Variants
Secondary Cache Keys

- Caching for “proactive” content negotiation
- E.g., Content-coding, content-language, format
- Also: Client Hints
- Sometimes abused into User-Agent, Cookie
Vary (RFC7234)

- Granularity is request-header-as-string
- Cache can canonicalise (but algorithm isn’t specified)
- Correct implementation is expensive
- Shortcuts are commonly taken
- Interop isn’t great
- Functionality is limited
Key (draft-httpbis-key)

- Recipe for secondary cache key in a response header

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

- ✅ Much finer-grained, more flexible, deterministic

- ✅ Usable on any request header

- ❌ Complex to author

- ❌ Not able to describe all relationships
Variants (draft-nottingham-variants)

- List all variant values available for a given negotiation axis
  Variants: Accept-Encoding;gzip;br,
             Accept-Language;en;fr

- Identify the values that were used to select this response
  Variant-Key: gzip, fr

- Algorithm specified for every axis of negotiation

- Works well for known axes of negotiation

- Not suitable for request headers with opaque semantics

- Simple, intuitive to author