

Oblivious Proxy Feedback

draft-rdb-ohai-feedback-to-proxy-01

March 2022

T. Reddy (Akamai)

D. Wing (Citrix)

M. Boucadair (Orange)

Problem

- Excessive traffic from a oblivious proxy to an target will cause target to rate-limit that proxy
- Rate-limiting the oblivious proxy harms all clients using that proxy

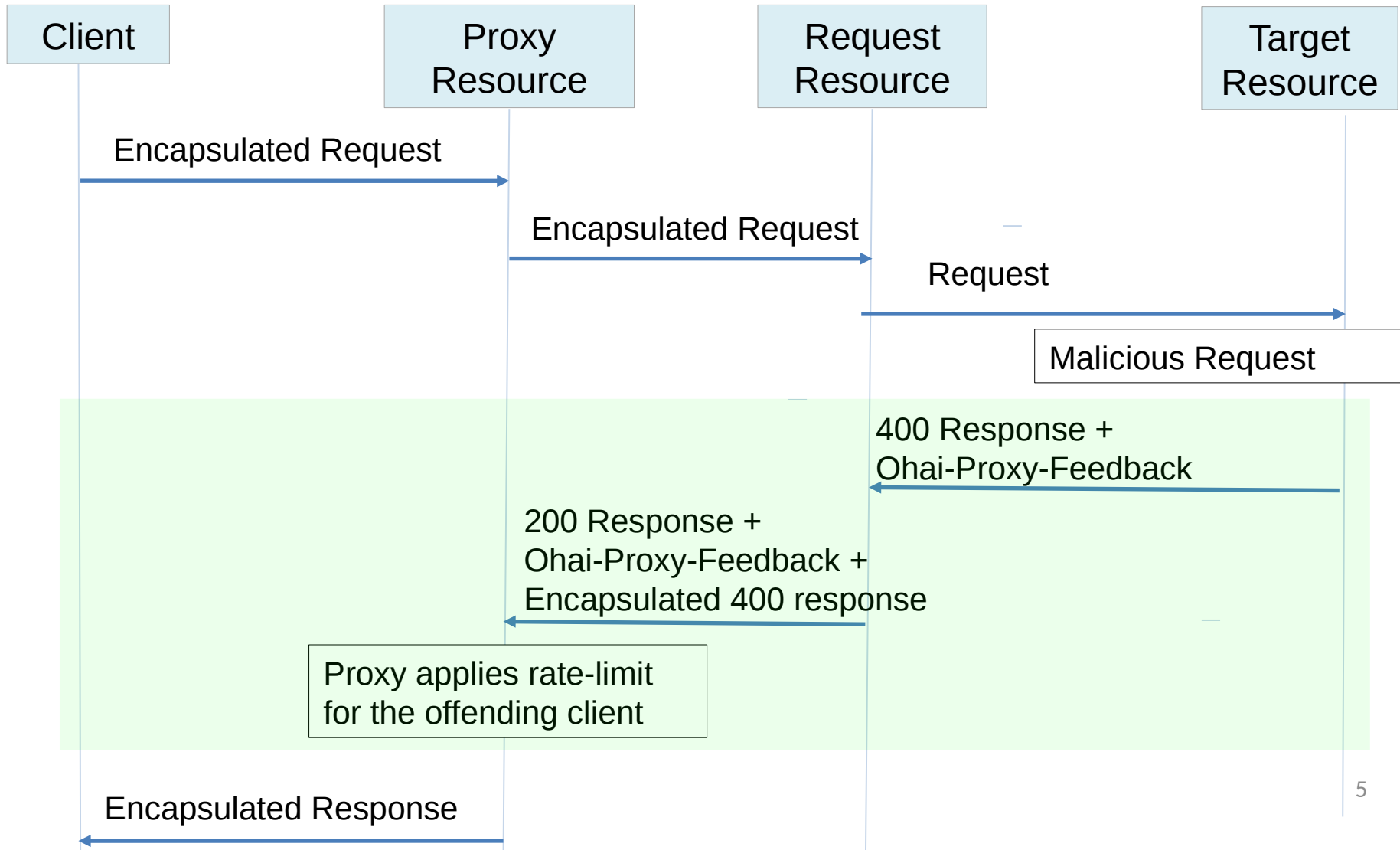
Proposal

- Signal overload from server to oblivious proxy
- Proxy uses the feedback to rate limit transactions from overzealous or misbehaving clients.
- draft-ietf-httpapi-ratelimit-headers publishes quotas (or service limits) to clients.

New HTTP Header

- New Ohai-Proxy-Feedback Header provides feedback from request/target resource to the proxy.
- The proxy must remove the header before sending the HTTP response to client.

Example Message Flow



Ohai-Proxy-Feedback parameters

- Added parameters to align with the fields in [draft-ietf-httpapi-ratelimit-headers](#) draft.
- RateLimit-p-Limit: Max requests from the proxy.
- RateLimit-p-outstanding-Limit: Max outstanding requests from the proxy.
- RateLimit-Limit: Max requests server is willing to accept from a client attacking the server.
- RateLimit-Outstanding Limit: Max outstanding requests server is willing to accept from client attacking the server.
- RateLimit-p-Reset, RateLimit-p-outstanding-Reset, RateLimit-Reset and RateLimit-outstanding-Reset : Number of seconds until the RateLimit-* -Limit quota resets.

Security Considerations

- Convey the header only to trusted proxies.
 - ❑ Proxy can collude with attacking clients to leak the Feedback information to help change the attack strategy.

draft-rdb-ohai-feedback-to-proxy-01

- Comments and suggestions are welcome.