Financial Services Firm Extends Virtualization to Enterprise Applications with Nutanix

Richter Turns to Nutanix for Better Performance, Manageability, and Visibility into Virtual MS Exchange and SQL Server Environments

Company Background

Richter is a financial consulting firm based in Montreal and Toronto. Founded in 1926, Richter currently employs more than 500 partners, professionals, and administrative employees and is ranked among the top-ten independent accounting and business advisory firms in Canada.

IT Challenges

Nearly all of Richter’s production environments had been virtualized, using VMware vSphere 5.5, ESX servers and a legacy storage platform. The company’s largest Microsoft Exchange and SQL Server environments had not been virtualized yet, due to limited performance of the existing storage and server environment.

“We were encountering significant performance issues that were quite typical with the traditional storage model,” noted Greg Eamer, director of information technology at Richter. “Whenever one of our large systems demanded more power, it created serious bottlenecks within the environment. Our IT team would try to troubleshoot the problem, but had to tackle it in a piecemeal fashion. We’d buy more disks to make it faster, we’d add another ESXi server, or purchase more RAM hoping it would solve the issues. Even though we spent a lot of money trying to fix the bottlenecks, we still struggled with slow system performance in our critical systems.”

Getting Ready for a Refresh

Since the existing storage appliances were nearing the end of the vendor’s three-year warranty period, Eamer met with his team to determine a plan of action. “We were faced with two options,” Eamer noted. “We could rip and replace everything again, but we’d have to invest a lot of money to make the legacy storage solution work. We decided it was time to think ahead and move forward with new technology.”

Eamer spoke with the Nutanix sales team to learn more about the hyper-converged solution. “What I liked most about Nutanix was that I wouldn’t have to change a whole lot of things to make our problems disappear,” Eamer said. “We had already virtualized the majority of our applications on ESXi, and the environment was working very well. Nutanix would just be replacing some of the things we had into a ‘prettier, cleaner little package’. It was a very appealing approach.”

Although the Nutanix solution was less expensive than the alternatives, price was not the deciding factor for Richter. “When we looked at how much power it would draw and how much space it would take, there was a sizable advantage in going

“We wanted to reduce our data center costs, virtualize all of our critical servers, and hopefully see some significant performance gains. We have achieved all of our goals – and much more – by moving to Nutanix.”

— Greg Eamer, Director of Information Technology, Richter
with Nutanix. But the biggest difference we noted was the number of disks we would need. A competing solution had over 100 hard disks in the array. They said we would need that many spindles to deliver the performance we were asking for. It was not an appealing proposition.

Running the Nutanix POC
Eamer and his team made the decision to run a POC on the Nutanix platform. “Nutanix brought us a box for testing,” Eamer said. “We quickly set up the SQL Server that was causing us the most problems. We virtualized it and copied it a bunch of times. Our team ran a lot of tests and didn’t see any performance degradation. Nutanix is not subject to the same pitfalls of traditional storage where all of the information goes to one area where it creates a ‘sticking point’. That common storage funnel clogs easily in these environments. The Nutanix architecture eliminates the source of that bottleneck.”

Easy Scalability with Predictable Costs
“Another thing that’s very appealing about Nutanix is its easy scalability,” Eamer continued. “When we need to add more capacity or more power, we can simply plug in another node and it’s a fixed cost. The Nutanix approach gives me the ability to go to our executive team and say, ‘this is the way we are going to progress with storage, and this is exactly how much it will cost.’ The predictable costs and easy scalability helped us get quick sign off to buy the Nutanix appliances.”

A Fast and Easy Deployment
It was very easy to deploy the Nutanix appliances, according to Eamer. “Nutanix guided us along the way, making sure we sized the solution correctly. We put in the nodes, transferred our virtual machines, and loaded everything very quickly. There was a small amount of downtime related to rebuilding the guest VMs during the new installation, but this was transparent to our end users. In the end, they only commented that their applications were suddenly running much faster. When you deploy a new environment and no one notices, you’ve done it right. The overall deployment exercise was incredibly smooth.”

Extending Virtualization to Exchange
Richter had not been able to virtualize some of its larger workloads due to the performance limitations on the traditional storage platform. “Our SQL Server database and MS Exchange environments weren’t virtualized yet,” Eamer explained. “We didn’t want to spend a bunch of time and money virtualizing those environments just to find out they were still running slowly on our legacy storage. We saw immediate performance gains across the board with Nutanix, enabling us to virtualize all of our workloads, including our large MS SQL databases and our Exchanges servers.”

Reducing Costs
Nutanix also helped reduce Richter’s co-location footprint. “Our datacenter costs in Montréal are about 30% lower than in the United States, but they are still quite high—especially for power. We were able to consolidate a substantial number of hosts that were running MS SQL and Exchange. In all, 70% of the servers at the colo facility were removed. Our colocation rackspace was reduced by 45% and electrical consumption went down by 33%. In addition to the cost savings for footprint and power, we don’t have to pay for the warranties on all of the replaced equipment anymore.”

Nutanix’ easy manageability has enabled Richter to significantly reduce both CapEx and OpEx costs. “The Nutanix appliances really manage themselves,” noted Eamer. “As a result, our IT administration time has gone down by over 50%. We’ve only called the Nutanix Support team a few times, mainly to double check on something we planned to do to understand the impact in advance. The Nutanix Support reps are not just experts on their own platform, they also really understand the intricacies of VMware, Cisco, and our other environments as well.”

©2014 Nutanix, Inc. All Rights Reserved
Achieving all Project Goals

Richter has just added another Nutanix node to the datacenter for the firm’s new ERP project. They also moved the company’s development environment onto Nutanix as well. “We wanted to reduce our data center costs, virtualize all of our critical servers, and hopefully see some significant performance gains,” Eamer concluded. “We have achieved all of our goals – and much more – by moving to Nutanix.”