

# Cache-Control: immutable

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# The Problem

- Facebook reported 20% of their HTTP responses were 304
- Most for resources that have existed for less than their max-age
- It turns out people press reload a lot

# Cache Control Extension

- Simple mechanism to assert fresh responses would receive a 304 if revalidated
- Therefore skip revalidation
- Reload gets faster
- Meshes well with versioned URL design pattern

# Running Code

- Firefox 49 - about 6 weeks ago
- Facebook, BBC, Interplanetary File System !?!
  
- Reports PLT 50% improved and 90% fewer transactions
- Ymmv based on content

# The Internet Draft

- Cache-Control: max-age=365000000, immutable
- <https://tools.ietf.org/html/draft-mcmanus-immutable-00>
- Thank you to wg for feedback - especially wrt intermediaries. Requires a -01.

# Cache Control Extension

- RFC 7234 - 5.2.3 Defines Extensions
- <http://www.iana.org/assignments/http-cache-directives>
- RFC 7234 - 7.1.1 Registry Requires IETF Review
- Adopt to HTTPbis WG?