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/](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](https://www.w3.org/2019/ig/jsonld/), relies on I-D.ietf-httpapi-yaml-mediatypes

Legend: quick win, work needed, some disagreement

[https://github.com/ietf-wg-httpapi/mediatypes/](https://github.com/ietf-wg-httpapi/mediatypes/)
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


REST API needs more feedback from JSON Schema community.

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

https://github.com/ietf-wg-httpapi/mediatypes/
#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/mediatypess/issues/59
Thanks!

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FAQ

Q: Do we need this?

A: Yes, we do :)
Backup slides