

Detecting Outdated Proxy Configuration

A Lightweight Hinting Mechanism Using HTTP Headers

`draft-rosomakho-httpbis-outdated-proxy-config-00`

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PAC files and PvD configs are pulled by clients

- Multiple mechanisms exist to detect and enforce proxy configuration
- These mechanisms provide a configuration URL, but clients must decide for themselves when to fetch updates
- PAC server can use HTTP headers such as `Expires`
- PvD config has `expires` JSON key
- But proxy configuration updates are not always planned...

Unplanned proxy configuration updates

- Misconfiguration
- Proxy outage not considered by configuration
- Unplanned migration

- To mitigate this PAC files are often fetched frequently (few times a minute) creating unnecessary noise and load...

Proposed solution: client header

- Client MAY inform HTTP proxy about configuration its using and when it was fetched
- Works with any HTTP and MASQUE proxies (CONNECT, CONNECT-UDP, CONNECT-IP, and templated CONNECT-TCP)

Proxy-Config: url="https://config.example.net/proxy.pac", fetched=@1748736000

- URL can be omitted if proxy configuration is at the default PvD location at proxy authority (https://proxy.example.net/.well-known/pvd)

Proposed solution: proxy header

- Proxy MAY include `Proxy-Config-Stale` boolean response header indicating
 - `?1` = configuration is stale and needs to be refreshed
 - `?0` = configuration is known to proxy and is not stale
- Header can be included in successful or error response if error is not authentication related
- If configuration URL is not known to the proxy, it does not include the header

Thank you!

Questions?

Comments?

Suggestions?