



HTTP/2 & HTTP/3

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¿Qué es HTTP?

Protocolo:

- Genérico
- Sin estado
- Multitud de usos



http: //

Historia

- HTTP/0.9, 1991
- HTTP/1.0, 1996
- HTTP/1.1, 1999
- HTTP/1.2, 2000
- HTTP/2, 2015
- HTTP/3, 2018



¿Por qué HTTP/2?

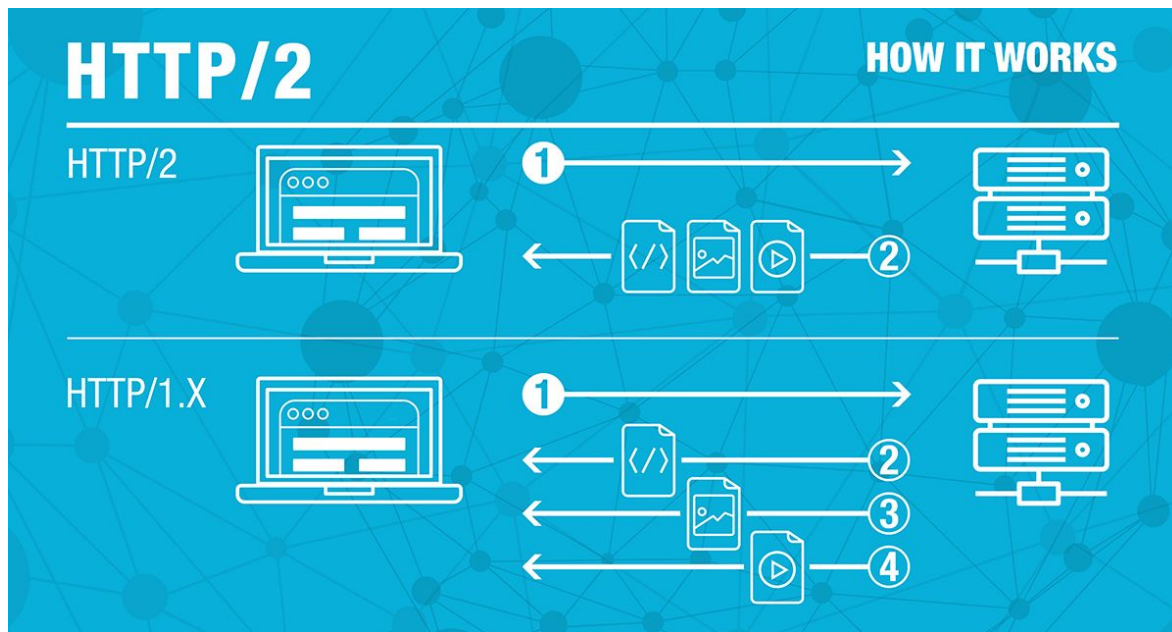
Por qué pasar de
HTTP / 1.1 a HTTP/2



 @vgstech_

HTTP/2

Historia HTTP/2

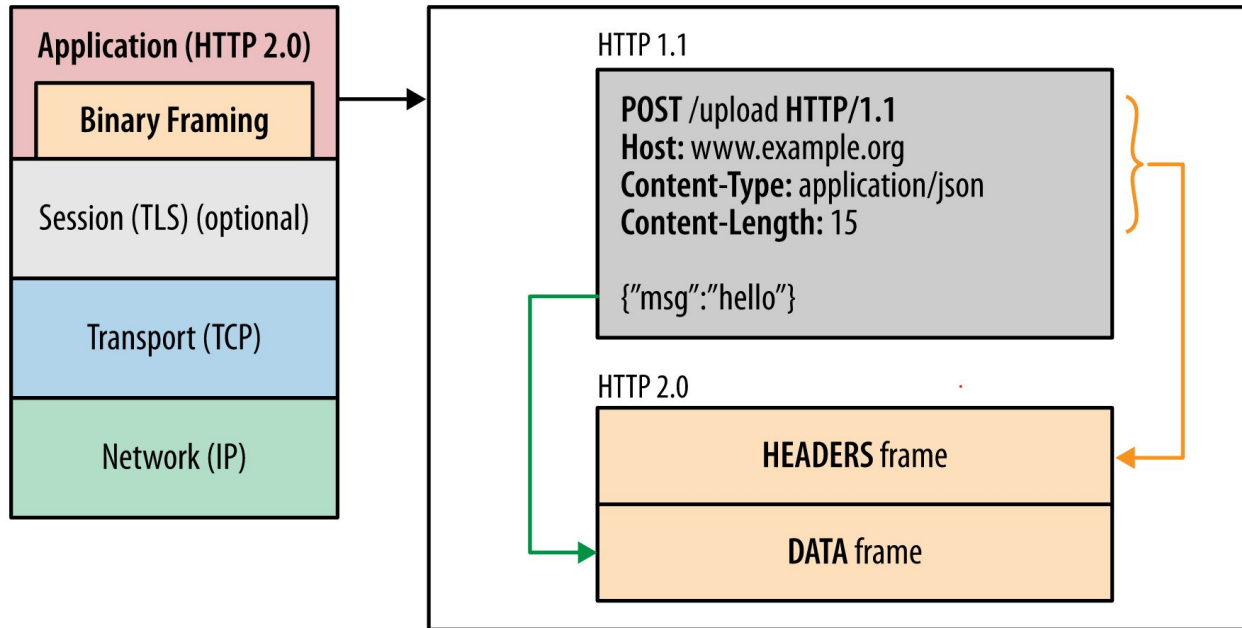




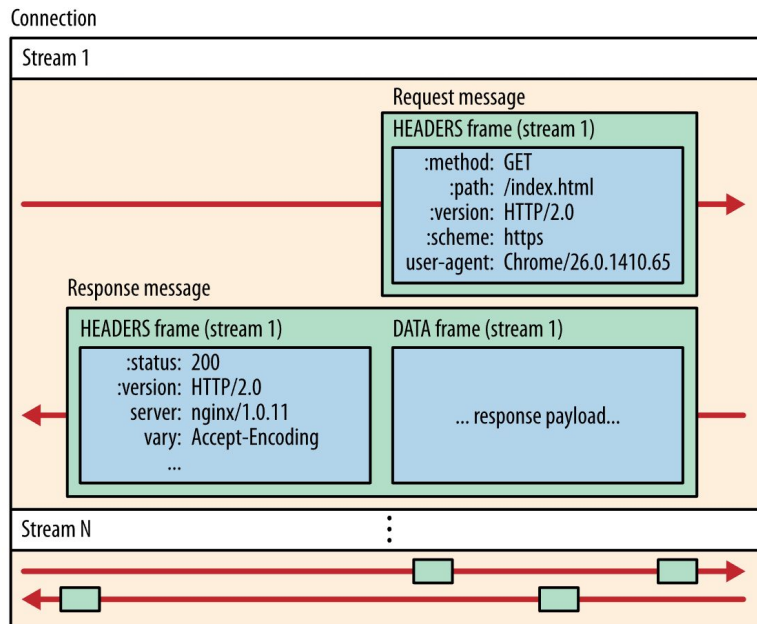
Características

- Binary framing layer
- Streams, Messages, and Frames
- Multiplexing
- Priorización de flujos
- Servicio 'server push'
- Compresión de cabeceras
- Cifrado TLS

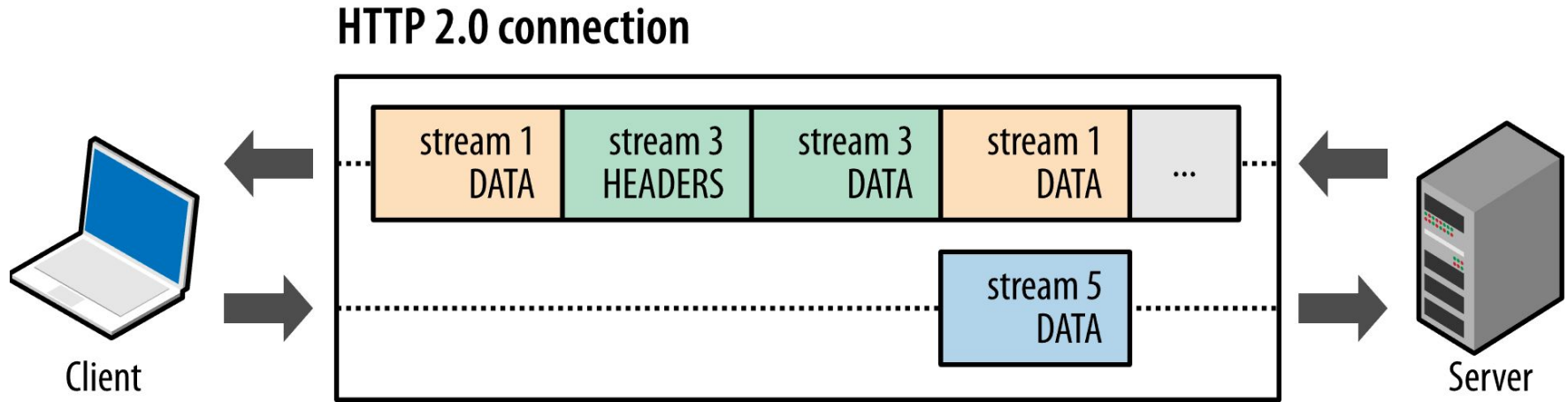
Binary framing layer



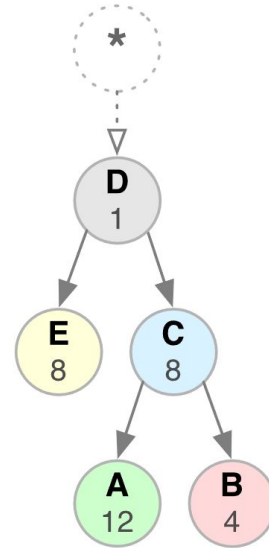
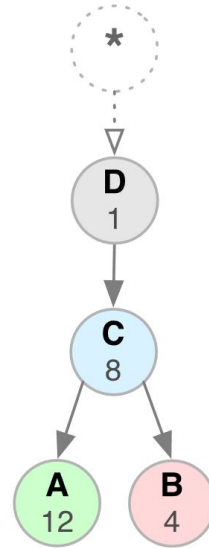
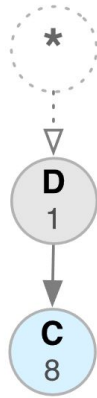
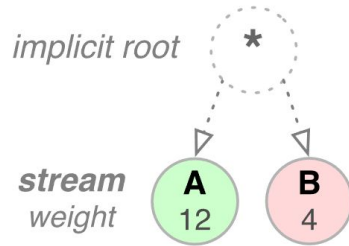
Streams, Messages, and Frames



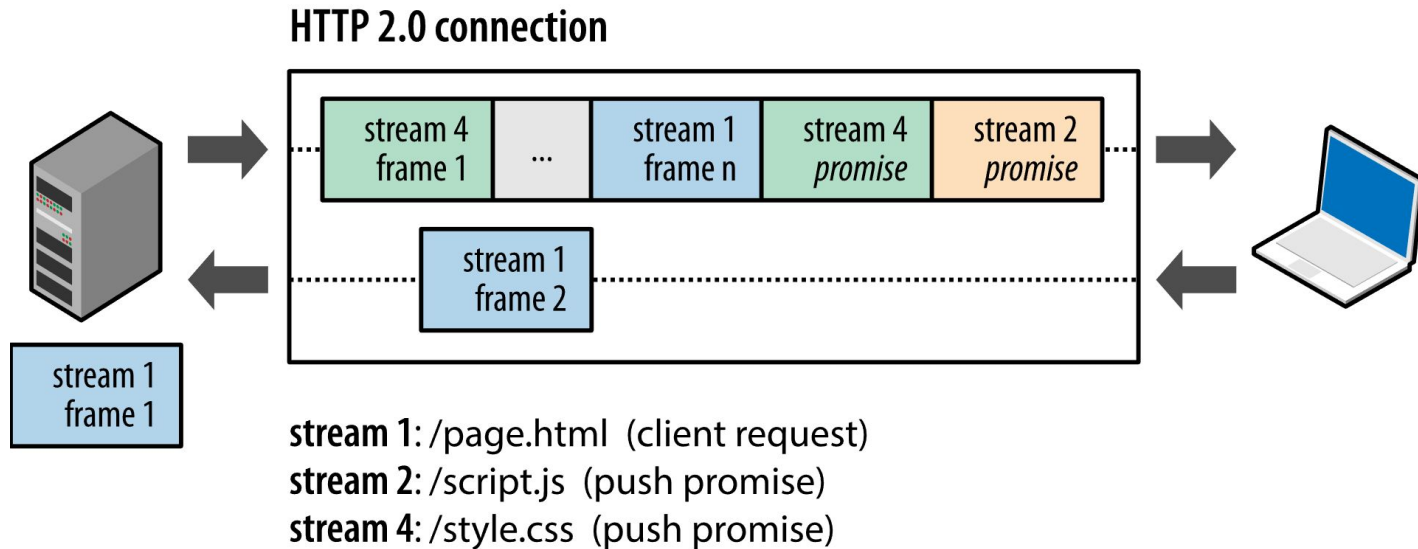
Multiplexing



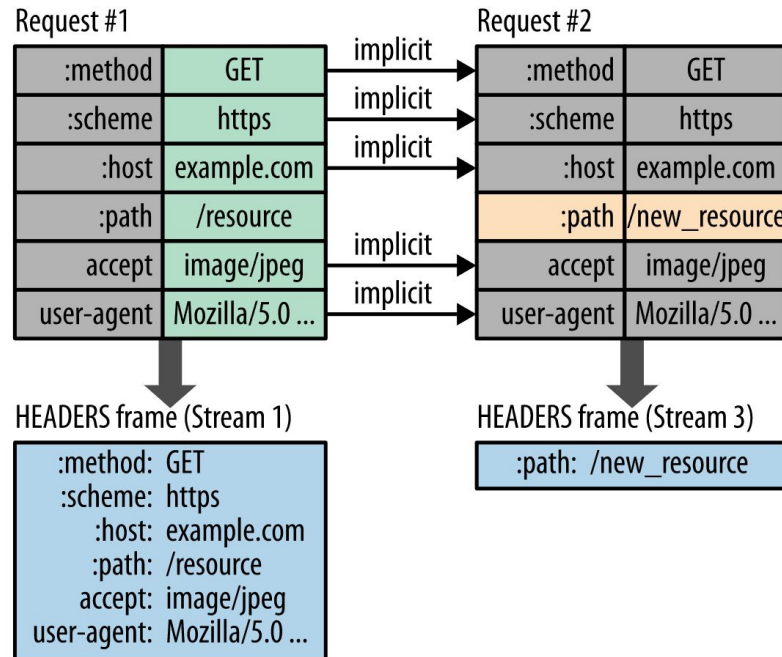
Priorización de flujos



Server push



Compresión de cabeceras

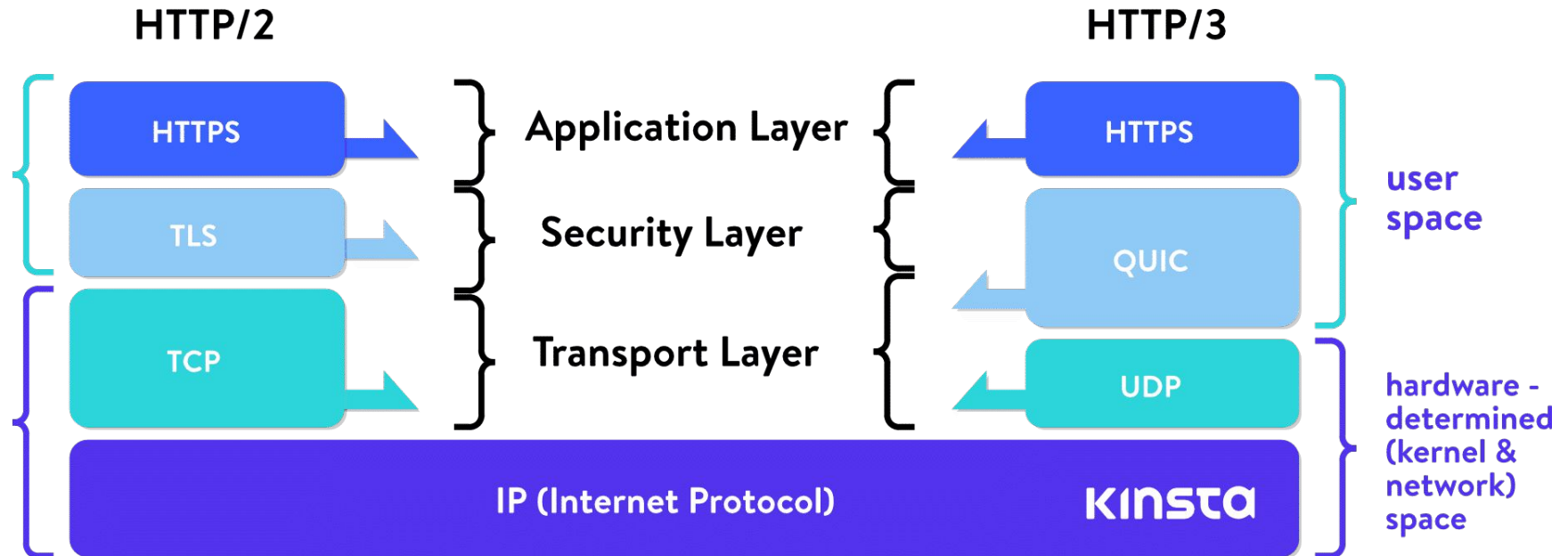


Cifrado TLS



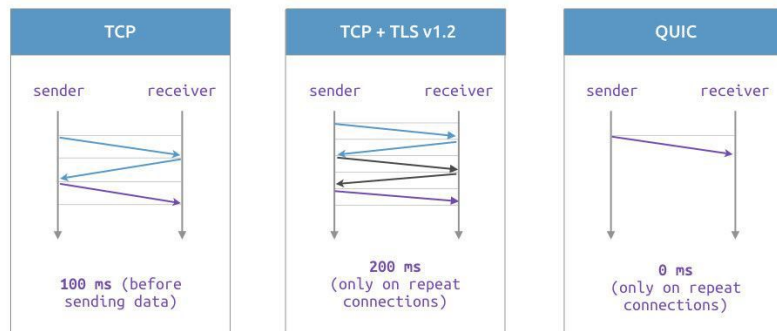
HTTP/3

Novedades respecto HTTP/2



TCP vs QUIC

Comparison between TCP, TCP + TLS, and QUIC



- TCP handshake
- Data
- TLS v1.2 setup

Source modified from: Chromium blog, 2015

Conclusiones



<https://hpbn.co/http2/>

<https://cloudflare.com/es-es/learning/performance/http2-vs-http1.1/>

<https://www.vgsystems.es/blog/servidores/por-que-pasar-de-http-1-1-a-http-2/#:~:text=Una%20de%20las%20principal es%20ventajas,la%20descarga%20de%20la%20informaci%C3%B3n>

<https://www.infoq.com/news/2012/11/http2-first-draft/>

https://en.wikipedia.org/wiki/Data_compression

https://en.wikipedia.org/wiki/HTTP_pipelining

https://en.wikipedia.org/wiki/Head-of-line_blocking

[https://en.wikipedia.org/wiki/Minification_\(programming\)](https://en.wikipedia.org/wiki/Minification_(programming))

https://en.wikipedia.org/wiki/HTTP/2_Server_Push

https://en.wikipedia.org/wiki/Internet_Engineering_Task_Force#Steering_group

https://en.wikipedia.org/wiki/Transport_Layer_Security#TLS_1.3

<https://kinsta.com/es/blog/que-es-http3/>

<https://es.wikipedia.org/wiki/SPDY>

<https://es.wikipedia.org/wiki/HTTP/3>

<https://www.xataka.com/basics/http-3-que-donde-viene-que-que-cambia-para-buscar-internet-rapido>

<https://es.wikipedia.org/wiki/QUIC>



Reparto de tareas

Marc Cerrillo Molinero: transparencias

Raul Cutillas Benítez: presentación

Àlex Fernández López: transparencias

Marc Fonseca Pagès: presentación

**Gracias por vuestra
atención**

