "tag1" MAILBOX "folder2/banana" UIDVALIDITY 503**) UID ALL 3002,4004

No new IMAP system flags?

- Probably not the most important thing in the Universe, but ...

- should the document just say that no further **\systemflags** will be defined in future revisions **IMAP4rev**X, we will only use **$keywords**

Always require untagged LIST on SELECT/EXAMINE?

- I.e. whether or not the server normalized or aliased the mailbox name?

- Only after ENABLE IMAP4rev2.

Allow 64 bit message/body part in FETCH?

- Server implementations don't have to allow values over 4Gb, but they can.

- Clients will need to accept that.

- Only after ENABLE IMAP4rev2.

A few remaining things

- Add a new section on other "recommended" IMAP extensions?

- Clarify the most problematic areas, such as

  - BODYSTRUCTURE (parsed MIME structure) is still quite buggy in some implementations

    - Send me your examples, or we might skip doing this this time

Recommended extensions

- CONDSTORE/QRESYNC?

- OBJECTID?

- ACL?

- NOTIFY?

- MULTISEARCH??

- Any other from https://www.iana.org/assignments/imap-capabilities/imap-capabilities.xhtml?

Next steps

- WGLC is done, but a few comments from Stephan still need to be addressed

- AD review from Murray Kucherawy