

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