Upgrade to Nutanix Improves
Application Performance,
Simplifies Data Management,
and Reduces IT Costs for
Forest County, Wisconsin's
Largest Employer

Forest County Potawatomi Tribe Chooses Nutanix Enterprise Cloud



CHALLENGE

Bill Connor is an IT infrastructure lead for the Forest County Potawatomi Tribe. He and his team of IT professionals are responsible for keeping the tribal data center and network systems online and operating efficiently, and presenting a consistent, positive end-user experience across all physical, virtual, and mobile devices.

"As a tribal government operation, we operate like any municipality," Connor explained. "We have our own water and sewage, insurance, accounting, forestry, land, and natural resources departments—each with its own IT needs. For instance, our forestry department uses GIS for their mapping and spatial applications, and our water and sewer department relies on a SCADA system for the tribe's water and wastewater functions. Most of our departments use Microsoft Share-Point and SQL Server. The tribe also has a large Health and Wellness Clinic that employs many doctors and other medical staff to provide healthcare to the tribe, employees, their families, and other members of the community. This clinic has many specific healthcare applications that require IT resources. And finally, our IT organization has its own set of applications, including Solar-Winds IT management software, Cisco Identity Services Engine (ISE), certificate services, and Splunk for log management."

The Forest County Potawatomi Tribe had been relying on mix of aging IT infrastructure from multiple vendors, including HP virtualization hosts and EVA storage arrays, a Dell/EMC VNX 5400 SAN, and Cisco UCS hosts, using VMware's vSphere hypervisor. "We had a lot of challenges with storage management before moving to Nutanix," admitted Connor. "With our previous 3-tier infrastructure, we used to have to create and manage a lot of LUNs. Due to all of the complexity, we had one IT admin that was solely dedicated to managing storage full-time."

"Nutanix Enterprise Cloud is the ideal choice for any tribe that doesn't want to hire specialized IT staff and buy all sorts of expensive infrastructure to support their governmental operations."

- Bill Connor, Enterprise Infrastructure Architect, Forest County Potawatomi Tribe

SOLUTION

The Potawatomi Tribe started looking for dedicated infrastructure for its upcoming VMware Horizon project in 2016. "Nutanix was getting a ton of good reviews in the press, and a lot of people in the tech sphere were talking about how easy it was to scale and maintain," Connor reported. "After reviewing the product literature and checking with several Nutanix references, we came to the conclusion that it would be the perfect fit for our upcoming VDI deployment."



Getting Started

The Potawatomi Tribe purchased its first Nutanix system in 2016 and conducted a proof of concept on VDI using that cluster. "The Nutanix deployment was quick and easy, and the PoC went very well," Connor said. The Forest County Potawatomi Tribe now has two Nutanix clusters—one was deployed at the tribe's main datacenter in Crandon, Wisconsin, and a second cluster was placed in Milwaukee for additional production and disaster recovery workloads.

"We're not here to be a 'flashy IT department' that exists for our own sake, we're here to enable high-quality services and applications for the tribe," explained Connor. "I don't I want to spend my time managing hardware and software, I want to work on cool things that enable higher productivity for the tribal employees. Nutanix is the platform that is enabling us to accomplish those goals."

RESULTS

Eliminating Storage Management

"Our storage admin was spending 40 hours per week just managing our legacy HP systems," Connor said. "We really don't have to manage Nutanix at all. That dedicated admin is now able to work on more strategic projects, including improving Quality of Service (QoS), enhancing security, and providing better desktop support for our 600+ end users."

3:1 Reduction in Datacenter Footprint

The Potawatomi Tribe was also able to save significantly on data center foot-print and power. "By migrating from our legacy infrastructure to Nutanix, we were able to eliminate nearly an entire rack of infrastructure that was dedicated to our EVA storage and hosts," noted Connor. "Moving from a 3-tier environment to Nutanix's hyperconverged architecture enabled us to consolidate everything into just one third of a rack, saving on datacenter space, power, and cooling costs going forward."

Easier Upgrades

"With our legacy HP infrastructure, we used to have to bring all of our systems down for an extended period of time to make any changes," explained Connor. "Since we had to do everything manually, upgrades were always a several day process, and everything had to be done outside normal working hours to avoid service disruptions for our end users. Everything is much easier on Nutanix. I just click a button and the upgrades work automatically without any downtime."

Higher Performance

"We just did an Exchange migration from our legacy hardware to Nutanix with Exchange 2016 running in hybrid mode," noted Connor. "Nutanix Prism provides a nice pie chart that shows where all the reads are coming from. We were amazed at how much was coming straight out of local memory and SSD, compared to what was coming out of HDD on the old SAN. It's a great indicator of Nutanix's high performance."

Obtaining Public Cloud Agility for On-Premises Workloads

The Potawatomi Tribe is running a few workloads in the public cloud, including Microsoft OneDrive, an Office 365 deployment used as a test environment, and Microsoft's Sway presentation program, but choosing to keep most of its workloads on-premise. "Our tribal management is not completely against moving workloads to the public cloud, but they do like the idea of having the data underneath their tribal sovereignty—using on-premise infrastructure on their sacred land. Nutanix gives us all of the simplicity and scalability of the public cloud, with the ability to keep all of our cultural and tribal data in our own datacenters."

NEXT STEPS

The Potawatomi Tribe has many IT projects planned for the coming year. "Now that we aren't spending so much time managing infrastructure, we can tackle new projects," said Connor. "We plan on ramping up our VMware Horizon View VDI project from 30 IT users to 500 desktops running on Nutanix. After we finish that, we will focus on getting a highly available, redundant fabric stretched between our two data centers. We already have Nutanix hardware and VMware vSphere at both locations, and plan on implementing Nutanix DR to make our infrastructure more reliable, pliable, and agile."

Recommending Nutanix to Other Tribal Organizations

"There are over 550 federally recognized Indian tribes, bands, nations, pueblos, rancherias, communities, and Native villages in the United States, each with different levels of IT maturity and income levels," explained Connor. "Some of the larger tribal organizations—especially those with casinos—have substantial IT budgets, but there are a lot of smaller ones with limited funds for IT infrastructure and management. Nutanix Enterprise Cloud is the ideal choice for any tribal organization—large or small—that doesn't want to hire specialized IT staff and buy all sorts of expensive infrastructure to support their operations. Our confidence in cost-effectively delivering a high performance, highly available, and redundant data center has been boosted by moving to Nutanix," concluded Connor.



T. 855.NUTANIX (855.688.2649) | F. 408.916.4039 info@nutanix.com | www.nutanix.com | \(\mathbf{y} \) @nutanix

COMPANY

The Forest County Potawatomi have lived in Wisconsin since the late 1800s. The Potawatomi Tribe's governmental organization is now the largest employer in Forest County with over 600 employees.

INDUSTRY

Tribal government

BUSINESS NEEDS

Need new data center and VDI infrastructure to optimally deliver key tribal government services for the community.

SOLUTION

- > Nutanix Enterprise Cloud
- Acropolis Software
- Prism management infrastructure
- VMware vSphere and Horizon virtual desktop infrastructure
- Microsoft SQL Server, Exchange, and SharePoint
- Splunk Enterprise
- > SCADA software

BENEFITS

- Eliminated need for dedicated storage administration resources —freeing time for more strategic activities
- Increased performance of tribal applications and virtual desktops, improving employee productivity
- Increased service uptime through non-disruptive 1-click upgrades
- Substantially lowered both CapEx and OpEx compared to 3-tier solutions
- Reduced data center costs and footprint from one rack to 1/3 of a rack

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

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