Western Washington University Selects Nutanix

CHALLENGE

"One of my biggest challenges as an IT director is that infrastructure funding is always a struggle," said Jon Junell, Assistant Director of IT at Western Washington University. "When we do make investments, they're usually large, flashy, and expensive new projects. When we finally get budget approval to upgrade our existing infrastructure, we usually buy 100% of what we might eventually need upfront, since we can't be sure we'll get additional funding when we need it. If we underestimate the project scope, we can encounter serious pinch points down the road if there isn't budget to expand."

WWU was relying on several aging HP EVA SAN arrays that were reaching end-of-support. "The HP systems were providing the 'blazing speed' of 800 IOPS, which an inexpensive flash drive probably could do today," noted Junell. "We were also spending a lot of time on SAN maintenance. Our virtual servers were outstripping our needs for compute power and our storage was lagging behind. As a result, we ended up with an unbalanced environment."

SOLUTION

Junell and his team started searching for options to replace the aging HP infrastructure two years ago. "We looked at solutions from Pure Storage, Nimble, Tintri, and IBM, but we kept coming back to the same conclusion--that we were only addressing the storage half of our problem," he explained. "If we just upgraded the storage, we were still going to have to deal with all of the aging fiber, SAN switches, and all of that other stuff that isn't fun to manage. By choosing Nutanix, we could solve all of our compute, network, and storage challenges with a single appliance. Nutanix makes all of that extra infrastructure invisible. That's what convinced us to go with Nutanix."

Great Service

"We have a really good relationship with the Nutanix team," Junell said. "They call us on a regular basis, not just to sell us new equipment, but to tell us about all of the new features that are available. Our excellent relationship is one of the great side benefits of choosing Nutanix."

WWU is now running all of its virtualized workloads on Nutanix, including the University's central SQL database servers, external web site, MS Office 365 suite, unified communications, document management, authentication, federation services, and Banner ERP system. "We are even running our Drupal, Docker, and Splunk applications on Nutanix," Junell added. "The only thing we aren't running on Nutanix yet is our old security camera server which is on a physical box, and our student health record system. We are planning on virtualizing that system and moving it to Nutanix in the next go-round. In total we have 278 VMs on our Nutanix cluster."

"Nutanix gives us a lot of flexibility and options. It's great, invisible infrastructure with really good support. Nutanix is second to none."

– Jon Junell, Assistant Director of IT, Western Washington University

NUTANIX™
Your Enterprise Cloud Platform

The Nutanix deployment and migration processes were very simple and non-disruptive. "It was a big undertaking, but our end users didn't even know we migrated since we had zero downtime. That made our IT team look awesome!" admitted Junell.

RESULTS
Smaller Footprint and Less Power
"The amount of infrastructure we were able to pull out was amazing," Junell reported. "We consolidated 4 racks of equipment down to just 6u of Nutanix. That system is only using one quarter of the power of the previous SAN and front-end. It's not a huge dollar savings, but power is power, and WWU is always trying to go green. If someone wants to move all of our offices to a tiny room at the top of the library, all of the Nutanix equipment can fit in a shoebox now because it's so consolidated and dense."

Easier Upgrades
"I also like the way upgrades roll out so effortlessly with Nutanix," explained Junell. "I just open Prism, click on the upgrade, and it's done. Right now we're running VMware 5.5 and we will be moving to 6.5 very soon. It's going to be a really painless process with Nutanix, because Prism can even manage the VMware upgrades."

More Flexibility and Linear Scalability
"I really appreciate having a flexible platform, because future provisioning is always a 'best guess' with IT," explained Junell. "Nutanix provides us with the ability to purchase storage modules incrementally. Now when new projects come in, I can say, 'This is exactly how much it will cost to add capacity, and I know it will work.' When you buy a SAN from HP, you can't upgrade it in steps. We even had to license the slots for the disks. That's insane. I bought the thing, it's sitting in front of me, and they are telling me I have to feed it some license codes so I can get the functionality that's already on the box? Whereas with Nutanix, I can easily add modules, and I automatically get more functionality with every patch or upgrade. There's instantaneous value-add with Nutanix."

Simplified Management
Junell was spending more than 20 hours per week managing the HP servers and storage. "With HP, any kind of disk management is a pain. It would always take a couple hours to get everything set up and working correctly. And when the drives failed, we had to call HP, keep our fingers crossed, and we'd eventually get a disk shipped to us if we were lucky. In contrast, Nutanix will say, 'You may not have noticed, but we just saw something in your environment and we've already sent you the new part. You can install it yourselves, or we can send a technician out — whichever way you are more comfortable."

"We are running with a very staff-lean IT team at WWU," noted Junell. "I have four engineers that report to me, but I am also a half-time engineer since I run all of our Skype infrastructure. With such a small team, we don't have a lot of time to fiddle with our infrastructure. That's why we invested in Nutanix, it makes it much easier for us to do our jobs."

"WWU is using Prism Pro to manage the Nutanix clusters. "With Prism we can easily see our storage usage in one glance", Junell said. It makes monitoring your storage, cpu and memory runways very easy and aids in capacity planning proactively. The proactive approach to capacity planning prevents surprises. The runway optimization recommendations, which are available with a single click also help hunt for dead or overprovisioned VMs. Being able to manage our upgrades with a few clicks from Prism saves the team valuable time.

WWU's IT team recently upgraded all of the SSDs in its Nutanix cluster. "The process went quickly, and didn't affect any of our end users — there was no performance degradation at all," said Junell. "The non-disruptive upgrades are great, because it's really difficult to negotiate downtime for a lot of our key applications. With Nutanix, we can upgrade at any time. That kind of flexibility is really important for keeping our systems up to date."

Faster Performance
"Our old infrastructure was extremely slow," admitted Junell. "Nutanix is literally night and day faster, since the SSDs are hundreds of times faster than spinning disk. It is still amazing to watch our machines reboot instantaneously."

WWU is now running its Skype application on Nutanix. "We have 24 servers in our Skype environment," said Junell. "The application is working so much better on Nutanix. We are currently supporting 300 Skype end users and we plan to add another 3,000 in the next few months. Nutanix is enabling us to scale that environment rapidly, with great performance."

Added Protection
Two years after acquiring its first Nutanix system, WWU's IT department received funding for additional infrastructure. "Since the Nutanix systems have continued to work so well since the first deployment, we decided to purchase another system for our second data center. With two systems, we can take snapshots of our VMs in one location every night, and send them to the other datacenter for redundancy. By moving to Nutanix, we were able to overhaul our entire virtualization environment and it works amazingly well. The only downside is that it works so well, nobody ever talks to us anymore!"

NEXT STEPS
"I'd love it if we could purchase a third Nutanix system and install it at a separate site for disaster recovery. We could also attach our Nutanix systems to the Azure Cloud and use the Azure Site Recovery options for site-to-site resiliency. Nutanix gives us a lot of flexibility and options. It's great, invisible infrastructure with really good support. Nutanix is second to none," concluded Junell.

COMPANY
Western Washington University (WWU) is located in Bellingham, Washington. It is the northernmost university in the contiguous United States and currently enrolls over 15,000 students.

INDUSTRY
Higher Education

BUSINESS NEEDS
WWU was getting ready to refresh its aging HP EVA server and storage environment. The University's central IT team wanted to find a solution that provided higher performance, more reliability, and easier management.

SOLUTION
› Nutanix Enterprise Cloud Platform

› Prism Pro 5.0 management solution

BENEFITS
› Increased visibility with a single pane of glass view into all systems

› Eliminated 20 hours per week of storage and server managements

› Gained the ability to perform one-click, non-disruptive up-grades

› Consolidated 4 racks of traditional infrastructure to just 6u of Nutanix

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 application mobility for a broad range of enterprise applications. Learn more at www.nutanix.com or follow us on Twitter@nutanix.

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