

Fastly for Online Video & Audio

Accelerate your media delivery for improved user engagement

Overview

Today's viewers have high expectations of your media services and are less tolerant of poor experiences. If their expectations aren't met, they become frustrated, less likely to engage, and may even stop using your service. Research from Conviva identifies playback delays, frequent buffering, and low quality media as the top reasons for abandoning video services. Viewers are also accessing your media on a growing number of devices with different form factors, which adds another layer of complexity. Content Delivery Networks (CDN) can help address these challenges. By accelerating live and on-demand media, a CDN improves the user experience across web and mobile devices.

Why Fastly?

Fastly empowers you to enhance the quality of viewer experiences by reducing playback times and interruptions. You can offload encryption and authentication to the edge of our network to secure viewer engagements without increasing origin traffic. Fastly dynamically packages your media so you only deliver content as needed, reducing administrative overhead and storage costs. We also streamline your configuration process and let you analyze changes in real-time so you can proactively make enhancements. Fastly enables you to rapidly deliver your media while boosting your team's efficiency.



Improve the viewing experience

Reducing playback time results in happier, more engaged users. Fastly helps accelerate your time to first frame (TTFF) and minimize interruptions so you can optimize media consumption.

Fastly's **modern network** has high-density points of presence (POP) strategically placed at well-connected Internet Exchange Points (IXP). This means we cache more content, both popular and long-tail, to boost delivery speeds globally.

Maintain low latency connections for faster playback and less interruptions by connecting directly to Fastly's network. For private datacenters, you can initiate a private network interconnect (PNI). In public cloud environments, Fastly is already peering with multiple providers in strategic regions.

Progressive downloads begin media playback while the rest of the file is fetched. Users can start viewing right after pressing play, reducing the frustration of long download times.

25% of users will give up immediately when encountering excessive stream interruptions, and 20% of users will avoid a service forever once they leave due to a disappointing experience.

(OTT: Beyond Entertainment Survey, Conviva, 2015)



"When we were unable to cache our large audio files, the TTFB was between 1 and 2 seconds. But with Fastly, 90% of our requests are cached on the edge, and the remaining 10% have a TTFB of 400 or 500 milliseconds, resulting in a significantly better experience for our users."

Darrell Mozingo Team Lead, Content Development



Secure interactions

Protecting your users and the integrity of your media is key to building trust. Fastly provides a comprehensive approach to security so you can ensure only authorized viewers access content while their data is protected.

Transport Layer Security (TLS) encryption secures connections between Fastly and your origin. We terminate these connections at the edge for improved performance.

Edge authorization checks if a user is allowed to access content at the edge of our network. This occurs before content is served, removing the need for requests to go to origin, which decreases latency.



Reduce cost of delivery

Managing different files for different streaming formats and bitrates takes time, effort, and a lot of storage. With Fastly, you can dynamically package files to streamline the delivery of high quality media.

Our **on-the-fly packaging (OTFP) service** lets you store one file and dynamically package and deliver the right version when requested. We support all of the common streaming formats (HDS, HLS, MPEG-DASH) and resolutions so you have flexibility when delivering media. For example, you can package and deliver different resolutions for mobile users as their network connection improves or degrades. And since we only package what users request, you don't waste resources delivering unwanted media.



Increase business agility

Traditional CDNs limit your team's ability to respond to changing conditions. They make you submit configuration changes that get deployed at unspecified times, while getting access to analytics can take days. Fastly provides full control over your service so you can make iterative, data-driven decisions.

Self-serve configurations enable you to deploy and rollback configuration changes yourself instantly. Activate your configurations via the Fastly Control Panel or API call.

Edge dictionaries let you define and modify logic at the edge without deploying new configurations. For example, you can enable Trick Play for iPhone users and edit those settings instantly via API.

Real time logs can be streamed to the endpoint of your choice where they can be parsed and aggregated to uncover business insights. Monitor the impact changes have on your KPIs in real-time.



"Fastly let us easily move
Vimeo.com over to 100%
HTTPS and speed up user
experience at the same time.
When we started serving
HTTPS traffic through Fastly,
we reduced response times
for requests across the globe,
with latency lowering by 50% in
APAC and to our mobile users.
That was a huge success for us."

Peter McArthur VP of Backend Engineering



"Fastly understands that modern teams move at a rapid pace, and their platform is really well-aligned to how we operate as a company. We have 245 million monthly listeners — as the first part of our network the user interacts with, Fastly ensures an optimal listening experience."

Adam Denenberg CTO