http://jmap.io/

a better way to interface with email

Bron Gondwana

 fastmail.fm>

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

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

SITUATION: THERE ARE 14 COMPETING STANDARDS.



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SITUATION: THERE ARE 15 COMPETING STANDARDS.

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

Others...

- Gmail REST API
- InboxApp API
- Yahoo API

... \$COMPANY API

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
 - Size limits on updates 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 Source / Open Documentation

- FastMail commits to provide:
 - Spec document
 - Reference proxy
 - Reference server
 - Reference client
 - Compliance test suite