



Agility, Scalability And Light Touch Management: The Business-critical Enablers Behind Nutanix Cloud Platform Migration At NIS

The ability to adapt and react rapidly to change is key to success in fast-paced, often, volatile energy markets. Nutanix Cloud Platform gives NIS, Gazprom Neft the agile, scalable and easily managed infrastructure considered essential to supporting and meeting that objective.

"Keeping pace with modern business developments, regulatory changes and new ways of working means modern IT, especially in a fast moving sector such as energy. Nutanix gives us that and more, in the form of a modern software-defined infrastructure that not only empowers us to be more agile, but take a new approach to IT, keep on top of the challenges and stay ahead of the competition."

- Dimitry Shevchenko, CIO, NIS, Gazprom Neft

CHALLENGES.

One of the biggest integrated energy companies in SouthEast Europe, NIS (Naftna Industrija Srbije) Gazprom Neft is a key player in a wide range of fast paced, often volatile, markets. Everything from oil and gas exploration, through to petrochemical refining, distribution and sales, as well as electricity production.

INDUSTRY

Energy

BENEFITS

- Immediate 50% improvement in core application performance
- Enhanced agility through on-demand resource scaling plus integrated application orchestration and automation tools
- Lower management overheads through centralised management of all physical and virtual resources from a single interface
- Greater resilience with crosshypervisor replication and integrated disaster recovery
- Cloud-native ready infrastructure to accommodate future development plans

SOLUTION

Nutanix Hybrid Cloud Platform

- Nutanix Enterprise Cloud Platform
- Prism management plane
- VMware and AHV hypervisors
- Nutanix Calm

Applications

- · SAP ERP application layer
- IBM Maximo Asset Managementapplication layer
- Business Intelligence- application layer
- Oracle Hyperion Financial Management- application layer
- Oil and gas exploration tools





However, supporting and managing those businesses in an era of rapid geopolitical and environmental change, was putting increasing strains on its ageing legacy IT infrastructure. Strains which were limiting both the company's ability to react quickly to fluctuations in demand and move forward to take full advantage of new developments. As CIO of NIS, Gazprom Neft, Dimitry Shevchenko, explains:

"Rather than an asset, our IT infrastructure was fast becoming a liability. Most of the workloads had been virtualised, but these were spread across over a hundred plus servers, from a number of vendors. The end result was not only low levels of performance plus ongoing reliability and availability issues, but a real lack of business flexibility compared to more agile competitors in our core markets."

SOLUTION

With extensive experience of addressing similar issues in previous roles, Shevchenko understood that the best way forward would be wholesale migration to a hyperconverged infrastructure (HCI). "Modern business really needs modern technology," he commented, "which means moving away from legacy three-tier technologies to a more agile software-defined architecture, best supported by hyperconverged infrastructure."

All that remained was to convince budget holders and technical teams of the benefits so, with the help of Nutanix partner S&T Serbia, a Proof of Concept trial was arranged leading, in turn, to the project being put out to tender. At the end of that process, the Nutanix Cloud Platform was chosen on both cost and technical grounds, with specialist partner S&T Serbia commissioned to lead on the planning, installation and migration work.

Rapid Rollout

Kicking that work off, three Nutanix clusters were delivered and installed, all based on industry standard Lenovo enterprise grade servers. Two were allocated to the main NIS data centre in Novi Sad to host core business workloads while the third was deployed in the Serbian capital Belgrade for development, testing and to provide disaster recovery capabilities.

To speed up the migration and minimise disruption existing VMware virtual machines were transferred "as is" to the new infrastructure. An option made possible by the hypervisor-neutral architecture of the Nutanix platform. This allows customers to run VMware and other virtualisation products alongside AHV, the licence-free hypervisor included as part of the Nutanix software stack.

"For expediency we decided to stick with VMware for production workloads and for the time being only use AHV on the Novi Sad cluster," said Shevchenko. "That way support staff and developers can become familiar with the Nutanix hypervisor and test out its capabilities at their own pace with a view to hosting more applications on AHV going forward."

The S&T Serbia team also configured the Nutanix software to work seamlessly with the company's existing backup system as well as integrate with its Cisco software-defined networking platform and other essential monitoring and management tools.





Automation Opportunity

Importantly, NIS also opted for Nutanix Calm as part of this project, adding application-centric automation tools plus native application orchestration and lifecycle management to the Nutanix Cloud Platform. Moreover those tools are already being used to build self-service portals and automate replication of workloads between the two hypervisor platforms.

"A lot of costly support time and effort was spent keeping the old infrastructure running," said Shevchenko. "Nutanix Calm gives us the tools to minimise that and deliver more intuitive, streamlined and cost effective IT systems. Again, to create modern hands-off IT solutions."

CUSTOMER OUTCOMES

Despite the Coronavirus lockdown, the project was completed by the S&T team on budget and ahead of schedule with immediate, highly visible, benefits.

"We knew that simply switching to modern processors and flash storage would mean better performance but initial tests have shown up to 50 percent improvement for our core applications," said Shevchenko. "It's also a lot easier to spread and balance loads as needed, to scale and reconfigure application workloads to both cope with new projects, changes to regulatory requirements and so on plus and fluctuations in demand."

Simpler Managment, Lower Costs

Another major benefit is the ability to manage the entire distributed infrastructure from a single console rather than several interfaces, and without the need for specialist knowledge. As Shevchenko explains.

"With just one easy to learn interface to manage physical and virtual resources there's much less need for specialist skills and training. That will allow IT staff to concentrate on more productive development work and, although we have yet to crunch the numbers, we can see it having a real impact on operational costs."

NEXT STEPS

It's early days for the new NIS infrastructure, but the company's IT team isn't resting on its laurels. As well as the ongoing SAP Hana development, for example, there are plans to make use of cloud-native container technologies using Nutanix Karbon, an enterprise Kubernetes management solution, to dramatically simplify container provisioning, operation, and lifecycle management.

PARTNER

S&T

A part of the international S&T group of companies, leading system integrators in Central and Eastern Europe, S&T Serbia is the first in the region to be become a Nutanix Scaler Partner.



in partnership with

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