Helkama Emotor Group moves up a gear with Nutanix converged infrastructure

Immediate capital saving plus significant operational benefits

Company Background

Founded in Finland in 1905, Helkama Emotor is a family-owned group of companies with an eclectic range of interests spanning areas as diverse as bicycle manufacture and the import, production and sale of marine, offshore and industrial cables.

The oldest bicycle maker in Finland, subsidiary company Helkama Velox operates out of a plant in the city of Hanko where the group data centre is also located while the cabling subsidiary, Helkama Bica, is based out of two plants, one in Hanko and one in Kaarina. The third arm - Suomen Polkupyörätukku - operates a chain of 15 sports retail stores across the country,

As a group, Helkama Emotor has over 340 direct employees. The co-owned companies Helkama-Auto and Helkama Rent run the import of Skoda cars and the Avis and Budget car rental businesses in Finland. In 2014 all the Helkama companies together reported an annual turnover of around 280 million euros.

Gearing up for a more scalable future

Like other mid-sized companies, Helkama Emotor operates its own on-premise data centre to service the IT needs of all the companies within the group. Over the years this had been built up using a mix of conventional HP blade servers plus SAN storage, mostly running Windows, as a platform for a variety of business-critical applications. These include a commercial ERP system, a number of databases plus several terminal servers providing shared remote access to office productivity tools.

Having served the group well, the Helkama infrastructure was starting to show its age and was clearly due for replacement, with a simple upgrade to more of the same the obvious first choice. However as IT Manager, Kim Wikström explains, when he started to look at the available options it became clear that technology had moved on and there were much better alternatives to consider.

"We decided not to restrict ourselves to the traditional server plus SAN architecture we had previously," said Wikström, "as we were finding it hard to scale both performance and capacity to keep up with growth in demand for IT across the organisation. To this end we spent a couple of months investigating alternatives and quickly came to the conclusion that a converged infrastructure, and Nutanix in particular, was a better solution all round. One of the key benefits as we saw it was the ability to scale quickly to cope with future growth and new application needs rather than having to over-specify the hardware up front as with conventional servers and storage."

The ability to work with any hypervisor was another key selling point for the Helkama IT team – with Nutanix supporting ESXi, Hyper-V, and Acropolis Hypervisor (the native Nutanix hypervisor based on KVM). Virtualisation was a pressing concern, with the company still reliant on physical servers to host the majority of its applications which was further limiting its ability to react to growth in demand. More than that, the few virtual servers it did run were on Hyper-V whereas the main area of expertise was with VMware and migration to that platform was seen as an integral part of the upgrade project.

> " ... the Nutanix infrastructure enables us to deploy new servers in minutes rather than the days it previously took to with our old technology. "
>
> – Kim Wikström, IT-Manager at Helkama Emotor Oy

Industry

Manufacturing and commerce

Business Needs

To build a scalable IT infrastructure with the agility to respond quickly to both growth in demand and the need to support new workloads going forward

Challenges

- Pressing need to replace end of life blade server and SAN solution with more scalable converged infrastructure able to cope with future IT growth

- Facilitate migration from Microsoft Hyper-V to VMware virtualisation environment and complete virtualisation of all physical servers

Solution

Nutanix Virtual Computing Platform (model NX1450) with four computing nodes and 16TB of storage

www.nutanix.com

Smooth transition, immediate benefits

Upgrading hardware is traditionally viewed as a lengthy and complex task, however, in this case the migration from old to new infrastructure proved both swift and straight-forward. The Nutanix hardware itself took just one day to install with another day to configure VMware ready for the migration. With some 30 server workloads to migrate, including 25 physical servers, the rest of the process took a little longer, but that too went very smoothly without any real problems leading to immediate and very tangible benefits.

"We have yet to run any official benchmarks," commented Wikström, "but we noticed an immediate improvement in terms of the time needed to both read and write large files. We were also impressed with how quickly we could move VMs from one node to another, to balance workloads and for maintenance. More importantly still, the Nutanix infrastructure enables us to deploy new servers in minutes rather than the days previously needed with our old technology."

As well as an immediate capital saving of 30%, the Nutanix infrastructure is also delivering long term operational savings. This is due partly to a significant reduction in rack space, the new hardware requiring half the room of the old setup resulting in an associated 20% reduction in power and cooling requirements.

Less obviously, management overheads have also been slashed with the in-house support team spending, on average, two thirds less time maintaining the new IT infrastructure. Moreover, thanks to integrated management of both computing and storage resources, Wikström no longer has to outsource work to a SAN specialist whenever storage changes are required. These can all be done in-house by the general IT team.

Fit for the future

Highly pleased with what the new converged infrastructure has delivered so far, Wikström and his team are keen to do more and migrate all of their data centre workloads to the Nutanix platform. The group is also looking at how the technology can be rolled out to other satellite sites while at the same time investigating the Nutanix Metro Availability option to provide for real time data replication and disaster recovery across locations.

With typical Finnish brevity, Wikström summarises the migration project as a resounding success, and one that has more than lived up to his expectations and those of the group as a whole.

"There were the usual problems along the way," says Wikström, "but these were minor and quickly resolved by the Nutanix support team who were both knowledgeable and very responsive. In the end everything worked out just as we had hoped, giving us the confidence to move forward secure in the knowledge that we have the capacity to handle, not just our current workloads, but whatever we decide to add in the future."

Benefits

- 30% lower capital cost compared to conventional server/SAN platform

- Integrated Prism management console has enabled the IT support team to reduce in-house management work-load by two thirds

- Use of simpler distributed storage with integrated management has eliminated the need to outsource storage changes to SAN specialists

- 50% lower rack footprint with signifi-cant reduction in power and cooling requirements

- Immediate 20% reduction in energy costs

- Rapid migration of all existing physical and virtual workloads to VMware environment to match in-house skills

- Vastly improved agility - new VMs can be created in minutes and scaled to handle new workloads and growth in demand