

What are HTTP/3 and QUIC?

Web browsers, web servers, and other critical pieces of web infrastructure are getting support with the new standard HTTP/3, which uses QUIC. This is the modern version of HTTP, which web browsers use to communicate with web servers and send data back and forth.

As the internet’s protocols evolve, so too do our experiences using them. HTTP/3 is the third major version of the Hypertext Transfer Protocol used to exchange information on the World Wide Web, and will do so over [QUIC](#) — the new transport protocol set to replace TCP. Together, HTTP/3 and QUIC are already seeing wide deployment with well over [500,000 services](#) (and growing) using the new protocol globally. [After more than six years of building, reframing, and refinement](#), these new protocols are primed to modernize the internet in a number of ways: deliver better digital experiences, empower faster innovation and built-in encryption, just to name a few.

Fastly supports HTTP/3 over QUIC on our edge cloud network, which allows our customers to provide a better digital experience for their end users, but most notably for their mobile subscribers and subscribers in parts of the world that have unreliable Internet service.

HTTP/3 benefits:

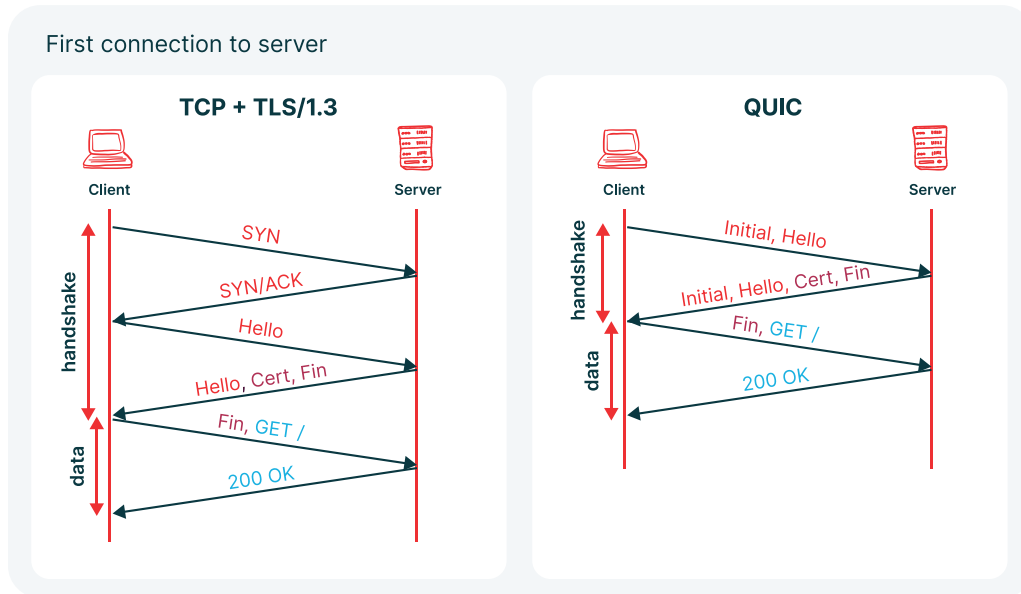
Better digital experiences	Reduces latency and rebuffering Avoids head-of-line blocking both at the application and transport layer enabling reliable delivery and congestion control
Faster innovation	Using user space versus kernel development
Built-in encryption	Built in encryption (TLS 1.3)

The transport protocol we use needs to adapt and evolve if it is to continue serving as an effective glue between increasingly demanding applications and the chaotic underlying internet.

Deliver a better experience globally.

QUIC allows web traffic to flow faster because it's designed to avoid head-of-line blocking and offers a low-latency handshake that significantly reduces rebuffering. These innovations [modernize the internet](#) and [improve digital experiences for all users](#), but especially for mobile users and those around the globe with less-than-reliable internet service.

Low latency-handshake:



Integrate deeper to innovate faster.

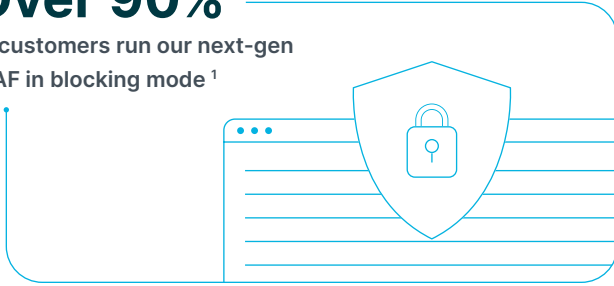
Because QUIC runs in userspace, it integrates seamlessly with Fastly's tooling, tracing, and logging infrastructure. This will eventually make it easier for developers to run and learn from experiments, enabling more rapid deployment and evolution of sites and apps.

Secure more with built-in encryption.

[TLS 1.3](#) — the latest version of the Transport Layer Security protocol — is built directly into QUIC. This design more effectively secures headers and metadata from third parties, ensuring more private, trustworthy connections than ever before.

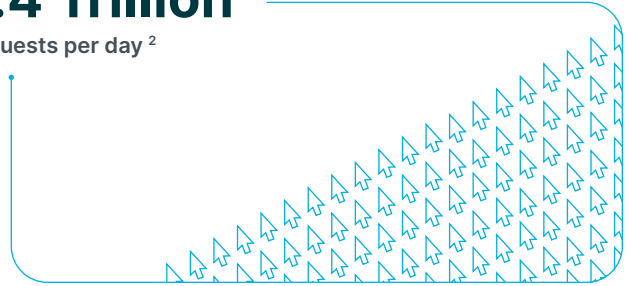
Over 90%

of customers run our next-gen WAF in blocking mode ¹



1.4 Trillion

requests per day ²



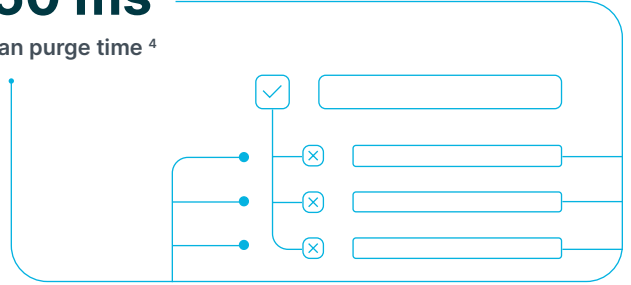
192 Tbps

edge network capacity ³



150 ms

mean purge time ⁴



95% CSAT ⁵

Enjoy world class support

With a customer satisfaction rating (CSAT) of over 95% for the past three years running, we pride ourselves on our customer relationships. Fastly's world-class support includes help from engineers through chat, in-depth technical documentation, solutions packages, and more. With choices ranging from white-glove to self-service, **we offer everything to fit your support needs.**

[Learn more about Fastly support →](#)

Getting started

Please visit Fastly's [website](#) for more information about our implementation of HTTP/3 & QUIC.

1: as of Mar. 31, 2021 2: as of Jan. 31, 2022 3: as of Jan. 31, 2022 4: as of Dec. 31, 2020 5: as of Jun. 30, 2020