Media Types

Register media types useful for REST API and YAML

HTTPAPI-WG @ IETF-114

ietf-httpapi-mediatypes
[see the specifications I-D YAML, I-D REST-API]

Goals

- increase interoperability when processing API specification

- leverage content negotiation when exchanging API resources

- simplify cooperative development and cataloguing of API and schemes

- do not disrupt current implementations, respect engaged communities: YAML, JSON Schema, OpenAPI, JSON-LD

https://github.com/ietf-wg-httpapi/mediatypes/

Rationale

OpenAPI Specification relies on YAML and JSON Schema, but underlying media types have **not been registered**

No interoperable way of **content negotiating** OAS documents or JSON schema

YAML users do not have interoperability and security considerations

https://github.com/ietf-wg-httpapi/mediatypes/

Media Types application/*

YAML: `yaml & +yaml`, provide interoperability and security considerations, foundation for openapi+yaml

OpenAPI: `openapi+json` & `openapi+yaml`

JSON Schema: `schema+json` & `schema+yaml`

~~**JSON LD**~~: YAML-LD moved to [W3C JSON-LD workgroup](#), relies on I-D.ietf-httpapi-yaml-mediatypes

Legend: quick win, work needed, some disagreement

Changes from -01

YAML is another I-D, and is almost done:
- security + interoperability considerations;
- fragment identifier considerations;
- multi document YAML streams;
- joint efforts with YAML community

https://ietf-wg-httpapi.github.io/mediatypes/draft-ietf-httpapi-yaml-mediatypes.html

REST API needs more feedback from JSON Schema community.

https://www.ietf.org/rfcdiff?url2=draft-ietf-httpapi-rest-api-mediatypes-01

Open issues (YAML only)

- YAML [#50](#) ([#54](#)) xxx+yaml MUST use application/fragids
- YAML [#56](#) reference Unicode security considerations
- YAML [#59](#) No normative conversion YAML -> JSON
- [#1](#) engage with media-types ML when WGLC

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#50 +yaml SSS fragid

Should every xxx+yaml media type use the same fragment identifier of application/yaml?

- proponents says that SSS are a way to implement Liskov' substitution principle;
- editors states that this affects future media types e.g. JSON Schema+yaml or LD+yaml that have different fragids;
- RFC 6838 does not require that +yaml and yaml need to have the same fragid

https://github.com/ietf-wg-httpapi/mediatypes/issues/50

#59 Normative conversion YAML -> JSON

Should we define a normative way for converting YAML to JSON ?

Other solutions:

- enrich the normative considerations;

- defer to YAML spec;

- another I-D either under IETF or other organization's umbrella

https://github.com/ietf-wg-httpapi/mediatypes/issues/59

Thanks!

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FAQ

Q: Do we need this?

A: Yes, we do :)

Backup slides