

Specialist oil exploration and production company migrates to Nutanix Enterprise Cloud to reduce IT costs, enhance performance and deliver scalability for future growth



Oryx Petroleum Builds For a Brighter Future with Nutanix

BUSINESS BENEFITS

Swiss-based Oryx Petroleum is highly dependent on its core ability to analyse seismic data and build real time simulations to take the guesswork out of costly exploration and production projects. Market pressures and geo-political factors also make for a highly volatile industry and, in recent years, the IT team at Oryx has sought more efficient ways of delivering existing services while, at the same time, developing the company's digital infrastructure to cope with escalating demand. This has been achieved by replacing its end of life 3-tier infrastructure with the Nutanix Enterprise Cloud Platform, thereby slashing operational overheads, improving competitiveness and delivering the scalability to cope with anticipated growth well into the next decade.

CHALLENGE

The oil industry is incredibly volatile, subject to hard to predict fluctuations in both supply and demand and further complicated by the vagaries of an ever-changing geo-political landscape. It is also a highly technical, data-driven industry, very much dependent on the ability of engineers at companies like Oryx Petroleum to carefully analyse and model geophysical data; to not just identify potential new oil and gas deposits, but establish whether exploitation makes economic sense. Unfortunately for Oryx the IT infrastructure needed to support these demanding workloads was reaching the end of its life and could not be upgraded to deliver much needed extra performance or capacity. It was also becoming increasingly expensive to run, as Hekuran Olluri, Head of IT, explains:

“With the Nutanix Enterprise Cloud and integrated AHV hypervisor we’re making operational savings that will deliver a return on our investment in just five years, but that hasn’t meant compromising on performance or capacity. Simulations that previously took two days to run, for example, can now be completed in just a few hours, and we’ve only just started to scratch the surface when it comes to exploiting the capacity and scalability the Nutanix platform has to offer.”

- Hekuran Olluri, Head of IT,
Oryx Petroleum

“Simulations were taking days to complete and we were struggling to find the storage capacity needed to cope with existing demand, yet alone plan for the future,” he said. “Increased performance and scalability were essential to our future plans, but we also needed to reduce operational costs - particularly day to day IT management and support - which had become very labour intensive.”

SOLUTION

Olluri and his team began looking for a possible solution when the support contract for the company's existing infrastructure expired at the end of 2017. The option of using public cloud was quickly discounted due to connectivity problems in the countries of operation, with the team favouring instead an on-premise hyperconverged solution. Products from all the major vendors were evaluated, with Olluri choosing the Nutanix Enterprise Computing Platform. This was largely because of its reputation as a market leader capable of delivering scalable computing power plus storage, in an affordable and easy to manage, hyperconverged format.



“We were of course interested in the technical performance data,” commented Olluri, “But also cost of ownership – both in financial and manpower terms – as it’s the business value that ultimately convinces our executives. Against this background, Nutanix clearly stood out as the best solution, both technically and financially.”

The order was therefore placed for a four node all-flash Nutanix Enterprise Cloud cluster to be located in the company’s Geneva data centre and supplied by Nutanix partner VWave. Olluri also specified the Nutanix AHV hypervisor as this would enable virtual workloads to be managed from the same Prism console as the physical infrastructure with the added benefit of major savings in terms of licensing costs compared to VMware.

CUSTOMER OUTCOME

The Nutanix hardware took less than a day to install in the Geneva data centre and in a fraction of the rack space – 2U rather than the 48 rack units needed to hold the legacy 3-tier infrastructure. Olluri was then able to migrate the 65 virtual machines previously hosted by VMware to the Nutanix AHV hypervisor to complete the migration in just a few days, with minimal disruption and immediate tangible benefits.

“The savings in power and cooling costs alone have proved substantial, added to which we no longer have to pay for hypervisor licenses,” commented Olluri. He calculates the combined savings will pay back the investment required in less than five years. The ability to monitor and manage the entire infrastructure from a single console and with minimal oversight is also helping reduce overheads. This was a particularly welcome benefit given that the company found itself having to reduce headcount following temporary suspension of activities in Iraq.

“The Nutanix platform more or less manages itself with updates and patches installed with a single click and all backed up by an incredible level of support,” Olluri told us. “Problems are rare but when we did have trouble, Nutanix responded straight away and the issue was fixed in under an hour.”

Overall Olluri estimates that the switch to the Nutanix Enterprise Cloud has cost the company just 20 percent of an alternative ‘like for like’ upgrade of its legacy solution. But that hasn’t meant having to make any compromises when it comes to performance or capacity with workloads already being processed up to 20 times faster. Simple storage snapshots which, for example, used to take 4-5 minutes now take only one or two seconds, while the time to process large scale geophysical models has come down from 2-3 days to just a few hours.

There have been knock-on effects elsewhere, too. Indeed, freed from having to spend all their time managing the infrastructure, the IT team has been able to migrate the organisation from a legacy email system to Office 365 and rollout new financial software in record time.

NEXT STEPS

Olluri is both impressed and pleased by what his team has managed to deliver using the Nutanix Enterprise Cloud, which is now hosting software services for over 150 employees across Switzerland, Iraq and Senegal. Costs are down and performance and availability have both been enhanced. Moreover, with memory usage still under 25% plus over 50TB of free storage there is plenty of scope to handle additional workloads as demand grows. Which is just as well as, given encouraging signs of a more stable geo-political situation, the team at Oryx Petroleum is confident of a return to growth and increasing demand for its expertise over the next few years. Expertise which, thanks to its Nutanix Enterprise Cloud, it is ideally equipped to deliver.

INDUSTRY

Oil and gas

CHALLENGES

- › End of life legacy infrastructure with large operational overheads
- › Limited processing and storage capacity
- › No headroom for growth
- › High cost of hypervisor licenses
- › Administration effort left little room for strategic IT projects

SOLUTION

Nutanix Enterprise Cloud Platform

- › Acropolis software including AHV hypervisor
- › Nutanix Prism management console

SOLUTION

- › Specialist geophysical exploration and production simulation tools
- › Financial software



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