



CASE STUDY

 **Your.
Online**

**Future-Proof
Open-Source Platform
Hosting Millions of
Websites for
Your.Online**





Your.Online is a team of pioneers from all over the world united by the passion for helping businesses succeed online. They needed to build a centralized IaaS cloud platform for four of their brands - Versio, Yourhosting, Savvii and Axarnet. The four companies ran on a wide range of infrastructure platforms using technologies like VMware, RHEV, Xen server, Virtuozzo, Proxmox, custom-built solutions. This made it extremely hard and nearly impossible to manage their infrastructure centrally and ensure reliability and operational effectiveness.

The team wanted to centralize the infrastructure management of these companies to ensure that all their systems run on one unified, reliable and easy-to-operate IaaS platform.

In addition, they wanted to be a future-proof provider and build their infrastructure accordingly. For such, they built a turnkey solution based on CloudStack for IaaS orchestration, Ceph and TrueNAS for storage and KVM as a hypervisor. These technologies were all carefully chosen, and the biggest advantage which comes with them is that they are all open-source. According to Your.Online, it's difficult to implement and maintain a vendor-driven IaaS management platform, as the vendor's interest is mainly commercial, and the direction in which the platform develops follows such interests. This also presents challenges with licensing, updates, upgrades, and patches, which are not sustainable in the long term.

Building a Centralised Platform Based on CloudStack

Your.Online has built a centralized platform powered by Apache CloudStack, Ceph, TrueNAS and KVM to be utilized by all their hosting brands. The new solution has allowed the company to simplify infrastructure management and have end-to-end visibility of the processes inside from a single pane of glass. In terms of size, their infrastructure in the Netherlands is spread out over 3 data centers in Amsterdam, consisting of 200+ TB of memory, a couple of PBs of storage, and tens of thousands of CPU cores, all running on Ubuntu. The preferred hardware vendors are Dell and Supermicro, which are combined with Juniper and Cumulus Linux networking equipment. The platform is also replicated in Spain and is growing to new locations to serve the extending portfolio of companies of Your.Online.

Your.Online uses BGP, EVPN and VXLAN with CloudStack's Advanced networking model. This allows them to scale networks very easily in a redundant and high-performant way over multiple data centers. This is built-in functionality of CloudStack, which when combined with IPv6 support and security groups makes for a modern and future-proof solution, on which they can continue to invest and grow.

"CloudStack is a stable platform for us and has proven its capabilities in the last 10 years! Every software has its issues, but they are neglectable when compared to everything we get in return."

Wido den Hollander, CTO, Your.Online



Ensuring Reliability in the Long Term



“One of the reasons to centralize on CloudStack is to have one single point of truth about the utilization of our assets. One overview of the VMs, assets and capacity utilization. Now we can automate against one platform, and for us, the main driver to choosing CloudStack was that it is an open-source project governed by the Apache Software Foundation. We know it is a stable platform both from a technical and legal perspective. The project will be live in the next ten years, allowing us to avoid the risk associated with commercial projects - usually licensing and governance problems.”

Wido den Hollander, CTO, Your.Online

At Your.Online the freedom of choice when it comes to technologies is highly valued, but on the other hand, they know that the community also needs to invest in open-source projects so that they can continue to develop.

Getting the Maximum out of the Hardware Investments

Hardware acquisition costs for cloud or hosting business can be enormous. In that regard, one of the advantages that Apache CloudStack brings to Your.Online is the option to use their already available hardware assets in the best possible way. Compared to using other commercial technologies, the company does not struggle with unsupported hardware or end-of-lifecycles for their available equipment. CloudStack allows Your.Online to get the maximum out of its investment in hardware by utilizing different generations of hardware in different clusters. In addition, the usage of CloudStack Compute Offerings helps them to ensure that certain workloads run only on a certain type of hardware, thus ensuring optimal performance for each of their customers.

“A portion of our existing hardware is focused on very high performance. Using the tagging of the Compute Offerings, we put in different CPUs on those hypervisors and we have certain workloads running only on those hypervisors. With this out-of-the-box functionality of CloudStack we can design an environment specific to enterprise workloads. In the way CloudStack works, you can create a lot of granularity in your offerings and in your resources to make sure you use your assets in the right way!”

The possibility of their hardware being more efficient reflects positively also on their TCO and profitability.

CloudStack Advantages for Your.Online:

- Improved Asset Utilization
- Building custom environments
- Reduced Capex
- Lower TCO
- Overall Lifetime Savings
- Easier to Use by Engineers
- Simpler Management
- Solving the Problem with Unsupported Hardware
- Solving the Problem with Hardware Lifecycles
- 100% Uptime



Your. Online is a team of pioneers from all over the world united by the passion for helping businesses succeed online. Their teams of local experts provide highly standardized managed services to high-intent customers to reach their full online potential. The group serves over 1 million customers and generates €175m in revenue with its eight brands and 600 employees.

versio

Versio is a web hosting provider, based in the Netherlands. Its services aim at the mass market and include shared web hosting, domains, email services, site builders and VPS. The company ensures reliable 24/7 customer support services and helps its customers to build a stable online presence.

axarnet

Axarnet provides web hosting, VPS servers, dedicated servers, and hosting in Spain. The company has its own infrastructure in Valencia, accommodated in two data centers. Axarnet offers a wide range of commodity hosting services, but also backup and SSL solutions, spam protection, email marketing and more to become a one-stop shop for its customers.

Yourhosting

Yourhosting is one of the largest hosting providers in the Netherlands, specializing in shared hosting, VPS, domain names, SSL, and Microsoft 365 services. For over 20 years, they have been doing everything to give their customers the best possible performance, security and support. With a team of passionate experts, Yourhosting distinguishes itself as a premium web hosting, providing hosting solutions bundled with great support and a customer-friendly attitude.

SAVVII

Savvii started as a Managed WordPress Hosting specialist in the Netherlands. The company has grown into a specialist in various hosting solutions over the years. The company is now an expert in providing managed services - managed WordPress and managed e-commerce hosting based on Magento. Its mission is to let digital agencies, developers and webshop owners in the Netherlands grow by adopting the right hosting technology.

Apache CloudStack is a highly scalable IaaS cloud computing platform that provides an orchestration layer, automating the creation, provisioning and configuration of IaaS components. It turns existing virtual infrastructure into a cloud-based Infrastructure as a Service (IaaS) platform.

Being open-source ensures that CloudStack follows the needs of its user and enables them to build future-proof technology solutions.

<https://cloudstack.apache.org/>

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