

draft-ietf-sml-structured-email-02

IETF 120

Status

- Scope: Main specification for structured email → allow to describe content of email messages in a machine-readable format
- Example implementation:
<https://github.com/audriga/roundcube-structured-email>
- Updates since IETF 119
 - Some minor editorial fixes/elaborations
 - Added “non-representation” case
 - Started “legacy structured email” survey
 - Started “multiparty/alternative” survey

“Legacy structured email” survey

- Goal: understand current usage of (legacy) structured email
- Problem: no public data sets (=need to crawl private accounts)
- Results (n=2; non Gmail/Yahoo/1&1 account)
 - **Various different senders**
 - Events (Eventbrite, Ticketmaster)
 - Other (Dropbox, Docusign, GitHub, Google Docs/Drive, Spotify)
 - Shops (Cyberport, eBay, Galaxus, Stripo)
 - Travel (Amtrak, Booking.com, Easyjet, HRS, Lufthansa, Lyft, Ryanair)
 - **Mostly JSON-LD; but also Microdata**
- Next steps
 - Publish example data
 - Provide tooling for crawling email accounts

“Multipart/alternative” survey

- Placement of structured data in the “full representation” case
 - Add “application/ld+json” to “multipart/alternative”
 - Pro: “clean”
 - Alternative: also embed JSON-LD in text/html SCRIPT-tag
 - Pro: More legacy software-friendly
 - See also: <https://github.com/hhappel/draft-happel-structured-email/issues/3>
- Problem: Three cases of API support for custom “multipart/alternative”
 - Easy
 - Difficult (Convenience methods for text+html; custom MIME handling for other)
 - Impossible (only supporting text/plain and text/html)
- Survey document: <https://notes.ietf.org/1CMe390rT6CdhJp07z1gBA>

Structured data across email messages: need more eyeballs

- Forwarding
- Replies
- Error replies
- Updates

Next steps

- Progress decisions on core representation issues
 - Continue with surveys (input appreciated)
 - Provide more examples/data
- Further aspects
 - Provenance?
- Further co-authors?

Backup

Structured data across email messages: Forwarding

- Treatment of structured data on (manual) forwarding
 - Keeping might be desired in many use cases (e.g., “share by email”)
 - Stripping might be desired in certain use cases
 - E.g. privacy issues in “on-representation” cases, where structured data is not obvious from HTML content (e.g., preemptive vacation notice)
 - No way to change behaviour of legacy email clients
- Any relation to automatic forwarding?
- See also <https://github.com/hhappel/draft-happel-structured-email/issues/6>

Structured data across email messages: Replies

- Structured email sent in response to a structured email
 - Based on “potentialAction”
- Capturing reply status
 - “\Answered” flag defined for conventional replies (RFC 9051)
 - Proposal: Adding \$AnsweredStructured
- See also: <https://github.com/hhappel/draft-happel-structured-email/issues/7>

Structured data across email messages: Error replies

- An original sender may not assume that a structured email has been processed by a recipient
- But: if a recipient answers with a structured email response, she may want to be informed if this response is invalid for some reason (in order to **avoid the false assumption of a proper reply**)
- Options
 - Define error based on DSN/MDN
 - Define structured data error type
- See also <https://github.com/hhappel/draft-happel-structured-email/issues/8>

Structured data across email messages: Updates

- Human readable messages can be recalled/corrected by a follow-up human readable message
- How to recall/update structured information in a machine-readable way?
- Options
 - Use SUPERSEDES header (RFC4021)?
- Potential side issues (answered? forwarded? ...)
- See also <https://github.com/hhappel/draft-happel-structured-email/issues/9>