draft-ietf-sml-structured-email-04

IETF 123, Madrid

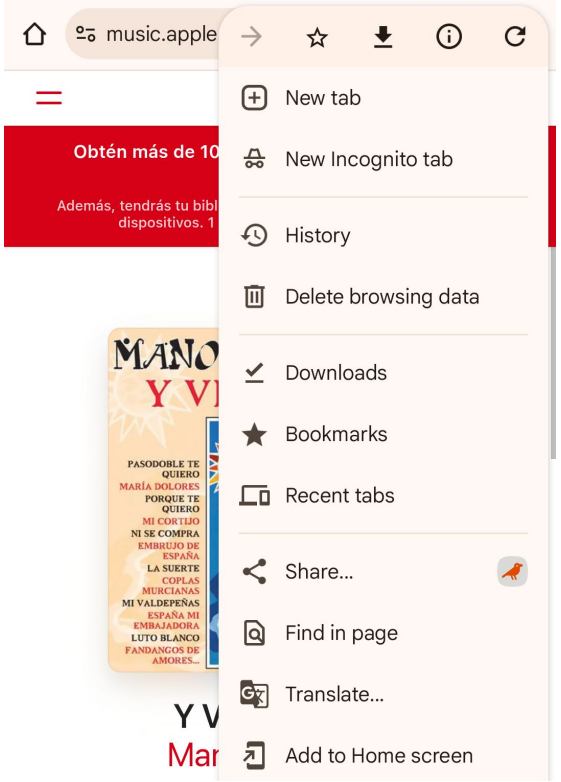
Status

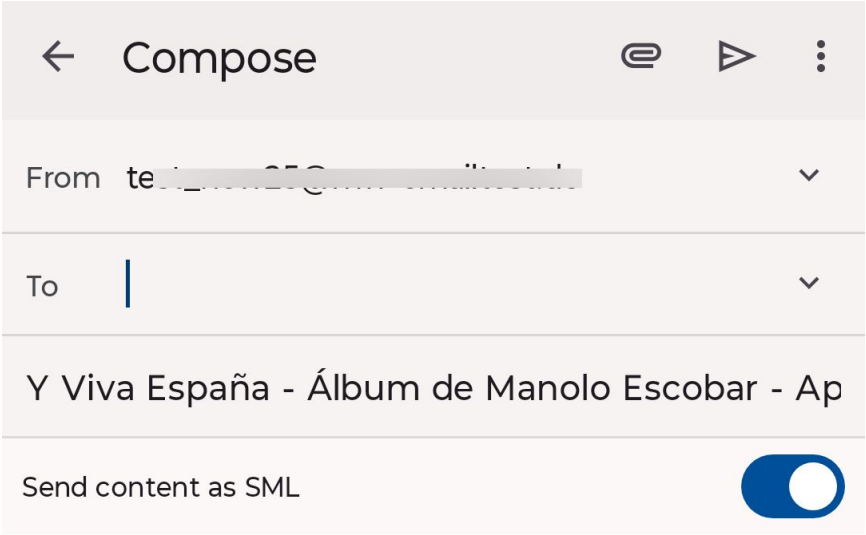
- Scope: Main specification for structured email → allow to describe content of email messages in a machine-readable format

- Example implementations
  - Roundcube Webmail (GitHub - audriga/roundcube-structured-email)
  - Thunderbird Mobile fork 🌟 (https://play.google.com/store/apps/details?id=com.audriga.yatagarasu.android.debug)

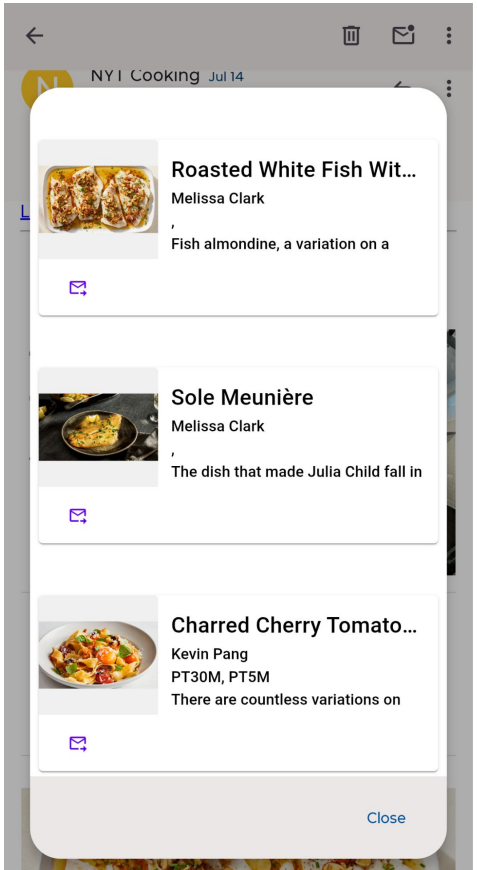
- Updates since IETF 122
  - New draft revision with proposals for various issues discussed

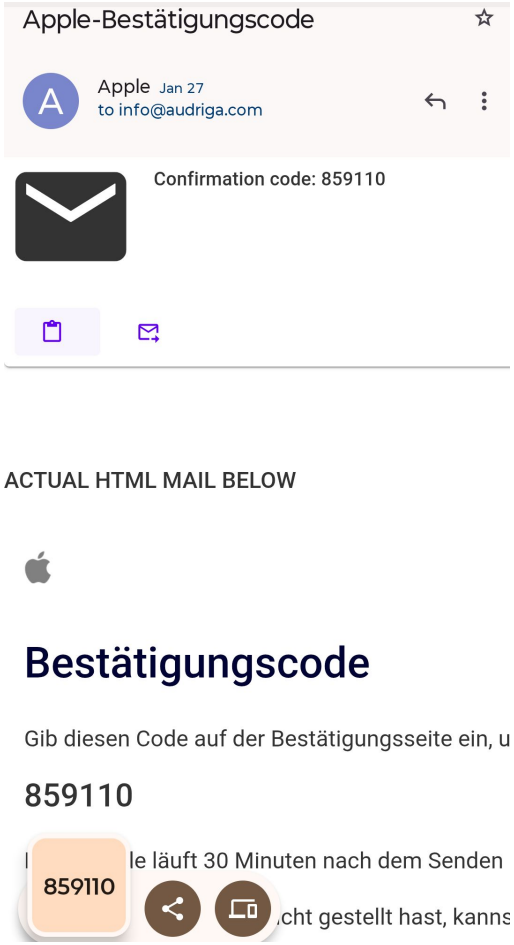
Thunderbird Mobile fork (I)





Thunderbird Mobile fork (II)





Agenda

- 3.2 Vocabularies
- 4.1 Structured data within email messages
- 5. Structured data across email messages
- 6. Headers and flags

3.2 Vocabularies: Create two IANA registries

- “Structured Email Vocabulary Registry”

Namespace	Info	Scope
https://schema.org	https://schema.org	General purpose concepts
https://sml.iana.org	https://sml.iana.org	Email-related concepts
https://rdf.who.org	https://who.org/resources/rdf	WHO medical vocabulary

- IANA registry for the vocabulary of email-related concepts

- Text to be done → happy for pointers to other drafts / insights from IANAbis

4.1 Placement of structured data (I)

- Added new section 4.1.1 (Designation of a body part)
- Added distinction between “full representation” of a single body part vs. entire message
- Addressed legal requirements (footer) in structured email
- Added section with example MIME hierarchies

4.1.1 Designation of a body part

- Suggestion: clarify intended purpose of a JSON-LD body part **using a new MIME header**
  - E.g.: “`Content-Purpose: Machine-readable`” (similar to “Content-Disposition”)
  - This might probably be something for a more generic email-related draft (c.f. discussion in Bangkok → MCR?)

- Added support for JOSE-signed JSON-LD:

  A system SHOULD treat such body parts as if their media type would be `application/ld+json` according to this specification, if they can extract JSON-LD data (e.g.: `application/jose`; [RFC7515])

- Alternative idea: dedicated “wrapper” media type “application/sml” or so?

4.1.2 Full representation

- Tried to add some more clarity distinguishing:
  - Full representation of an individual body part
  - Full representation of an **entire email message** (= sum of “human-readable” body parts)
- Might sound theoretic, but probably needs some elaboration
  - Important aspect: full representation of an entire message might enable different handling
- Also added a note regarding structured email sent machine-to-machine
- Next steps: will improve wording, but feedback/help very welcome

4.1.2 Structured Email Signature (Footer)

- Legal information is required for commercial senders by some legislations
- Added example based on existing Schema.org markup

- Where to add this?
  - Within a full representation body part?
  - As a separate non-representation body part?

5.2 Replies

- Added more elaboration and examples to section
- Merged text of section 6.2 (message flags for replies) in here

- Suggestion: **split this into a separate draft**

5.3 Error replies

- Error messages sent as structured data in response to structured data replies that have issues

- Added a list of suggested issue types
  - SyntaxError (e.g., invalid JSON)
  - VocabularyError (e.g., unknown action type or missing required property)
  - UnknownProcess (e.g., invalid identifier)
  - InvalidState (e.g., action is already in CompletedActionStatus)
  - Unauthorized (e.g,, the sender is not permitted to execute this action)
  - InternalServerError (e.g., the recipient is unable to process the action)
  - General: any other error

5.4 Updates of structured data

- Scenario: structured data is is updated (e.g., flight departure)
- Current spec: leverage SUPERSEDES header (RFC4021); dismiss/update prior structured data if possible

- Open issue: Spec currently focuses on recipient case
  - Suggestion: add sender perspective

- See also https://github.com/hhappel/draft-happel-structured-email/issues/9

6. Header fields an message flags

- Forms of signaling structured data (for optimized processing)
  - Header fields
  - Flag (`$hasStructuredData` similar to `$hasAttachment`)

- Open questions
  - Need both? Consistency?
  - Need to distinguish entirely machine readable email?

Next steps

- Spec
  - More eyeballs
  - Refine in an interim?
  - Move towards WGLC for Montreal?

- General
  - Refine/add implementations
  - New reach action out to senders
  - Update MIME tests and Automated client testing
  - Setting up WG GitHub repo