LKAB's IT strategic choice for Nutanix

ON-PREMISE INFRASTRUCTURE THAT OFFERS THE SCALABILITY OF THE CLOUD

The expansion of traditional IT infrastructure often has a domino effect. A new storage area network (SAN), for example, temporarily solves the need for more storage, but it also requires more network capacity and adds complexity to the environment's overall management. At LKAB, that's no longer the case. That's because we made the strategic choice to run our IT on Nutanix.

LKAB operates the deepest iron ore mine in Europe. To keep costs and profits under control, we choose to be a very innovative, technology-driven company. We invested in a strong fibre network, among other things, to guarantee network access everywhere, even in the mines. Until about seven years ago, we ran a traditional IT environment, based on standalone servers and storage. However, this model couldn't keep up with the evolution of our IT needs. We were close to running out of storage. We thought we needed a new SAN. But then we realised that the network would be impacted and we would need new controllers as well. The whole model just didn't seem sustainable anymore.

Because we were looking for a new environment that would offer more scalability, we decided to implement converged infrastructure. Unfortunately, it didn't end our pain. The new infrastructure did offer extra scalability, but after a year, we ran into the same old problems. As the solution was quite expensive, we had decided to start with a rather small set-up. It was a smart decision, because we soon ran out of storage again and were sent back to square one.

BEST OF BOTH WORLDS

Still looking for a solution, we were introduced to Nutanix and decided to run a test on this new type of hyperconverged infrastructure. As a matter of fact, LKAB was the first company to work on Nutanix in Scandinavia. The results exceeded our expectations and we were convinced right away. What's more, while we were still having trouble with the old converged infrastructure, we decided to move some parts of the production environment to the Nutanix platform, even when initially it had been set up for test purposes only.

As we work in mines and refining plants in the north of Sweden, it is a good thing – in terms of business continuity – to be able to rely on IT infrastructure that is literally within reach. Nutanix offers us the best of both worlds: on-premise infrastructure that offers the performance, availability and scalability of the cloud. Today, we run two full-blown and fully replicated Nutanix clusters (9 nodes each), as well as a separate cluster for software development and testing (9 nodes) and one for our VDI environment (4 nodes). All in all, we manage 1.076 VMs and 170 TB of storage on Nutanix.

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SMOOTH MANAGEMENT, NO VENDOR LOCK-IN

Apart from offering more performance, scalability and availability, Nutanix was essential to reduce the effort and resources needed for IT management. In all honesty, managing the traditional IT stack was always a hassle. Today, because Nutanix can be handled from a centralised management console, IT management and administration are far less complex and require lower overheads. Another major benefit of the Nutanix set-up is that it offers easy access to the cloud. Thanks to Nutanix, it was easy to design and deploy this type of hybrid infrastructure. It offers the freedom to choose whatever cloud provider we prefer. We avoid the risk of vendor lock-in, which in turn puts us in a better negotiating position with our suppliers.

As we were an early adopter of the solution, we had the privilege of being in direct contact with the tech teams at Nutanix. Certainly there were some bumps in the road, but Nutanix was always ready to help us get back on track. Although our first experience with converged infrastructure wasn't a very positive one, we are now fully convinced we have found the right solution in hyperconverged infrastructure. Nutanix offers the performance and scalability we need to support the evolving IT needs of LKAB's business.

Who is
ROBERT POHJANEN

Robert Pohjanen is IT Architect at LKAB, a state-owned mining company in Sweden. LKAB specialises in mining iron ore, the raw material used for the production of iron and steel. It is the world's second-largest supplier of iron ore pellets. LKAB's mines and refining plants are located in Malmfälten, Kiruna, Malmberget and Svappavaara, in the north of Sweden. LKAB also runs a facility for special products in the UK. The company has about 5000 employees.

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