Nyherji raises the game for public cloud in Iceland with VMware

Nyherji is one of Iceland’s leading solution and service providers, formed in 1992 following the merger of IBM Iceland and Skrifstofuvélar-Sund. The company has been publically trading since 1995 and is now Iceland’s largest domestic IT company. It offers consultancy, hardware and software, office equipment and technical services to a range of organisations across the country including leading financial, software development houses and transport providers such as Icelandair. Nyherji’s services and solutions are hosted across its four data centres in Iceland, all of which run on a mixture of geothermal and hydro renewable energy.

Transforming the data centre

When Nyherji was first formed, it had a growing number of IBM physical servers across its data centres, which meant that it was faced with the classic issue of underutilisation, higher levels of unexpected downtime, as well as high operational costs and increased energy consumption. Running purely physical servers also meant that it was taking Nyherji anything between two and four weeks to provision new services for its customers.

Nyherji’s IT team soon realised that creating a virtualized infrastructure was the key to offering a competitive and effective solution for its customers, as well as making better use of hardware and streamlining operations within the business. In 2003, Nyherji embarked on a server virtualization project, implementing VMware vSphere across its IBM servers. This immediately enabled Nyherji to reduce the number of physical servers within its data centre.

Helgi Björgvinsson, Solutions Architect at Nyherji explains: “While we’re located in Iceland and have ample access to low cost renewable energy, our overall goal is to use as little energy as possible, full stop. If we hadn’t virtualized our servers with VMware, we would now be running up to 70 IBM Blade Centers (each with 14 servers), but we have managed to cut this down to 20 using VMware vSphere. We’d also be looking at almost 70% more floor space, cooling, UPS, and diesel generator capacity in our data centres than we have today.”

Most importantly, VMware vSphere enables Nyherji to provision new servers for its customers in a matter of minutes rather than weeks, enabling it to respond to customer demand in a matter of hours, as opposed to weeks.

In terms of reliability, Nyherji is long past the point of considering virtualization as a less desirable option for hosting mission critical applications. The benefits of removing the dependency between an application and a single piece of hardware are obvious and result in less downtime - whether it’s planned or unplanned.”

The server virtualization project also meant that Nyherji can move workloads across different servers depending on requirements, with the best example being the relocation of one of its data centres.

Björgvinsso explained: “In 2010, we wanted to move from a leased data centre to a privately owned location. VMware vSphere Storage vMotion enabled us to perform a live migration of virtual machine disk files across our servers so that we didn’t have to experience any downtime during this move.”

Making the hybrid cloud a reality

Having created a solid, virtualized foundation for its data centres with VMware vSphere, Nyherji was keen to move to the next level, developing a full public cloud offering for its customers. Using VMware’s vCloud Suite, Nyherji was able to launch an Infrastructure as
a Service environment (IaaS), which is based on VMware’s Software Defined Data Centre, with each layer, including networks, storage and servers, fully virtualized.

VMware’s vCloud Suite also enables Nyherji to spin up a new cloud environment for a customer within minutes. Additionally, VMware vCloud Connector (part of the vCloud Suite) allows customers to integrate their own private cloud into Nyherji’s public cloud, creating a hybrid cloud solution.

“Customers see the benefits of public Infrastructure as a Service clouds for their flexibility, cost benefits, and ease of use. With VMware’s vCloud offering, it is simple to integrate our public cloud with our customers’ existing VMware environments. This protects their current infrastructure investment and delivers more efficient operations than a less integrated solution could achieve,” said Björgvinsson.

When asked why Nyherji chose VMware over competing products such as Microsoft, Björgvinsson stated: “VMware has enabled us to be the only managed service provider in Iceland which can offer our customers Infrastructure as a Service and the option of a hybrid cloud. And the fact that our offering is based upon IBM physical hardware and VMware software really boosts our credentials in the market.”

“VMware is incredibly well respected and was, in my view, the only company which we would feel comfortable partnering with. Not only does it have a strong heritage within virtualization and provisioning cloud environments, but we also feel that it offers us tremendous value for money both in terms of the ROI which we see from using these solutions and the VSPP licensing model it offers to us.”

Helgi Björgvinsson,
Solutions Architect, Nyherji

PRODUCTS
• VMware vCloud Suite
  Including:
  • vSphere 5.1 with Operations Management (Storage vMotion)
  • VMware ESXi 5.1
  • vCloud Director 5.1
  • vCloud Networking and Security 5.1

ADDITIONAL PRODUCTS INCLUDE
• VMware vCloud Connector

“Customers see the benefits of public Infrastructure as a Service clouds for their flexibility, cost benefits, and ease of use. With VMware’s vCloud offering, it is simple to integrate our public cloud with our customers’ existing private cloud environments. This both protects existing infrastructure investment and delivers more efficient operations than a less integrated solution could achieve.”

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