Cache Control Metadata

CDNI Working Group

IETF 123

7/21/25

Cache Control Metadata

What is the draft about?

- Adds new Cache Control objects that complement the basic Cache Control Metadata object defined in RFC8006

Usage

- Provides content providers and upstream Content Delivery Networks (uCDNs) a more fine-grained control over downstream CDN (dCDN) caching

Applicability

- Override or adjusts cache control headers (when desirable) from the Content Service Provider (CSP) source or origin

Examples of usage

Positive Cache Control

- Allows the uCDN to specify both internal and external caching policies for the dCDN

Negative Cache Control

- Allows the uCDN to specify caching policies based on error response codes. For e.g., it may be desirable to cache error responses at the dCDN for a short period of time to prevent an overwhelmed origin source service or uCDN from being flooded with requests

Cache Bypass Control

- Allows content providers to bypass CDN caching when needed (typically for testing or performance benchmarking purposes)

Stale Content Policy

- Allows control over how the dCDN should process requests for stale content

Dynamically Constructed Cache Keys

- CDN configurations to generate cache keys that are dynamically constructed via lightweight processing of various properties of the Hypertext Transfer Protocol (HTTP) request and/or response *[using Metadata Expression Language]*

State of the draft

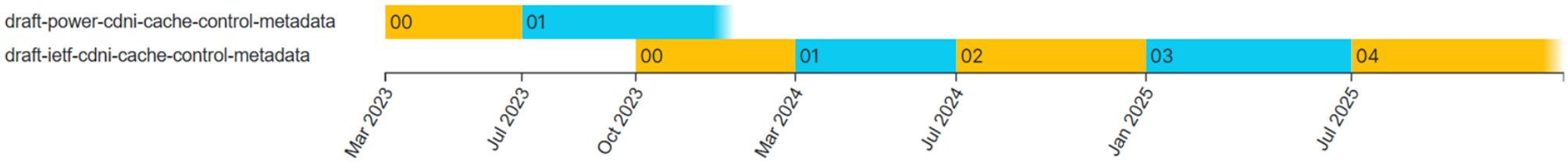
CDNI Cache Control Metadata

draft-ietf-cdni-cache-control-metadata-04

Status | IESG evaluation record | IESG writeups | Email expansions | History

Versions:

00 | 01 | 02 | 03 | 04



- While the reviews/updates have occurred progressing of the draft awaits charter update
- Document references use of Metadata Expression Language (MEL) and processing stages drafts
- Both of these drafts are subject to updates to the charter

Thank you