Keep-Alive

draft-thomson-hybi-http-timeout-01
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What happened

• Per-request timeouts are now a preference:
  – Request-Timeout: 10 ⇒ Prefer: wait=10
  – See: draft-snell-http-prefer

• Keep-Alive is back from the dead
  – Connection-Timeout: 10 ⇒ Keep-Alive: timeout=10
The WebSocket protocol interaction

- Keep-Alive is hop-by-hop
  - Timeout values can differ on each hop
- The WebSocket protocol is end-to-end
  - ...ish
  - Where it is end-to-end, intermediaries need to pass their policies on persistent connection lifetime right down the pipe
Hop-by-hop

Client

Proxy

outbound policy: 120s

inbound policy: 300s

Proxy

effective policy: 30s

outbound policy: 1200s

inbound policy: 30s

effective policy: 1200s

Server

outbound policy: 1200s

inbound policy: 1200s
thewebsocketprotocol

- Client
  - outbound policy: 120s
- Proxy
  - inbound policy: 30s
  - outbound policy: 120s
  - inbound policy: 300s
- Server
  - inbound policy: 1200s
- effective policy: 30s
  - Discovered only after handshake completes
- Unless the proxy treats thewebsocketprotocol specially
Keep ‘max’ Alive?

• Only other documented (and implemented: Apache) Keep-Alive parameter is ‘max’
• Tracks the maximum total number of requests on a single persistent connection

• Suggested outcome: ‘max’ is counterproductive and should be removed