Ontario Universities' Application Centre Selects Nutanix

**Ontario Universities'
Application Centre**

CHALLENGES

The Ontario Universities' Application Centre (OUAC) was relying on an aging IT environment, with HP servers and NetApp storage systems for its business-critical MS SQL workloads and web services. When it came time for a technology refresh, the center's IT team made the decision to look at some of the newer storage technologies on the market. "We were running out of storage space, and the NetApp systems were getting a little 'glitchy,' since the systems were over five years old," explained Peter Schaefer, Manager of Systems Infrastructure and Facilities at the Ontario Universities' Application Centre.

OUAC was originally planning on just replacing its storage systems during the refresh, since the HP servers were still under warranty. OUAC's IT team made the decision to evaluate storage solutions from Tintri, Nimble, NetApp, Nutanix, and Pivot3 for the refresh. The chosen solution needed to provide sufficient disk space to accommodate 100% growth over the next two years, and integrate with OUAC's existing backup/recovery solution and 10G network. The final decision criteria for the new storage systems included ease of management, superior reliability, and great vendor support.

The Lowest Five-Year Cost

As part of the decision process, OUAC conducted a five-year financial analysis on all proposed solutions. The IT team looked at the following factors when estimating the costs:

CAPITAL COSTS

Server/storage/software in the main data center

Server/storage/software at DR site

Installation/migration services

VMware licenses

OPERATING COSTS

Power in main data center based on Hydro One Calculator Mid-Peak

Cooling in main data center based on Hydro One Calculator Mid-Peak

Rack space at DR center to house solution

Additional FTE for management

Maintenance for VMware licenses

Maintenance/support in main data center

Maintenance/support at DR site

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>
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NUTANIX
Your Enterprise Cloud Platform

The five-year estimated cost of the Nutanix Enterprise Cloud platform was 27% lower than any of the alternate solutions due to its ease-of-use, power, and rack space savings. (Note: OUAC did not include the cost of rack space in its main data center, since they have lots of extra space available in that location. The business case for Nutanix would have been even stronger if they had included the space savings in the main data center.)

IMPRESSED WITH THE NUTANIX DEMO

The IT team was convinced that Nutanix was the best solution after seeing a demo of the Enterprise Cloud Platform. "I asked one of our local Nutanix customers if he was willing to come out to OUAC's datacenter to present his infrastructure in real-time," recalled Stuart Pettifer, Nutanix sales representative. "OUAC was blown away that another customer would not only agree to demo his own environment at their site, but actually drive to their location to deliver it within two days of asking. The customer remotely fired up his Nutanix environment and demostrated the functionality piece by piece. After the demo, I asked him to show OUAC the Nutanix upgrade button. He went one step further and actually upgraded his entire production cluster on the fly, during production hours, while he was at OUAC's site!"

"This Nutanix customer had nothing but good things to say about the hyper-converged systems," noted Kyle Trott, Systems Architect for the Ontario Universities' Application Centre. "I was immediately impressed with the ease-of-use and the simplicity of the Nutanix management interface during the demo. When the customer did a remote upgrade of his Nutanix cluster while here at our office, I was sold. I figured if he had enough confidence to perform the process from another site, in another city, during working hours—without informing anybody at his office in advance—that was enough to convince us to go with Nutanix."

THE SOLUTION

OUAC purchased two Nutanix Enterprise Cloud NX-8000 series systems in 2016. One was installed at OUAC's main data center, the other at its remote disaster recovery site. "Nutanix provided the most compute power, IOPS, and disk space of all proposed solutions," reported Trott. "The Nutanix deployment was very easy, and it took less than half a day at each location. The NetApp systems, HP severs, and VMware environment always took 4-5 days to deploy, since we had to install the HP and VMware servers separately from the storage. It was a much more complex process with a lot of moving parts."

RESULTS
Faster Performance and Higher Reliability

Nutanix has provided OUAC with a very robust and reliable infrastructure that easily integrates with its existing backup/recovery solution and 10G Ethernet network. "The performance of the Nutanix systems has been quite impressive," according to Trott. "Our application is not very IOPS-intensive, but everything is running much faster on the Nutanix platform. One way that we compared performance was by cloning the same VM, first on NetApp, then on Nutanix. The time to finish dropped from 31 minutes on NetApp to just 6 seconds on Nutanix. Even though we were comparing 5-year old systems with brand new ones, we were still amazed at the difference in speed."

Schaefer reported that he had previously been receiving 15 to 20 emails every day for support, since the aging NetApp systems were starting to experience reliability issues. "After upgrading to Nutanix, we are still getting two to three emails a day, but those are just status reports telling us that everything is 'green', reassuring us that everything is working well," he reported.

Reduced Management Time

"By moving to Nutanix, we no longer have to manage separate servers, storage, and network components," Schaefer said. "As a result, we are saving over 100 hours per year in IT management time by moving to the hyperconverged Nutanix systems."

Space and Power Savings

Nutanix also provided the largest savings in data center space, power, and cooling of all proposed solutions. "We went from 34 rack units of HP servers and NetApp storage systems, down to just 8 rack units of Nutanix," Trott said. "The 4:1 reduction in both space and power is loweringour ongoing IT costs as well."

Leveraging Nutanix Built-In Data Protection

OUAC is now leveraging the built-in data protection that Nutanix offers between its primary and DR locations. "We weren't originally planning on using Nutanix's data protection, but it came in very handy," Trott recalled. "We had a deadline of Labor Day to be off of our NetApp systems, and we were having some struggles with our backup vendor. Luckily, we were able to pivot our plans and use the built-in Nutanix features. Our backup replication times on Nutanix are significantly faster, and our restore initiatives are much easier now."

Strong Customer Support

"The Nutanix support experience has always been excellent," Trott stated. "Every person that I have spoken to has been quick to respond, and more importantly, quick to respond with the right answers. It's a refreshing change from some of our other vendors."

NEXT STEPS

"We have a lot of other IT projects going on now, including a very large Oracle implementation," Trott explained. "That was another factor in choosing Nutanix. The management simplicity of the hyperconverged platform enables our IT team to focus on those other strategic initiatives. Nutanix is the one part of our IT environment that we don't have to worry about any more."

"We started our upgrade project as just a 'storage replacement adventure', but when we started looking at what Nutanix offered, the Enterprise Cloud platform made a lot of sense for our use case," concluded Schaefer." We have been extremely happy with the Nutanix solution, and our relationships with both the support and sales teams have been stellar. We made an excellent decision when we decided to switch to Nutanix."

COMPANY

Located in Guelph, the Ontario Universities' Application Centre (OUAC) is a non-profit organization that processes hundreds of thousands of applications for admission to undergraduate, law, medical, rehabilitation sciences, and teacher education programs at Ontario's 20+ universities each year.

INDUSTRY

Higher Education

BUSINESS NEEDS

Existing NetApp storage systems were due for a refresh. Wanted to simplify storage management, consolidate existing infrastructure, and lower IT expenses.

SOLUTION

Nutanix Enterprise Cloud Platform:

› Nutanix Enterprise Cloud Platform
   – Acropolis NX-8000 series systems
   – Nutanix Prism management solution

› VMware ESXi virtualization

BENEFITS

› Obtained fast ROI, 27% lower than all competing solutions

› Reduced VM cloning time from 31 minutes to 6 seconds

› Cut rackspace requirements >4x across both datacenter sites

› Leveraged Nutanix built-in data protection to improve disaster recovery

NUTANIX™
Your Enterprise Cloud Platform

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