

Using Varnish Enterprise for efficient, centrally managed caching, MotorTrend saves 10-15 hours of engineering effort daily

Case Study:

MotorTrend

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Background

MotorTrend Group is a media company, the largest automotive media company in the world, specializing in enthusiast brands, such as MotorTrend, Hot Rod and an over-the-top (OTT) video-on-demand platform, websites and publications among other live event and competition activities.

MotorTrend's digital channels attract a monthly audience of 26 million across web, TV and print along with 110 million social followers, leading to two billion monthly content views across platforms.

The challenge: Tackling inefficient cache management

MotorTrend was using open source Varnish Cache for tier-2 caching, deployed across all server instances. Depending on the specific application or website, the number of servers ranged from 10 to 40 instances. Each cache clear request required an engineer to launch console access to each server of the application group and run cache clear commands manually. This happened multiple times every day whenever the editorial team made content changes, and was an error-prone process that resulted in loss of productivity and a loss in customer satisfaction.

The MotorTrend team looked at their options, aiming to centralize cache management across multiple instances, automating as much of the process as possible.

In addition, MotorTrend uses Akamai as a CDN and wanted to ensure smooth integration between Akamai and server cache configuration data.

MotorTrend at a glance

Organization

 MotorTrend Group is a media company specializing in enthusiast brands, such as MotorTrend, Hot Rod and an over-the-top (OTT) video-on-demand platform, websites and publications among other live event and competition activities.

Challenge

- Single point of control for cache management/ cache clearing
- Integration between Varnish and Akamai for change-once, deploy-everywhere caching policy across instances

Varnish Enterprise

- Varnish Web and API Acceleration
- Varnish Akamai Connector
- Professional Varnish support



With caching and cache control being as central to what we're doing as an editorial operation, we needed a change-once, deployeverywhere solution that we could administer centrally from a single point of control, letting our cache changes propagate across all our server instances simultaneously.

-Alex Stoica, Senior Infrastructure Engineer, MotorTrend

The solution: Varnish for single point of cache management

Implementing Varnish Enterprise involved first building a Varnish cluster, and second, adding multiple websites to the cluster, putting an entry load balancer in front of the Varnish cluster with rules about how to split traffic for the websites. On the backend, MotorTrend had internal load balancers for each website. While there were some challenges as they moved into production, the move to Varnish Enterprise with the assistance of Varnish Support, was easy and everything has worked without a hitch in terms of performance.

Akamai Connector for Varnish: Easy cache policy integration with Akamai

Varnish Enterprise already offered the Akamai Connector solution, which enables setting policy once within Varnish, which automatically cascades to the Akamai setup, making management of multiple cache levels more efficient without having to invest in any development or design work.

Varnish was already in place and worked very well in terms of performance, so upgrading to Varnish Enterprise made sense when we wanted to streamline caching with a single point of entry

-Shrikant lyer, Senior Manager, DevOps and Infrastructure, MotorTrend

The Akamai Connector for Varnish made it easy for us to get our cache changes across and help our customers, the editorial team, get their content live as soon as possible.

-Alex Stoica, Senior Infrastructure Engineer, MotorTrend

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Results: Efficiency, scalability, cost savings: Varnish for more than caching

MotorTrend has achieved significant time savings by automating their cache management and purging with their Varnish implementation, leading to greater predictability in their resource needs, workloads and low-maintenance requirements for their caching setup:

Single point of cache control

Being able to handle all cache management from a single place saved engineering time and effort and reduced errors and inconsistencies typical of manual cache management.

Time and resource savings

Before Varnish Enterprise, any content changes, manual cache clearing meant that engineers might spend at least 30 minutes on each change if changes ran smoothly. In the event of a problem, this could balloon to more than an hour for troubleshooting and repair. Varnish Enterprise and being able to handle the cache from a single place have helped reduce that effort by 10-15 hours every day while also making the end results more consistent.

Once we had Varnish Enterprise in production, and had our single point of control for cache clearing, we could virtually forget about Varnish because it's worked without a single problem since its implementation three years ago.

-Alex Stoica, Senior Infrastructure Engineer, MotorTrend

MotorTrend and Varnish: The future

MotorTrend indicates that Varnish Enterprise will continue to serve its performance and efficiency-enhancing purpose even as MotorTrend's strategy shifts.

> As we work on our flagship websites and OTT platform, we know we can consult Varnish engineers, who have been instrumental in helping us with the configuration and fine-tuning of our caching solution.

-Shrikant Iyer, Senior Manager, DevOps and Infrastructure, MotorTrend

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