Nutanix Enterprise Cloud Platform Simplifies Management, Improves Performance, and Increases Reliability for Students, Staff, and Faculty End Users



Edmonds Community College Chooses Nutanix

CHALLENGE

Edmonds CC had been using HPE blade server infrastructure, with a SAN backend for data storage. When the existing equipment was nearing end of support, the IT team began the search for new infrastructure. Rod Halverson is the IT manager for servers and desktop services for Edmonds CC. "Our HPE environment was very complex," he noted. "We were spending too much time keeping track of all of the firmware and coordinating update sequences to keep the environment up and running."

SOLUTION

The IT team conducted an extensive study of solutions, comparing the cost and impact of replacing the existing HPE systems with updated versions of the same platform, switching everything over to the cloud, or moving to a hyper-converged infrastructure. "Our Dell EMC sales rep suggested we look at the Nutanix Enterprise Cloud Platform," noted Halverson. "We briefly studied other vendors' solutions, but Nutanix was the only hyperconverged infrastructure that supported Hyper-V at that time."

Edmonds CC purchased its first 5-node Nutanix on Dell EMC XC Series cluster through Dell EMC. "We didn't run a proof of concept, because we needed to get everything up and running before the HPE equipment was out of support," added David Voogd, IT analyst at Edmonds CC. "Nearly 80% of our virtual machines are now running on Nutanix, including our administrative file servers, MS SQL servers, Active Directory, and Linux systems."

RESULTS

Smaller Datacenter Footprint and Power

"Several years ago, our server room environment had expanded into over 10 server racks and across two adjoining server rooms," explained Halverson. "Networking, electrical wiring, power management, and cooling were all becoming a logistical nightmare. My VP and I came up with an idea to see if we could qualify for an Energy Reduction incentive program. A representative from our local energy company came in and ran some numbers of energy usage and potential savings, and the results were very positive. We were able to reduce our 100+ individual physical servers from 10 server racks down to 4 racks, and virtualize 80 of our 100 servers onto 12 physical blades attached to two 10U SANs. The energy savings was way beyond what we had anticipated. It also cut our server room footprint and our need for cooling in half. "

"Nutanix Support is the gold standard for any technology support that we use. They are head and shoulders above everyone else."

- Rod Halverson, IT Manger for Servers and Desktop Services (SDS), Edmonds Community College.



Management Simplicity

"Nutanix solved all of our maintenance issues," said Halverson. "Managing the previous environment was very time-consuming. Not only did we have to perform updates on all of the servers, storage, and switches separately and in exactly the correct sequence, we had to make sure all firmware versions were compatible with each other. With Nutanix, we don't have to worry about that anymore. We still have to perform firmware updates, but because everything is incorporated into one same system, it eliminates the need to create and follow complex compatibility matrices."

Better Performance

Edmonds CC's administrative users have noticed significant performance improvements since moving to the Nutanix platform. "We received positive feedback from several departments, saying that their servers were much more responsive after the cut-over," said Halverson. "We didn't change the specs on any virtual machines, we just migrated them from the old environment to Nutanix. Our DBA reported that his SQL server was responding much quicker than before, and our network admin remarked that the software package he was running was 'far less sluggish' than on the HPE systems."

Increased Reliability

"Lack of reliability was one of the biggest issues with the HPE SAN systems," said Voogd. "We were losing hard drives several times per week. We received refurbished HPE hard drives as replacements, and they typically failed within a year. The Nutanix systems are extremely reliable. We haven't had a single outage since we deployed the systems."

NEXT STEPS

Edmonds CC is now planning to move its students' educational services to Nutanix. "One of the things we are considering for the 'next evolution' of our IT infrastructure, is adding more cloud integration with AWS or Azure," Halverson explained. "Nutanix gives us the flexibility to easily extend out to the cloud, and back if we choose. We didn't have that ability with our standalone HPE servers. We're also interested in utilizing Nutanix at some of our other campuses, by creating an internal cloud sharing resource. It's something we tried to do in the past using our existing server resources, but it was far too complicated. With Nutanix, it looks like it's finally going to work for us!"

Final Thoughts

"The benefits of Nutanix solution were similar in magnitude to what we achieved when we initially moved into virtualization," concluded Halverson. "By eliminating the two SANs and both blade chassis, we were able to cut our server storage down to two separate racks, while increasing performance and storage capacity. I am very enthusiastic on what this new hyperconverged technology will bring us. The idea of spanning our local campus over to other colleges is something we've been talking about for years, but has always been cost prohibitive. This Nutanix technology will definitely be able to provide us with the redundancy across WANs that we have been striving for."



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COMPANY

Edmonds Community College (Edmonds CC) is located in Lynnwood, Washington, with more than 1,500 faculty and staff and 11,000+ students.

INDUSTRY

Higher Education

BUSINESS NEEDS

Existing HPE blade servers and EVA 4400 SAN storage systems were reaching end of support. Edmonds CC wanted to find a solution that was more reliable and easier to manage.

SOLUTION

Purchased Dell EMC XC730xd-12 systems with the Microsoft Hyper-V hypervisor

BENEFITS

- Simplified system management and upgrades
- > Improved application performance
- Increased reliability of administrative applications

Nutanix makes infrastructure invisible, elevating IT to focus on the applications and services that power their business. The Nutanix enterprise cloud platform leverages web-scale engineering and consumer-grade design to natively converge compute, virtualization and storage into a resilient, software-defined solution with rich machine intelligence. The result is predictable performance, cloud-like infrastructure consumption, robust security, and seamless applications. Learn more at www.nutanix.com or follow us on Twitter@nutanix.

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