

JMAP: a better way to email

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"The nice thing about standards is that there are so many to choose from."

Now

- POP3 + SMTP (+pop before SMTP and abominations)
- IMAP + SMTP
- ActiveSync / MAPI / OWA
- IMAP flavours (gmail, Cyrus extended, Dovecot extended, 30+ RFCs)
- SMTP + BURL + IMAPURL

\$Company API

- Gmail REST API
- Nilas API
- Yahoo API
- Office 365 API
- context.io
- (FastMail API)

HOW STANDARDS PROLIFERATE:

(SEE: A/C CHARGERS, CHARACTER ENCODINGS, INSTANT MESSAGING, ETC.)

SITUATION:
THERE ARE
14 COMPETING
STANDARDS.

14?! RIDICULOUS!
WE NEED TO DEVELOP
ONE UNIVERSAL STANDARD
THAT COVERS EVERYONE'S
USE CASES.



SOON:

SITUATION:
THERE ARE
15 COMPETING
STANDARDS.

Why JMAP?

“it's the letter after I”

- JSON over HTTPS
- One API for email/calendars/contacts
- Mobile/battery/network friendly
- Actually designed so you can write performant, full-featured email clients
- Concepts working now at FastMail

Support Friendly

- IMAP + SMTP
 - Tons of optional features
 - Firewalls => support headaches
 - partial failures / incomplete actions
- Single endpoint – all up or all down
- No partial failures

Network/battery friendly

- Batched operations
 - Multiple commands in a single request
 - Can refer to items created in previous request
- Supports out-of-band notifications
 - e.g. Android and iOS push notifications
 - No need to keep a TCP connection open

Efficient updates

- Powerful windowing controls
 - Request exactly what you need for the current display.
- Rename/move detection
 - Consistent IDs mean no re-downloading messages moved by other clients
- Flood resistant
 - Limits on update responses so you never get flooded

Clear upgrade path

- JMAP Proxy talks IMAP/CalDAV/CardDAV
 - Allow immediate use of JMAP clients with existing service.
 - Use CONDSTORE/QRESYNC and Gmail specific facilities
 - Can add new server feature support in one codebase.

Open

- Spec: <http://jmap.io/>
- Proxy: <https://proxy.jmap.io/>
- Source code: <https://github.com/jmapio/>
- https://github.com/brong/cyrus-imapd/blob/master/imap/http_jmap.c
- Tests: development starts next week