Fastly + RV

How tech company RVU leverages Fastly to build consistency across its brand portfolio
RVU owns the UK’s leading market comparison sites and apps: *Uswitch* for home services and utilities, *Money* for financial services, and *Bankrate* for mortgages. But first and foremost, RVU is a tech company — empowering its developers to build the best possible user experience behind each of its market comparison brands. RVU’s sites serve millions of users every month, helping them save on services they use every day. This case study demonstrates how using Fastly’s *edge cloud platform* as a layer of consistency behind each of its brands enables RVU to scale both its development practices and business model.

**Coding consistency into every acquisition**

RVU has grown into a national leader in the UK in market comparison tools by focusing on strategic acquisitions. However, the growth-by-acquisition model often leads to inconsistencies in tech stacks, as each acquired business comes with its own back end architecture, integrations, and more.

To give all of its properties a secure, single layer of consistency after each new acquisition, RVU uses Fastly’s *edge cloud platform*, standardizing operations across all brands for performance, experience, and compliance.

This systemized approach to moving sites and apps to the edge allows RVU to scale because each new implementation of Fastly becomes more efficient and enables streamlined workflows for RVU developers. Uswitch and Money were the first two brands onboarded with Fastly. Every time a new RVU brand is ready to move to the edge, RVU’s developers leverage the up-front work on features, headers, handling Access Control Lists (ACLs), and custom VCL they’d built previously to bring the new brand online faster — serving traffic to newly onboarded brands within just one week, in some instances. With Fastly’s modularity and focus on microservices, the RVU team can repurpose code across brands without having to start from scratch.
As users have grown increasingly reliant on price-comparison tools, so too have their expectations around security and privacy. To fortify all of its brands equally, RVU began implementing Fastly’s WAF from day one. Fastly’s WAF provides global protection without any significant performance impact because it’s fully integrated into Fastly’s edge cloud platform, built into every POP. That means that all traffic can be delivered on the same network, with built-in security and performance — simplifying configuration and management. Using a set of pre-built rules, Fastly’s WAF only runs detection logic on requests that cannot be served from cache, saving valuable milliseconds in detecting attacks aimed at RVU’s origin server.

One of Fastly’s most beneficial features is real-time log streaming — something RVU uses consistently within its WAF. Developers at RVU flow the real-time streaming syslogs into BigQuery to quickly and easily get insight into each property’s traffic. This enables leadership to make data-driven security decisions as soon as issues occur.

Powering business with empowered developers

With plenty of built-in automation and programmatic updates via API, Fastly’s edge cloud platform gives RVU developers the tools they need to build more strategic workflows. Previously, RVU ran on an enormous Nginx server. It was built, maintained, and debugged by just two team members, leaving RVU with a single point of failure when the server fell over. Implementing Fastly opened the door for RVU’s developers to start thinking about how they could use the platform to make their lives easier. In a span of just two weeks, the team went from basic caching with Nginx to advanced caching, A/B testing, and powering SEO and redirects — all at the edge with Fastly. Plus, developers were now able to solve more challenges, faster: modifying a feature for multiple brands within Fastly takes less time than modifying the same feature for a single brand in Nginx.

RVU also created a delivery pipeline for managing integration and version control. Developers toggle between the Fastly UI, used for visualizing and testing changes, and the API, for staging and applying changes. Because about 90% of RVU’s versions are API-created, a

“Fastly helps us define what it means to operate as a RVU brand. For example, we previously had a fragmented approach when it came to deploying redirects — each brand was different. So we moved all redirects into Fastly to have a consistent service that delivers that functionality across the portfolio. It’s important to have a consistent posture to those things across all of our brands.”

– Tom Booth
HEAD OF INFRASTRUCTURE AND SECURITY
RVU

“Because we can get WAF data through syslog or BigQuery, it makes things easy for integrations on our side when we want to pull that into a report or do some weekly block rates. The fact that the integrations are standard and straightforward help a lot when it comes to retrieving real-time data.”

– Dewald Viljoen
LEAD SITE RELIABILITY ENGINEER
RVU
favorite feature is the ability to write custom VCL to code around a problem. RVU developers are able to go above and beyond Fastly’s built-in features by writing their own code that can be shared across properties. The Terraform integration offers another level of customization, allowing the RVU team to define infrastructure as code and manage the full CI/CD lifecycle.

Optimizing at the edge: A/B testing and feature flagging

RVU is also using Fastly to experiment and improve user experience at the edge, including its largest A/B test to date: a full rebrand of its home services and utility comparison tool, Uswitch. To understand the impact a redesign might have on usage, RVU integrated the A/B test with LaunchDarkly to roll out new features and brand elements to 10% of visitors. Two versions of the same page were presented to different users at the same time without compromising overall performance. And within 10 days, the team discovered that the rebrand had no negative impact on sales, which was all the data needed to fully roll it out to all users.

Even more recently, RVU began edge caching feature flagging, using custom VCL to integrate LaunchDarkly. This allows the RVU team to vary headers at the edge with a pre-flag check against the service. If a combination of feature flags has been previously viewed by a user, a cached response of those features can be returned from Fastly.

Results

By using Fastly’s edge cloud platform as an extension of their network, RVU has built innovative efficiencies into its pipeline. New brands on-board sooner, developers solve problems more effectively, and sites load even faster — since partnering with Fastly, RVU’s time to first byte (TTFB) has decreased by approximately 30%. This allows users to access always-current, money-saving information right when they need it, and enables the RVU brand to consistently outpace and out-perform the competition.
Leveling up the future

Fastly’s new serverless compute environment, Compute@Edge, is already part of RVU’s vision for the future. The team plans on experimenting with parallel fetches, redirects, pixel tracking, click tracking, and authorization — all opportunities to externalize business logic that weren’t possible before.