CLOUDFLARE

Cloudflare Performance Services

Cloudflare is a global cloud network that accelerates and protects anything connected to the Internet. Websites, APIs and SaaS applications supported on Cloudflare will all experience faster load times and increased reliability.

Cloudflare performance services address many of the challenges that impact the performance of web properties over the Internet.

Cloudflare Performance Services

Improve web asset delivery

Cloudflare provides an array of solutions to improve page load times for images and video assets.

Image Optimization. Images can be dynamically resized to fit the desired screen size and device type. Image compression and WebP conversion can further reduce image loading times on user devices. Progressive JPEG images are loaded with parallel streaming, reducing perceived page load times.

Stream. An online video platform that reduces the time and effort for publishing on-demand video content on webpages.

Concurrent Streaming Acceleration. Network optimizations that improve download times for large media assets and live video.

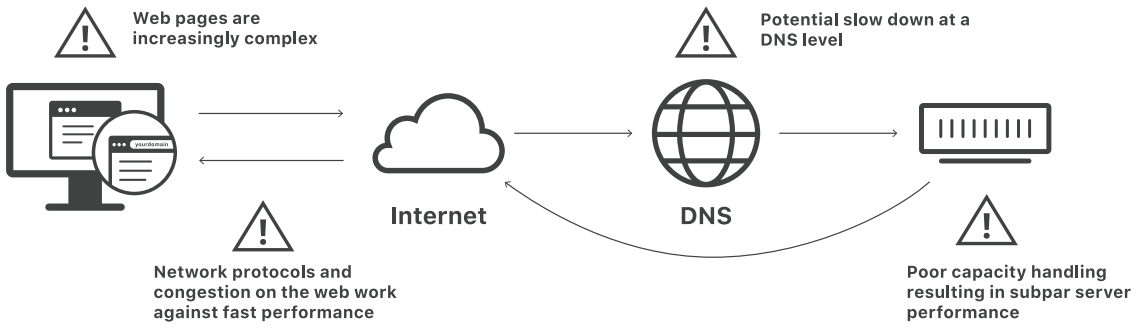
CDN. Cache static content at any Cloudflare data center to reduce network latency when connecting to your web host.

Argo. Accelerate the delivery of dynamic content from your hosted infrastructure to the Cloudflare network, avoiding inefficient routes or network outages.

HTTP/2 Prioritization. Cloudflare provides a prioritization schema for HTTP/2 resource loading that accelerates asset loading and removes dependencies on browser resource prioritization.

Rocket Loader. Images and high-value assets are moved ahead of resource-intensive background scripts that can impact perceived page load times.

Binary AST. Cloudflare supports binary encoded ASTs to accelerate JavaScript performance for pages loaded in Mozilla Firefox.



Support for new network protocols

Cloudflare partners with many leading Internet organizations to support new innovative web standards and protocols.

HTTP/2. Cloudflare currently supports HTTP/2 browsers, with no additional backend infrastructure or server upgrades required at customer origins.

HTTP/3. Our QUIC implementation and support with Mozilla Firefox allows customers to take advantage of HTTP/3 for a faster, more secure browsing experience.

AMP Signed Exchanges. Cloudflare supports the delivery of Signed Exchanges for pages viewed in Google's AMP (Accelerated Mobile Pages) viewer, enabling publishers to retain URL attribution by deploying **Cloudflare AMP Real URL.**

Fast DNS Lookups

Our network serves as the backbone for our DNS service.

DNS. High performing DNS lookups, typically in approximately under 12 milliseconds on average.[1]

1.1.1.1. Our DNS resolver service enables mobile devices to experience faster DNS lookups on Cloudflare.

Capacity and Resourcing

Cloudflare helps distribute workloads across your hosted infrastructure to only rely on healthy, available resources.

Load Balancing. Distributes request traffic across available server pools and origins and automatically selects paths with the lowest latency.

Health Checks. Monitoring and insights across your hosted infrastructure to ensure service availability.

Cloudflare Workers. Deploy serverless functions that reduce hosted server dependencies and reduce server overhead at the origin.

Cloudflare Advantage

ANYCAST NETWORK
Our global network coverage reduces latency and time to first byte. Anycast functionality provides an integrated stack of performance and security services at every data center in our network.

EASE OF USE
Setting up Cloudflare takes as little as 5 minutes. The dashboard lets administrators quickly configure and enable fine-grained functionalities to improve the performance of their Internet applications.

INTEGRATED SECURITY & PERFORMANCE
Cloudflare integrates web and infrastructure security services to defend against DDoS attacks, data breaches, and abusive bots without any performance trade-offs.

"We are caching 80% of our traffic on Cloudflare, and saw page load times for both desktop and mobile clients decrease on average by 50% - which was amazing!"

David O'Brien, Digital and eCommerce Manager, YPO

"We're in a constant search for ways to improve our product experience at Discord... Argo allowed us to cut our load times by an average of 33 milliseconds with no development effort by our team."

Stanislav Vishnevskiy, CTO, Discord

"When we rolled out Cloudflare Load Balancing to route traffic across our atlas of WebSocket servers, we immediately got messages from customers in Asia and Oceania thanking us for the improvement."

Valérian Saliou, CTO, Crisp

1."DNS Performance Analytics and Comparison." *DNSPerf*, https://www.dnsperf.com/. Accessed 23 July 2019.