HTTP Availability Hints

draft-nottingham-http-availability-hints

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Vary is awful.
First try: draft-ietf-httpbis-key

- Response header carries a recipe for determining a cache key
- E.g.,

  Key: user-agent;substr=MSIE;Substr="mobile", Cookie;param=“ID"
  Vary: User-Agent, Cookie

- **Pro:** very flexible / doesn’t require cache to know headers
- **Con:** complicated / awkward / footgun
Second try: draft-ietf-httpbis-variants

- Response header carries information about what variants are available, and which created this request

- E.g.,

  Variants: Accept-Language=(en jp de)
  Variants: Accept-Encoding=(br gzip)
  Variant-Key: (en br)
  Vary: Accept-Language, Accept-Encoding

- **Pro**: Much less footgun-y / more declarative

- **Con**: Cache has to know about header semantics / still kinda complex, non-intuitive
Let’s try again.
Response headers describe what representations are available, facet-by-facet.

‘d’ parameter indicates a default representation.

E.g.,

Vary: Accept-Encoding, Accept-Language, ECT
Avail-Encoding: gzip, br
Avail-Language: fr, en;d
Avail-ECT: (slow-2g 2g 3g), (4g);d

Pro: Intuitive / declarative / other use cases for this information

Con: Does not contain information regarding relative preferences between facets
Adopt?