



HTTP Timeouts

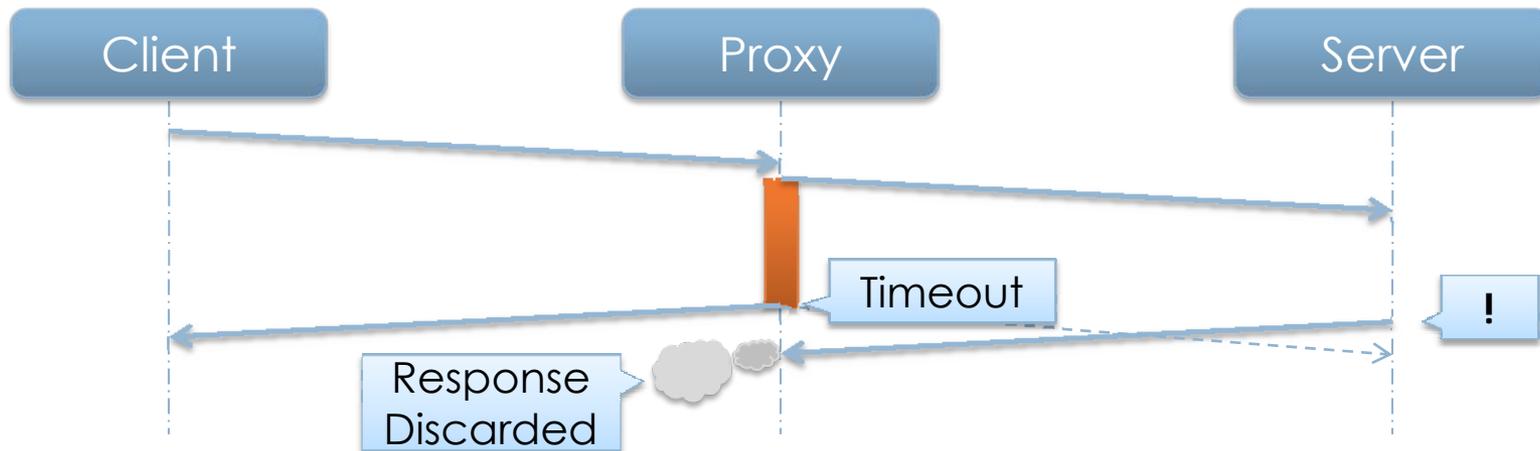
draft-loreto-http-timeout-00

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Request Timeout

- Long-polling is the asynchronous for the web
- *Problem:* no information on how long to hold a request open
 - Conservative guesses are made to avoid timeouts at intermediaries, NAT bindings, etc...



Timeout* Header

- Advertise client timeout requirements
 - Intermediaries can reduce *Timeout* according to policy or their knowledge of connection timers
 - Header gives intermediaries an explicit indicator that this is a long-lived request
 - Origin server sees lowest value

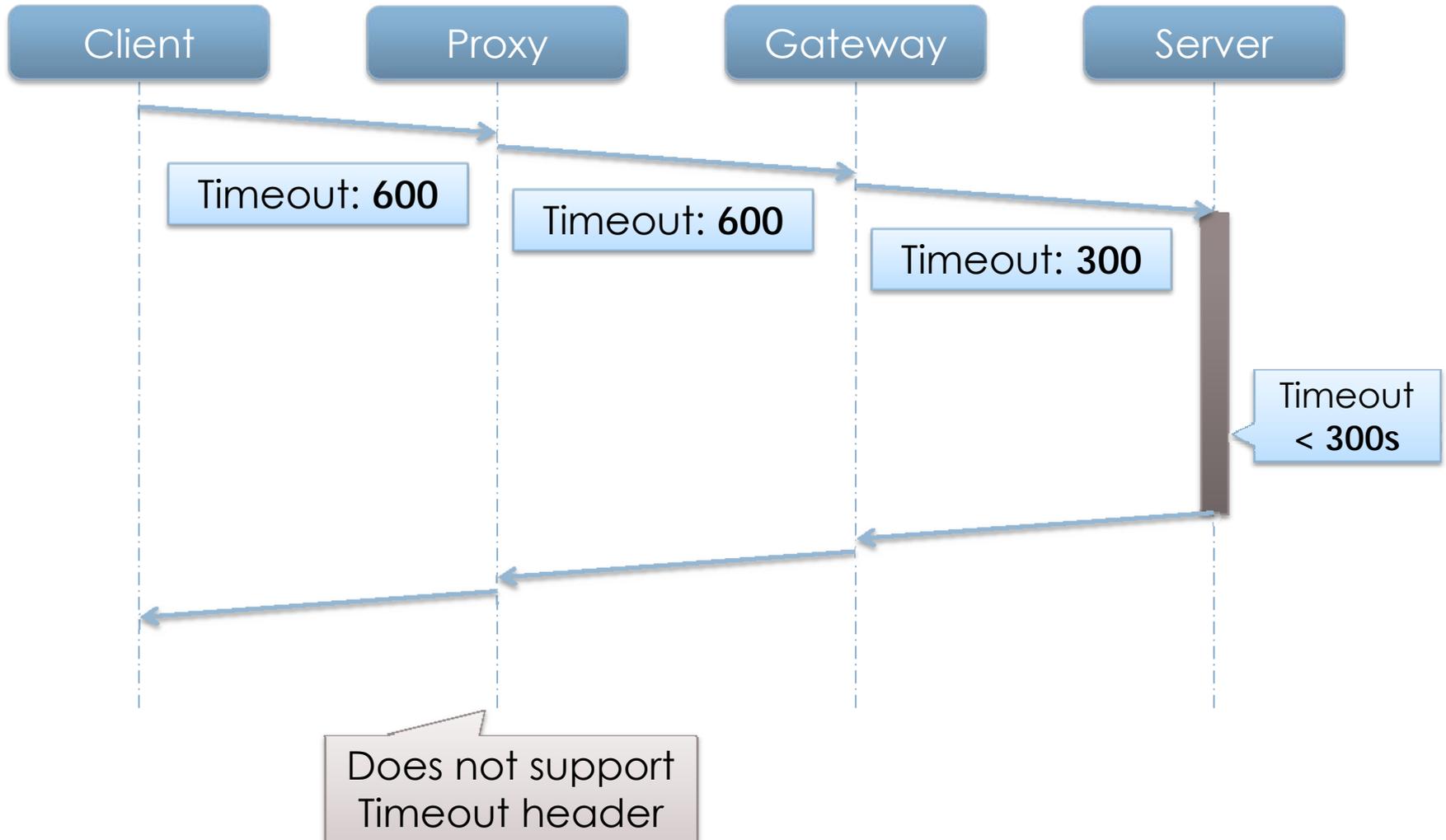
```
Timeout           = "Timeout" ":" timeout-value
timeout-value     = 1*DIGIT ; in seconds
```

Request-Timeout Header

- Advertise client timeout requirements
 - Intermediaries can reduce Request-Timeout according to policy or their knowledge of connection timers
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```
Request-Timeout = " Request-Timeout " ":" timeout-value
timeout-value   = 1*DIGIT ; in seconds
```

Timeout



Idle Connection Timeout

- Idle HTTP/1.1 connections are reusable
 - ...in theory
 - in practice, not so much (see §8.1.4 of RFC 2616)
- *Problem:* Connection reuse can fail
 - The connection could be closed at the other end when a request is started
 - Bigger problem for non-idempotent requests
- Many clients seek to avoid the problem by making new connections for POST

Connection-Timeout* Header

- Hop-by-hop header
 - Token is added to the *Connection* header
- Both peers advertise how long they are willing to keep the connection open

```
Connection-Timeout = "Connection-Timeout" ":" timeout-value
timeout-value      = 1*DIGIT ; in seconds
```

Keep-Alive Header

- Hop-by-hop header
 - Token is added to the *Connection* header
- Both peers advertise how long they are willing to keep the connection open
- Might attempt to codify existing usage
 - ! Implementations are not consistent

```
Keep-Alive = "Keep-Alive" ":" timeout-value
timeout-value = ?
```



<http://tools.ietf.org/id/draft-loreto-http-timeout-00>

Comments