Case Study

Waoo

Content and fiber broadband provider

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Waoo http://www.waoo.dk/

Waoo in Denmark used Varnish DIY CDN to massively boost streaming capacity & build their own CDN

Who is Waoo?

Waoo is a national content and fiber broadband company in Denmark. It provides digital experiences to fiber-networked consumers in Denmark. This includes TV, internet and telephony services.

During its life, Waoo has seen tremendous growth, thanks to its commitment to delivering fast and predictable upload and download speeds and its constant drive to look for more ways to satisfy customers, such as in its video-on-demand and live TV OTT (over-the-top) solutions.

What challenges brought Waoo to Varnish Software?

With growth comes new challenges, and Waoo needed solutions.

Basic scaling: Amplify capacity with a caching layer
With the basic streaming infrastructure Waoo could offer when they found Varnish Software, they were limited to only 1 or 2 GB but wanted to deliver performance while streaming content to a lot of different devices. They did not have enough streaming capacity to serve all clients and continue to grow. A basic Varnish installation proved to be straightforward – with only a few lines of code and a few command lines, it was up and running. From the basics, with the flexibility of the Varnish VCL language, Waoo did significant customization allowing for optimizing hit rates and doing filtering around to whom they wanted to serve content.

VARNISH SOFTWARE

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Serving internal and external customers: DIY CDN

Waoo has customers coming from different networks and needed to design Varnish caches to serve customers both inside and outside of their own networks. They used Varnish to build their own CDN to support this.

Customization proved to be important here also. Because of the strengths and flexibility of Varnish, it works well with other solutions and could thus also be a component of a bigger solution. Waoo added a custom redirection service in front of its Varnish CDN, which redirects traffic based on what network the customer is coming from.

> *"Using Varnish, Waoo has avoided a cost increase of up to 150-200% while greatly improving the performance they can offer their customers."*

The custom-built Varnish CDN plays well with the non-Varnish redirect.

Waoo results with Varnish Software

Waoo achieved great results with Varnish Cache, stating that without it they would have needed at least twice their current production capacity to provide their customers with the performance and capacity they do today. Using Varnish, Waoo has avoided a cost increase of up to 150-200% while greatly improving the performance they can offer their customers. Waoo also saved considerably in monetary terms in building their own CDN with Varnish on top of commodity software.

Waoo future with Varnish Software

With Waoo's growth and integration with Varnish solutions, they decided to move from Varnish Cache to Varnish DIY CDN. Why? The professional service and expertise offered as a part of the Varnish subscription is the main reason. Waoo will seek assistance from Varnish professional services in reviewing and optimizing existing and future installations. Waoo also plans to use the Varnish Administration Console (VAC) to accomplish the functions they could not with their basic Varnish installation. Varnish Custom Statistics (VCS) may also come into play in gaining insight into both performance-related and customer data, which will also inform how Waoo delivers performance and content.

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