

INDUSTRY

# Fastly for Online Video & Audio

Accelerate your media delivery for improved user engagement

## Overview

Viewers have high expectations of your media services and are intolerant when it comes to poor experiences. Unfulfilled expectations quickly result in frustrated consumers that are less likely to engage. It might even make them stop using your service. Studies have identified playback delays and frequent buffering, as the top reasons for abandoning video services, and a growing number of platforms, resolutions, and devices only adds another layer of complexity.

Fastly's Content Delivery Network (CDN) can address all of these challenges, and by accelerating live and on-demand media, it can improve the user experience regardless of how and where viewers consume your media.

## 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 and do so 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 make enhancements when needed. Fastly enables you to rapidly deliver your media while boosting your team's efficiency.

### Improve the viewing experience

Reducing playback time results in more engaged users. Fastly helps accelerate your time to first frame (TTFF) and minimize interruptions so you can optimize the viewer experience.

Fastly's **modern network** has high-density points of presence (POP) strategically placed at Internet Exchange Points (IXP). 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)



Since integrating Fastly into our technology stack, Brightcove has increased video delivery performance at a global scale while also enhancing visibility metrics and streaming experiences.

Charles Chu, Chief Product Officer, Brightcove

**Secure interactions**

Protecting your users and the integrity of your media is key to building trust. With strong security support and access control, the Fastly platform can ensure only authorized viewers access your site while at the same time making sure the content remains 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**

Fastly Media Shield optimizes live streaming by acting as an origin to content delivery network (CDN) providers. Fastly customers have reported cost savings of up to 75 percent a year, along with performance and operation improvements.

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 and resolutions, so you have flexibility when delivering media. For example, you can package and deliver different versions for mobile users as their network connection improves or degrades. And since we only package what users request, you deliver only what is wanted.

**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. 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 new changes have on your KPIs in real-time.

**Getting started**

For more information, please contact us at [sales@fastly.com](mailto:sales@fastly.com).



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



With Fastly, I finally have visibility when things go wrong. Because Fastly gives us access to our logs, we can self diagnose instantly — it's much lower maintenance than with other providers.

Sung Ho Choi, Co-founder, fuboTV