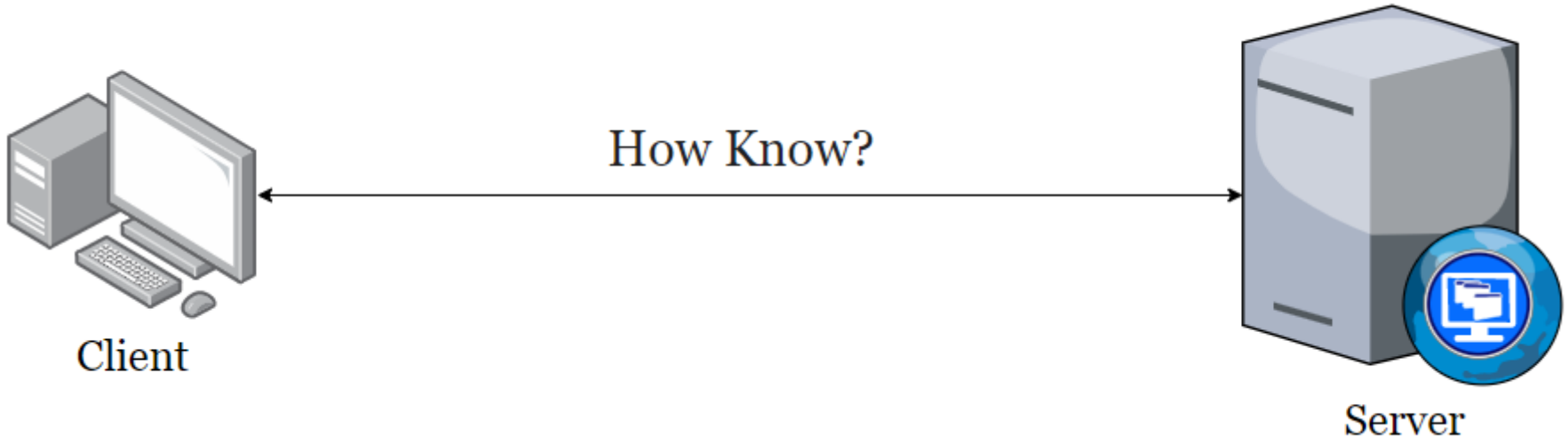
HTTP

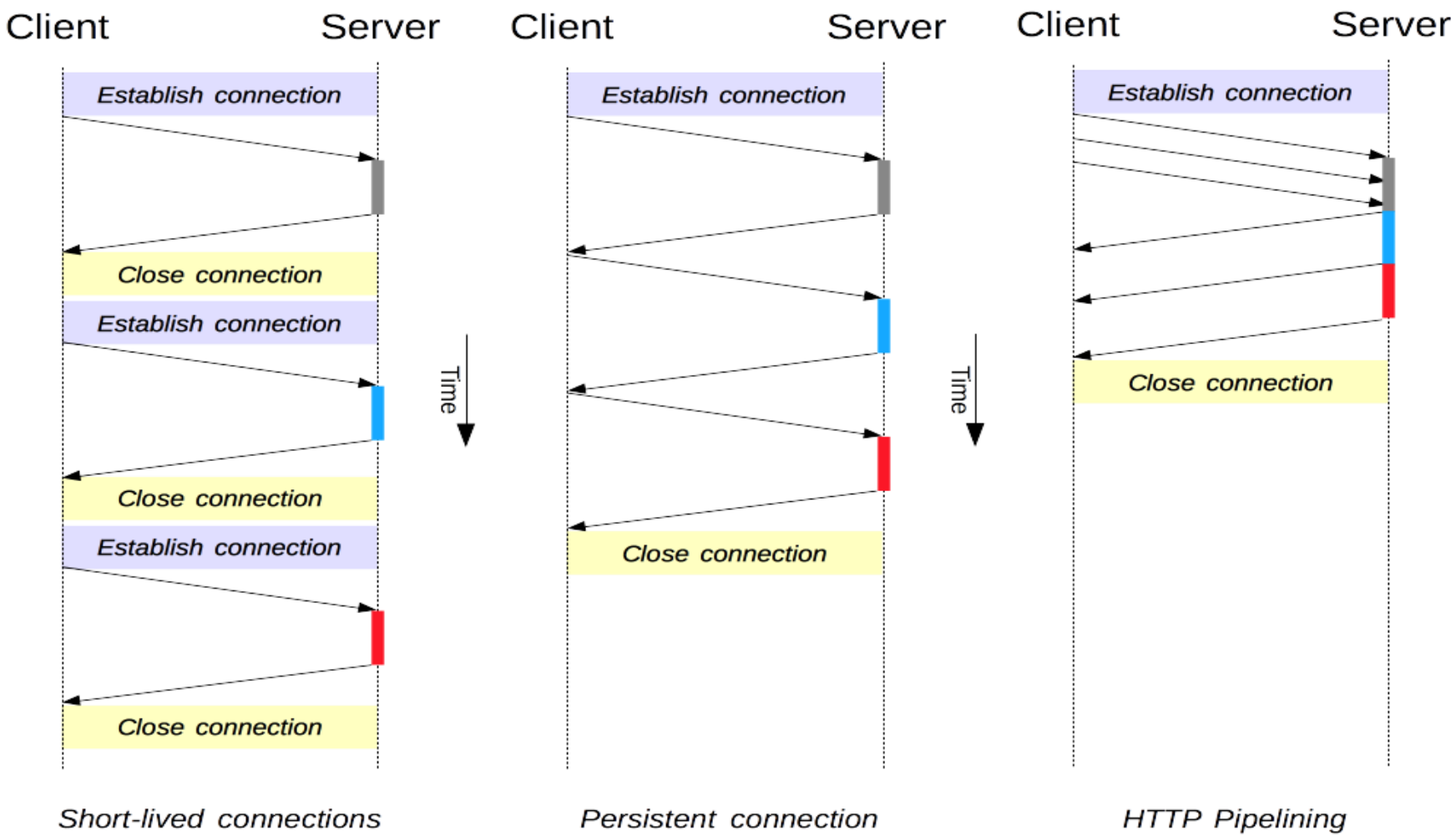
http에 대해 알아보자

What is HTTP?

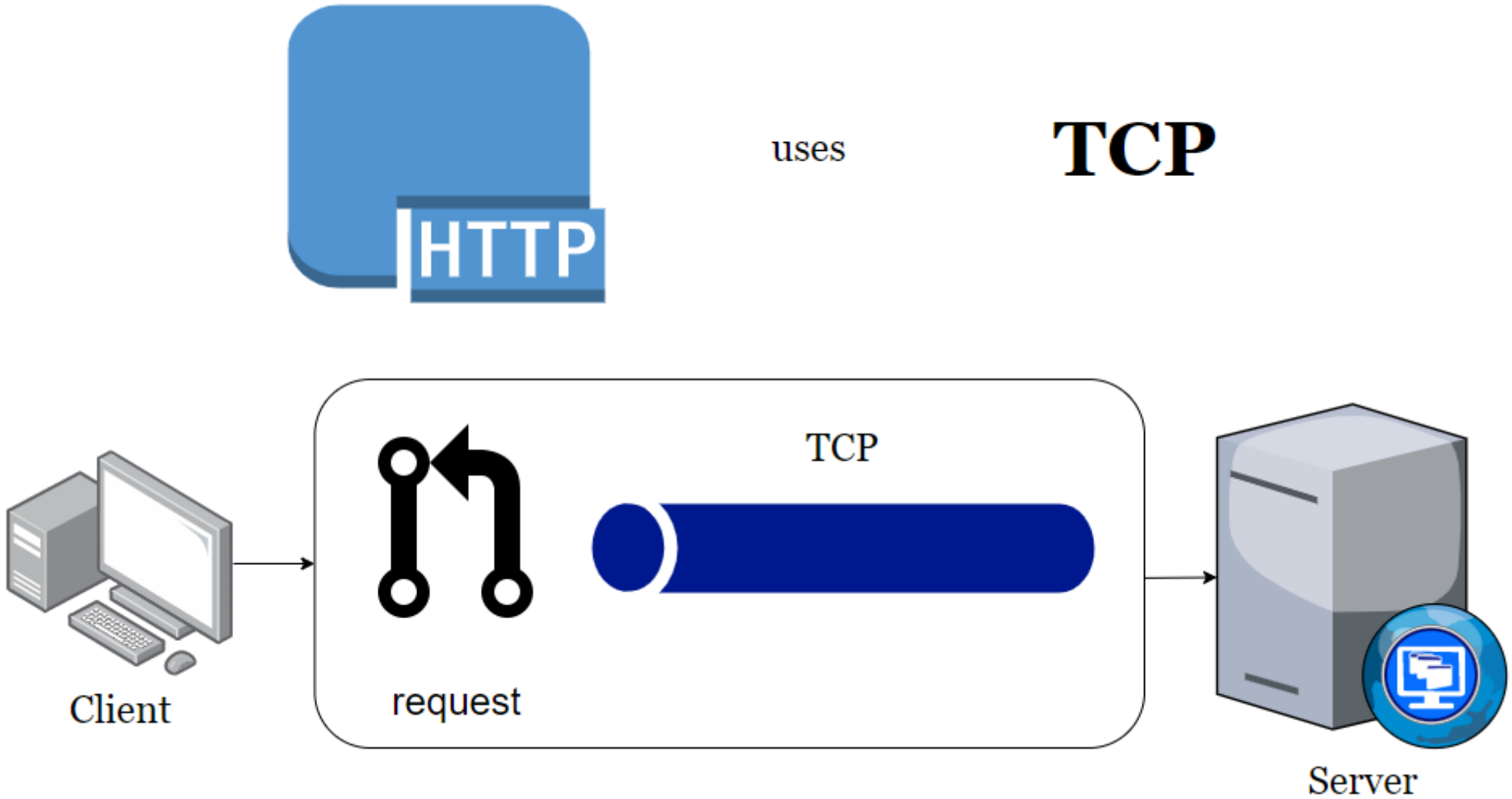
HTTP is Protocol



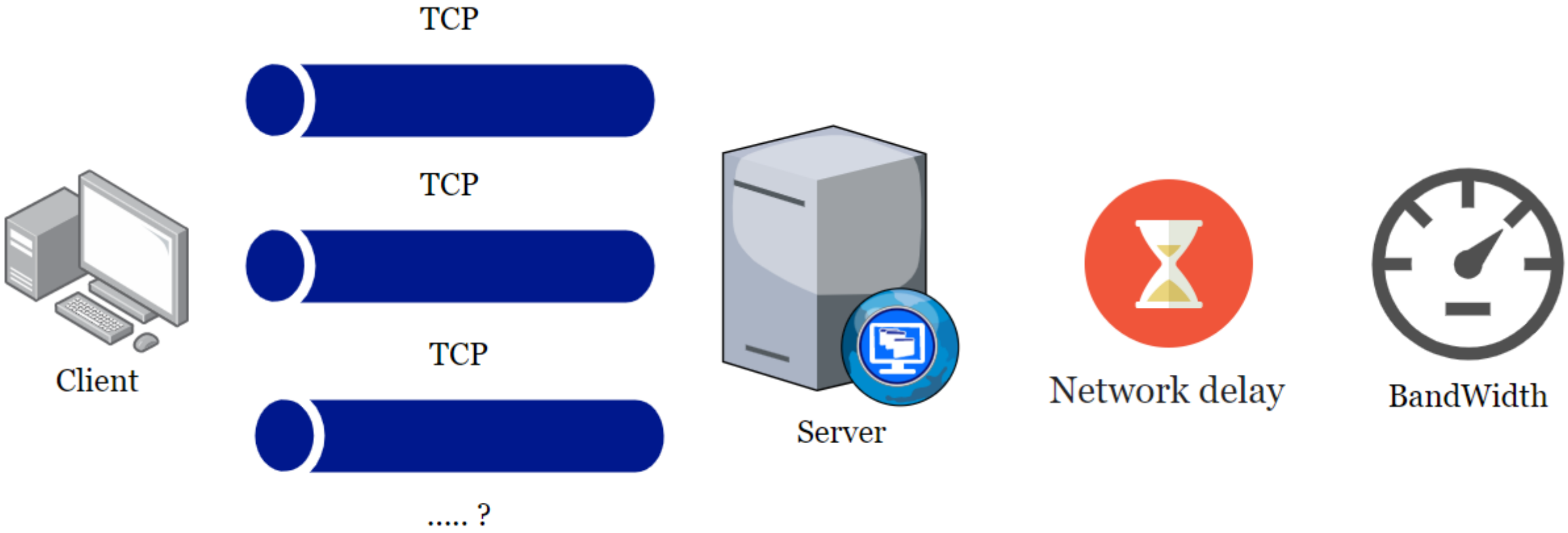
HTTP/1.x


Client
Server
Establish connection
Close connection
Establish connection
Close connection
Establish connection
Close connection
Time
Short-lived connections
Client
Server
Establish connection
Close connection
Time
Persistent connection
Client
Server
Establish connection
Close connection
HTTP Pipelining

HTTP 개요

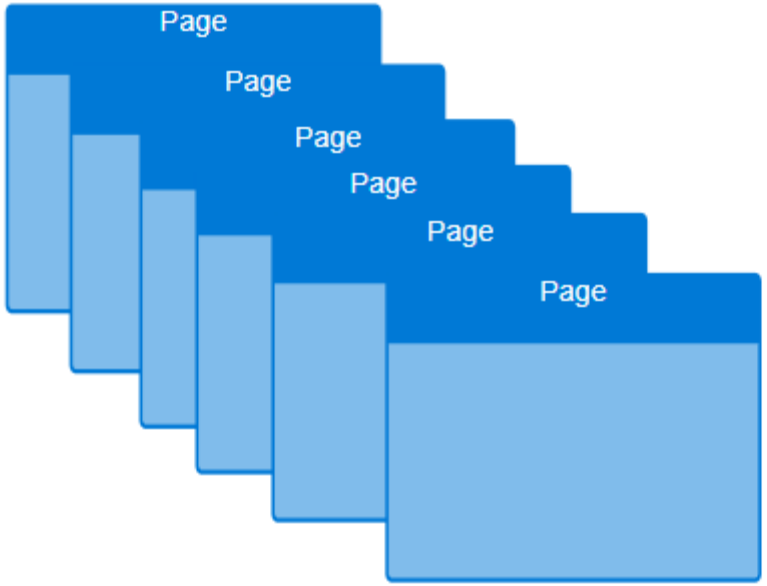


HTTP 개요



HTTP 개요

Modern Pages



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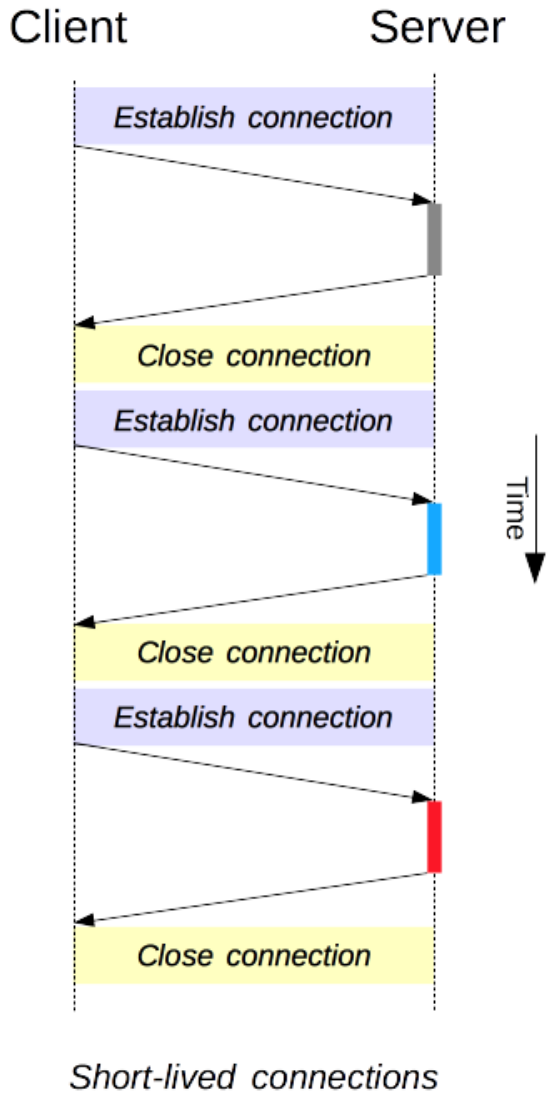
- Persistent Connection Model
- HTTP Pipelining

HTTP 개요

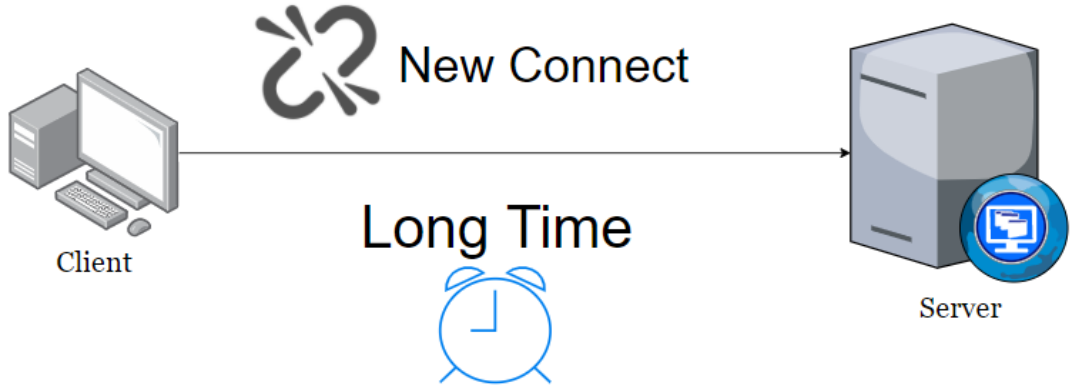


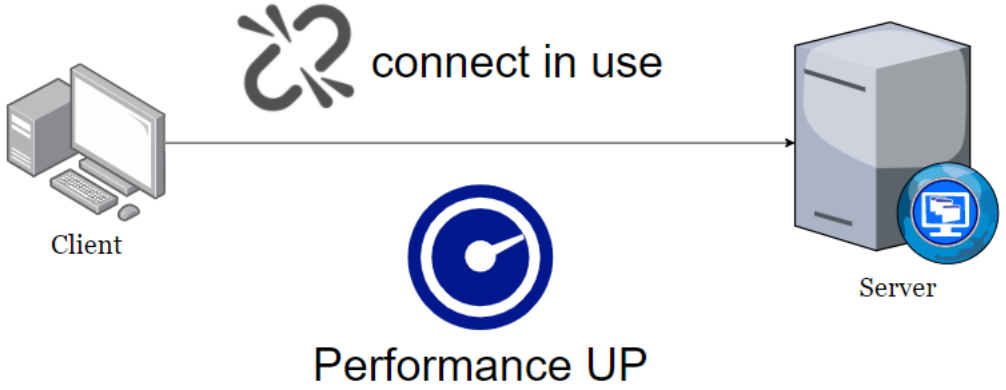
Short-lived connections

Short-lived connections

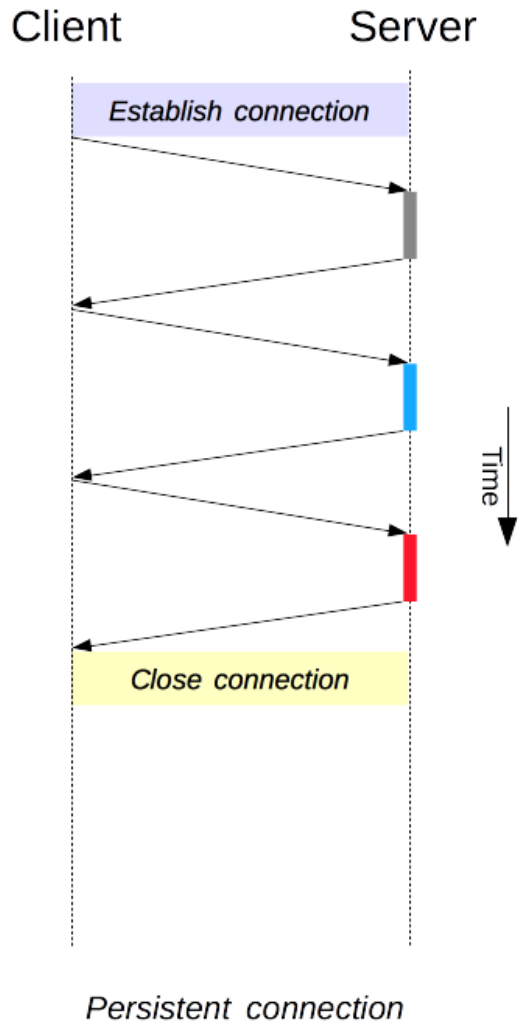
HTTP/1.0 default

HTTP - TCP 기반 Connection 단점



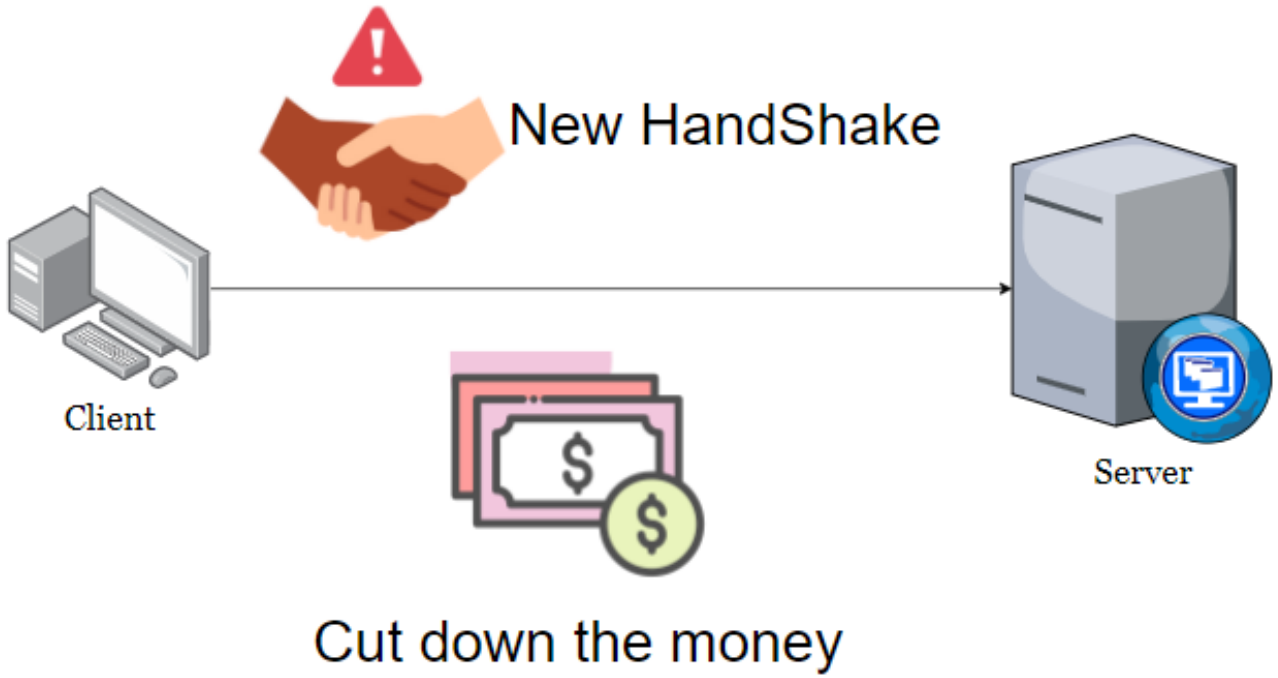


HTTP 개요

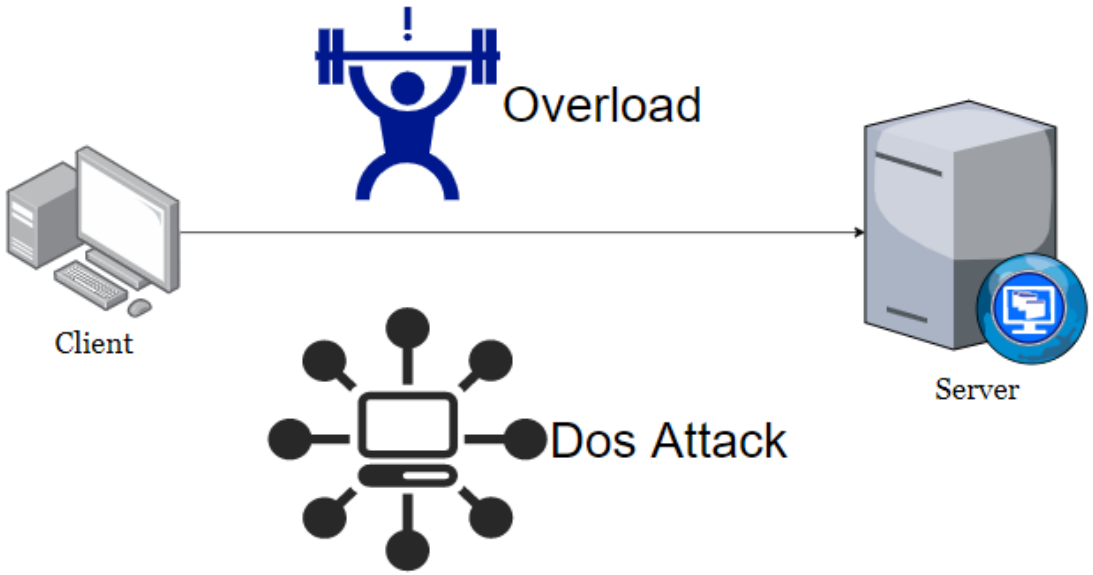


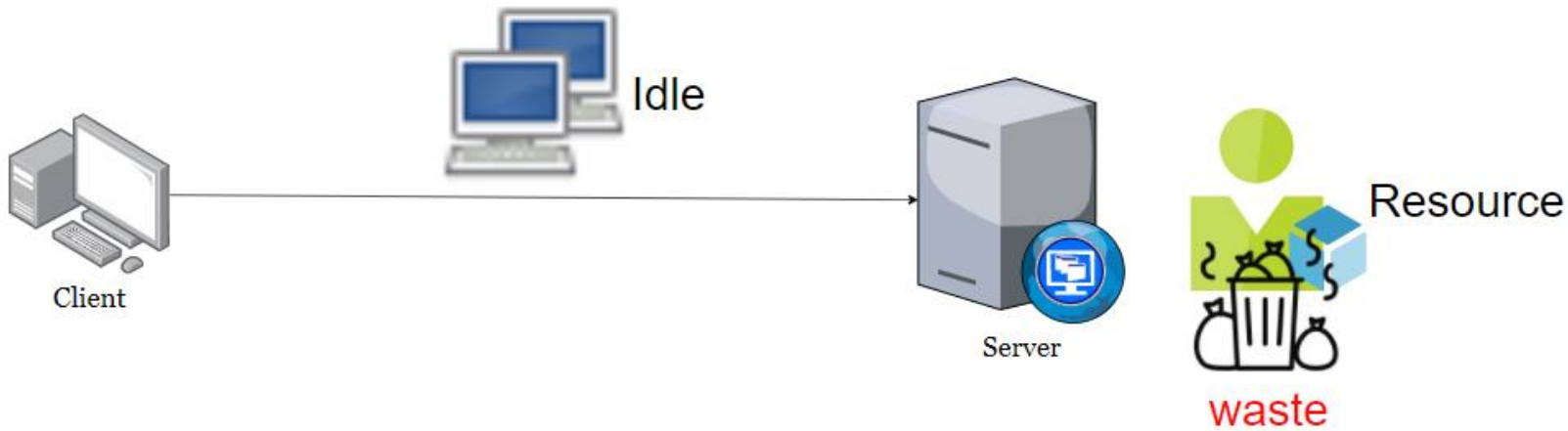
Persistent Connection Model

Keep-alive 장점

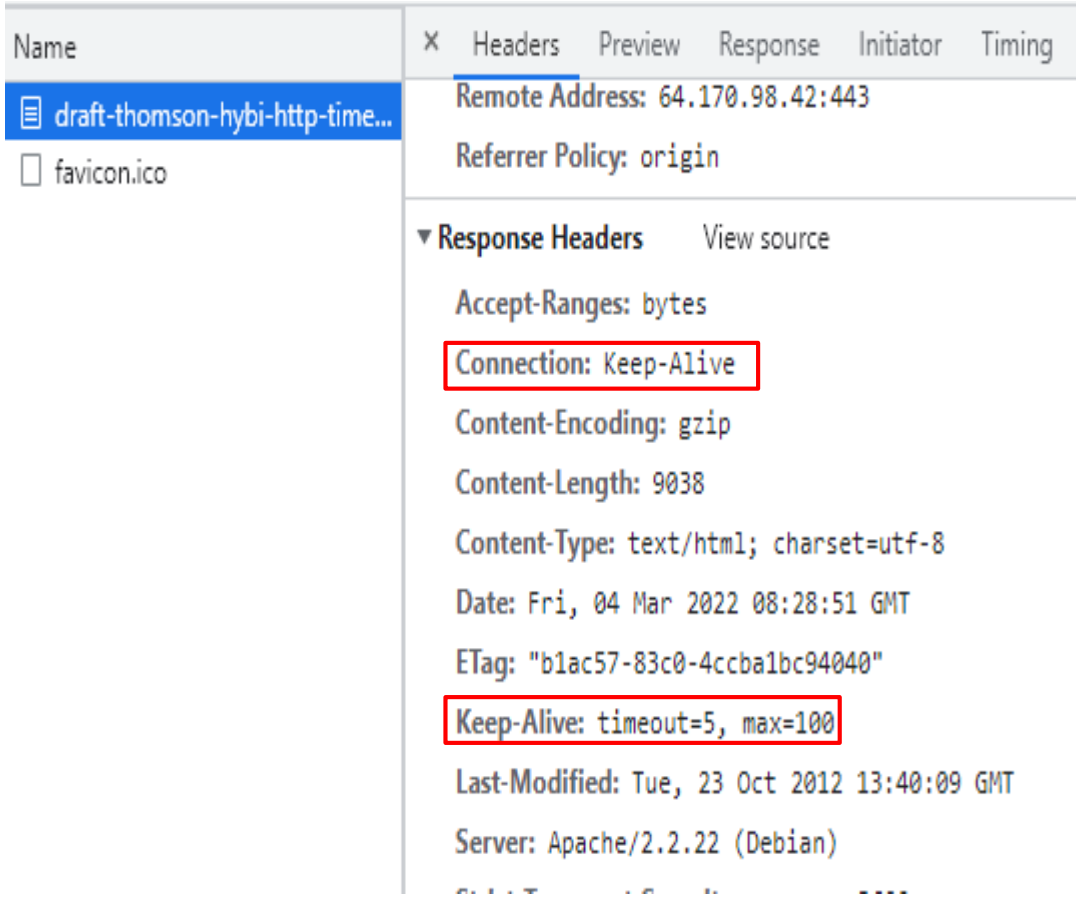


Keep-alive 단점





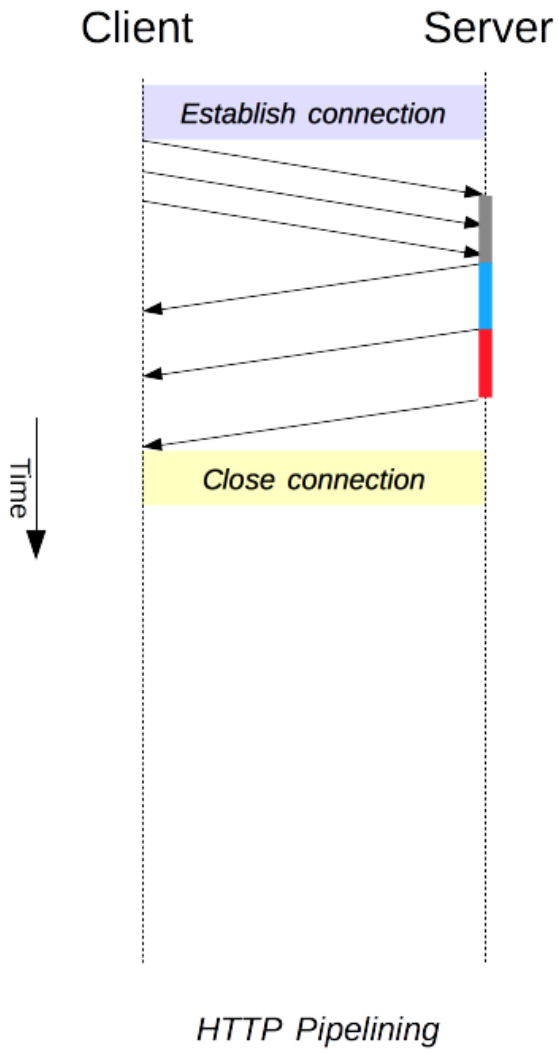
Keep-alive Header



Keep-Alive Header : 연결이 최소한 얼마나 열려있어야 할 지를 설정

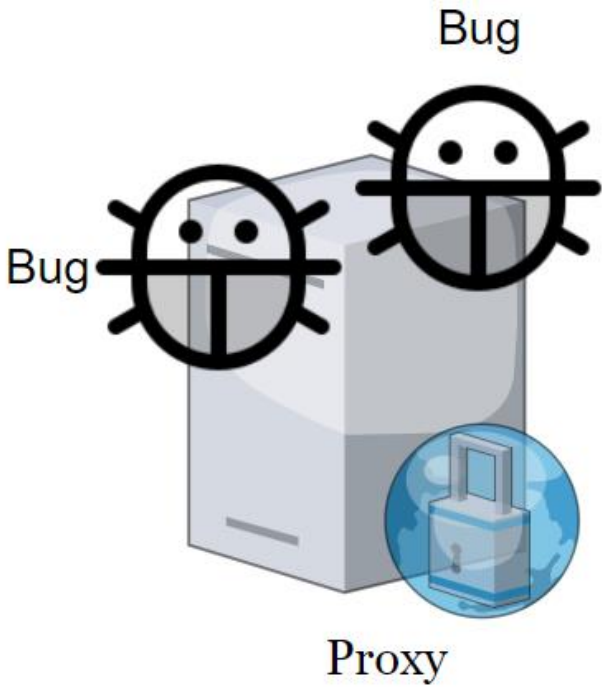
HTTP Pipelining

HTTP Pipelining



HTTP Pipelining

HTTP Pipelining



Head Of Line

HTTP Pipelining => Multiplexing으로 대체 (HTTP/2에서 사용)

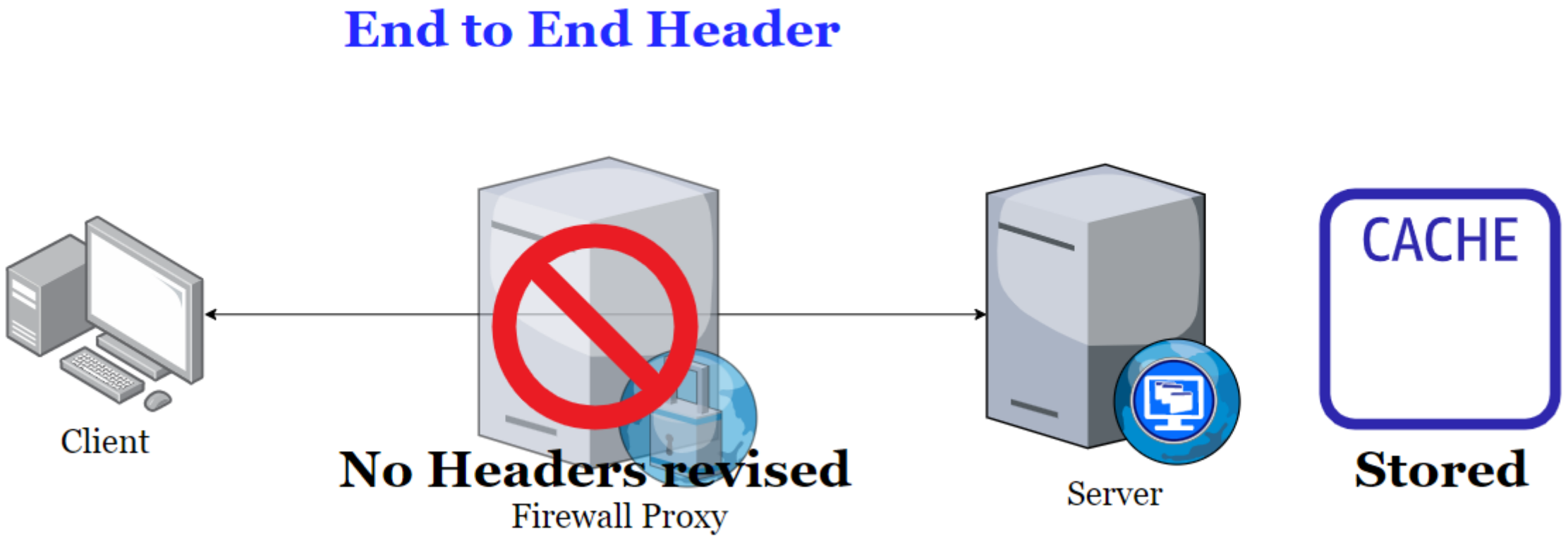
HTTP - Connection 관리

End to End Header

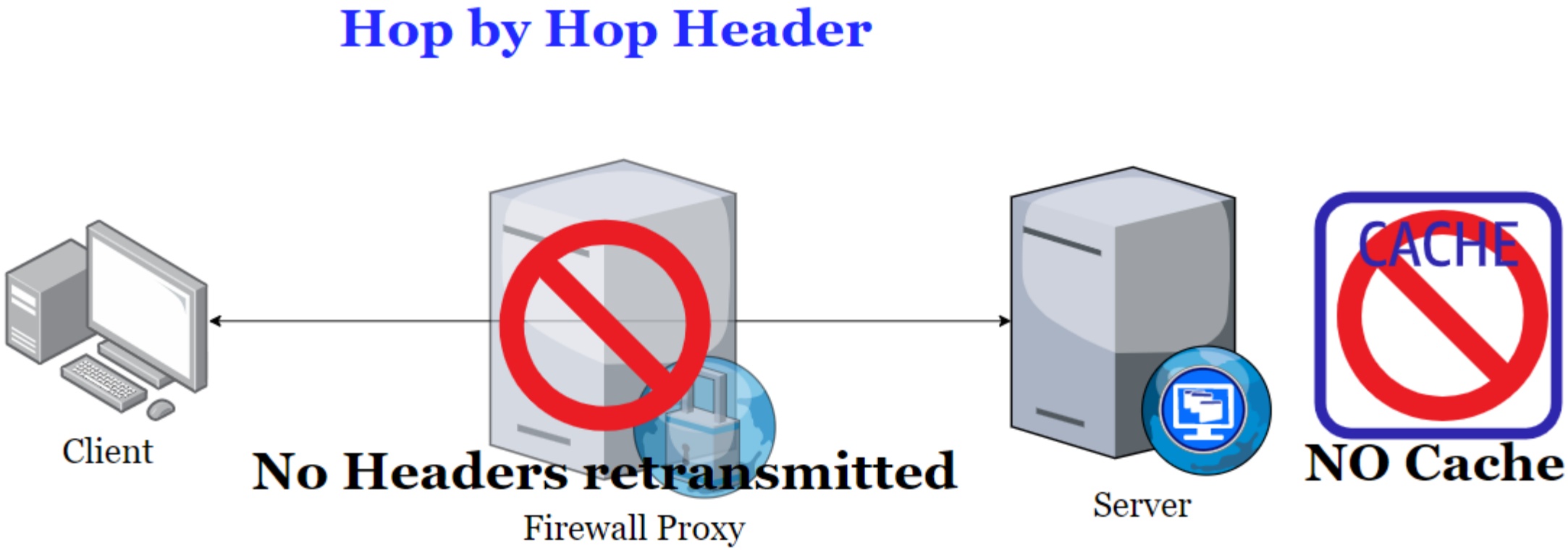
VS

Hop by Hop Header

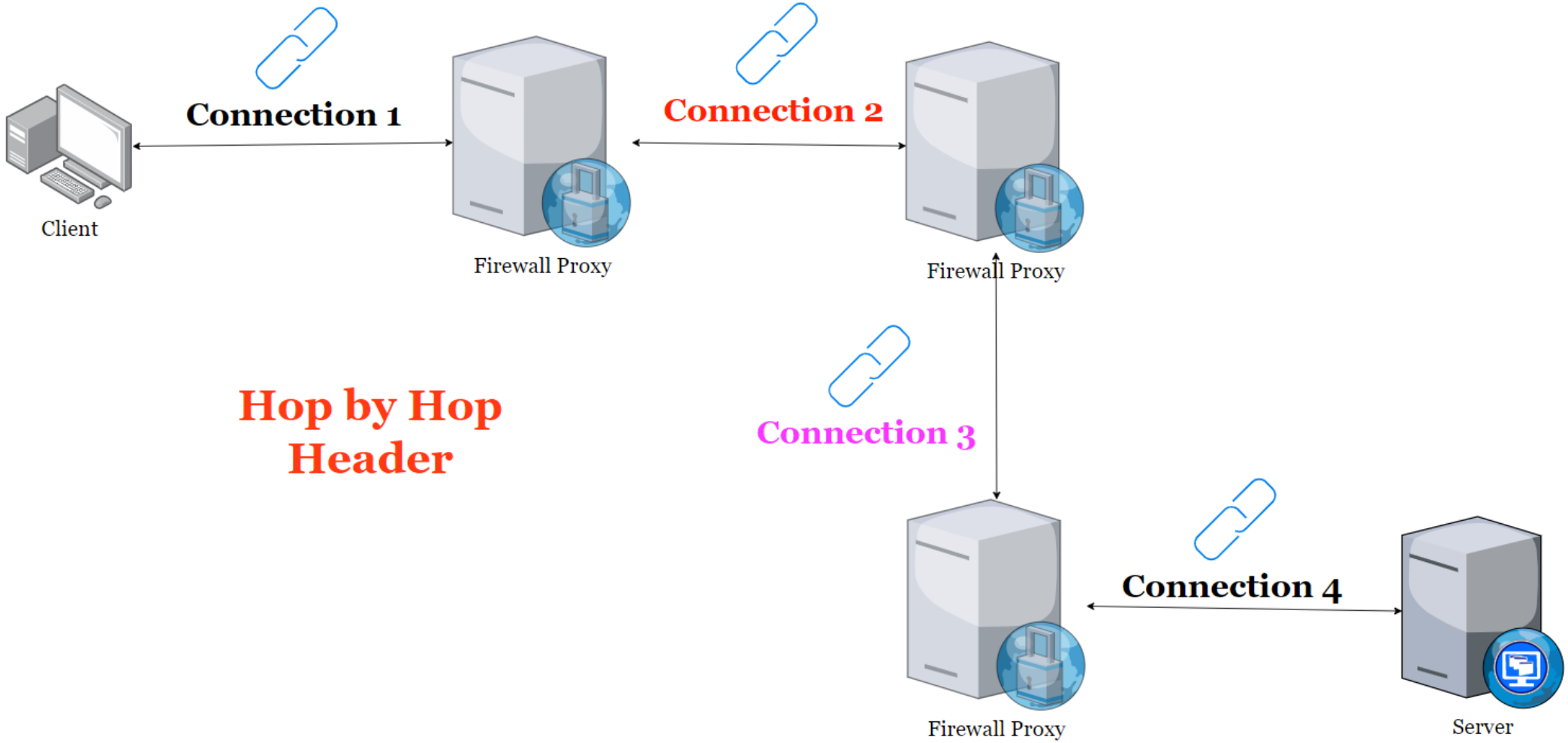
HTTP 개요 - Connection 관리



HTTP 개요 - Connection 관리



HTTP 개요 - Connection 관리



HTTP Connection

TLS/1.0

WebSocket

HTTP/2

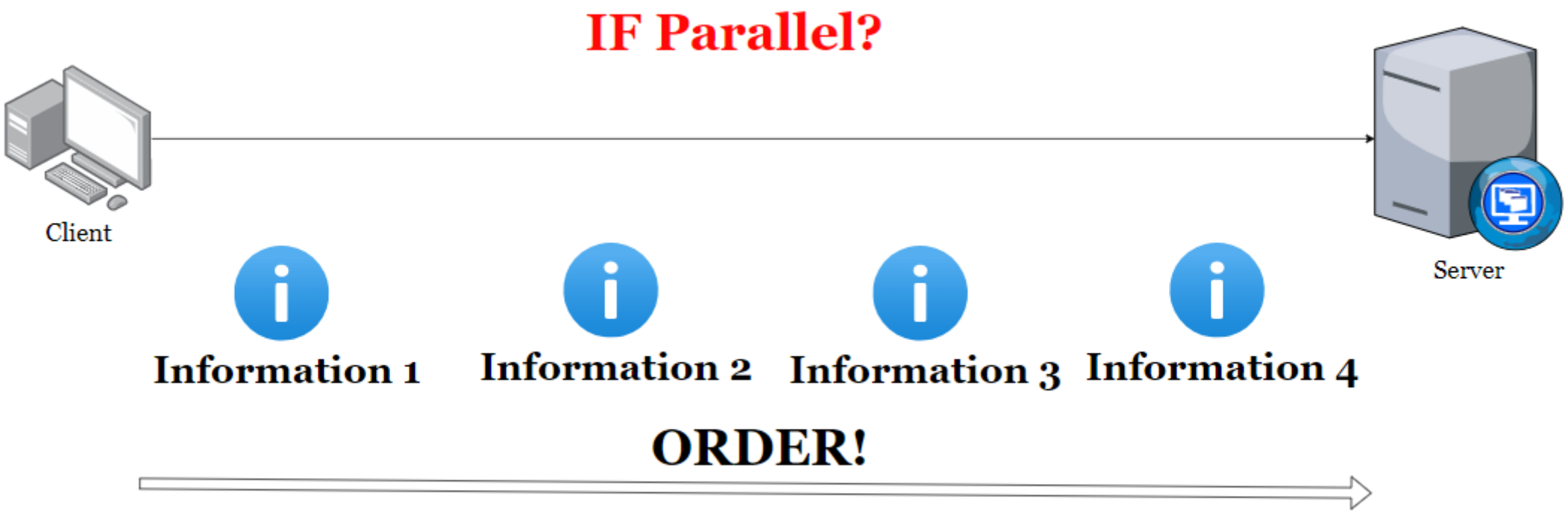
HTTP/1.0 vs HTTP/1.1

HTTP/1.0

HTTP/1.1

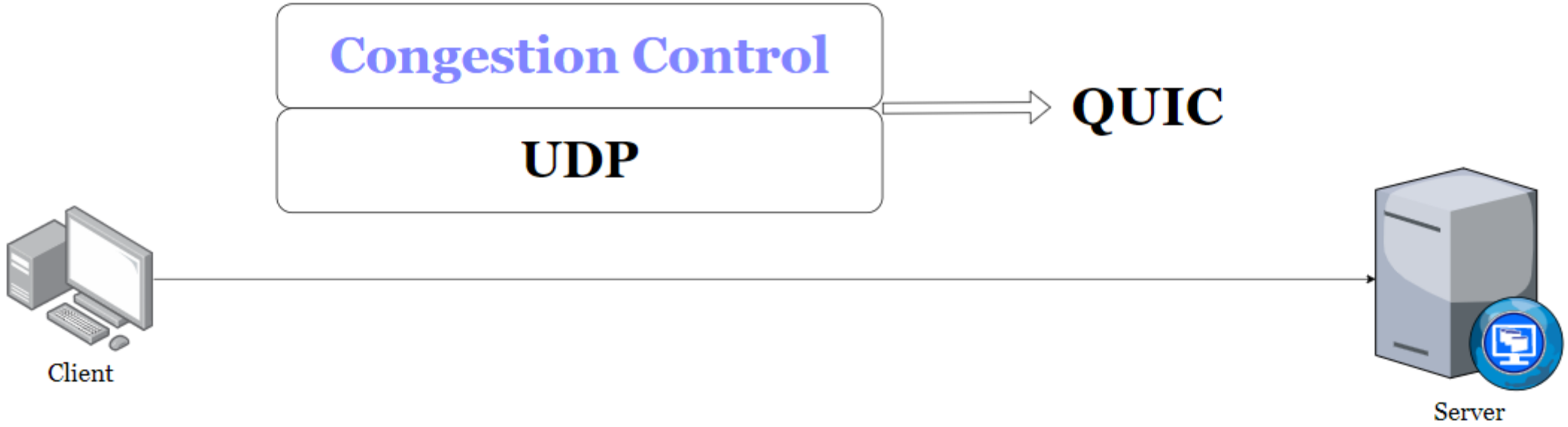
Persistence

HTTP/2



1. Binary Framing 2. Multiplexing 3. Header Compression 4. Server Push

HTTP/3



TCP => QUIC Protocol (UDP)

참고

- https://developer.mozilla.org/ko/docs/web/HTTP/Connection_management_in_HTTP_1.x

- https://developer.mozilla.org/en-US/docs/web/HTTP/Headers#hbh