



Mauve migrates
from Varnish
Cache to Varnish
Enterprise to gain
speed and control of
content on the edge

Case Study:

Mauve
Mailorder

Mauve Mailorder delivers speed with Varnish Enterprise

Background

Mauve Mailorder Software (Mauve) is a software company that provides solutions for the pharmaceutical and pharmacy industries, specialized in the digitization of pharmacies and the growth of the online pharmacy mail order business model.

Mauve is focused on developing the tools, interfaces and applications for the pharmacy of tomorrow.

Providing e-commerce services to customers, which are mostly pharmacies, requires speed – a need for faster content delivery with less load on the backend servers.

The challenge

Greater speed and efficiency in caching, cache invalidation and ESI processing

Mauve was using Varnish open source software for caching in their shop setup for customers with a heavy traffic load. Because they already had experience with the community version of Varnish, they sought a scalable solution for caching on the edge from within the community first.

But they ran into challenges. They were not able to process Edge Side Includes (ESI), which are widely used in their system, in parallel, and they could not connect to the backend via HTTPS directly. They also had to use the ban function in cache invalidation, which came with high performance costs.

Mauve Mailorder Software at a glance

Organization

- Mauve is a software company that provides solutions for the digitization of pharmacies and the online pharmacy mail order business.

Challenge

- Reduce load on backend
- Faster content delivery with parallel ESI processing
- Improve user experience and speed with better control over cache invalidation (Ykey)

Varnish Enterprise

- Varnish Enterprise for caching, cache invalidation (Ykey), parallel ESI, TLS (HTTPS connection to the backend), HeaderPlus, CookiePlus
- Professional Varnish support



The solution

Migration to Varnish Enterprise

Mauve chose to migrate from Varnish Cache to the commercial Varnish Enterprise because it offers the feature set they need to get the efficiency gains they wanted. With their previous experience using open-source Varnish Cache, the migration was simple because they already had compatible Varnish Configuration Language (VCL) and configuration management via Ansible in place. By extension migration time was negligible.

The Varnish Enterprise feature set, including parallel ESI processing, HTTPS connection to the backend and invalidation using the Ykey VMOD, offered everything Mauve needed: simple caching based on cache-control headers set by application and invalidation with YKey based on database events. The cache is warmed after invalidation by automation to prevent the user from hitting unnecessary cache misses on the most frequently used pages.

Results

For Mauve customers, it's all about speed

"For Mauve, it's all about speed of content delivery because for our customers, it's all about speed. Time to first byte is key," explained Mauve's Head of Infrastructure and Operations, Daniel Czerwonk.

The better the user experience, in Daniel's experience, the higher the conversion rate in online sales, leading to higher revenue for Mauve's customers.

Mauve's customers – often very large pharmacies – experience heavy traffic loads, which is why Varnish Enterprise delivers on Mauve's performance goals:

- Reduce backend load
- Deliver content faster, which is why the Varnish setup is on the edge side



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