Photonics Leader Gains Efficiency, Simplicity, and Scaling On-Demand for SAP and SQL Server Applications

Excelitas Selects the Nutanix Xtreme Computing Platform for Mission-Critical Applications



CHALLENGE

"Our teams were under pressure to deliver new environments quickly, but we didn't always have enough budget to purchase all of the infrastructure they need," noted Robert Ersoni, Vice President of IT Infrastructure & Security, Excelitas. "As a result, we were always pushing our virtual environments to their limits. We also faced a consistent battle in regards to the amount of capacity we needed. We had to make sure the environments were sized for several years of growth, but the extra capacity often evaporated within the first year because we were growing faster than our projections. We had to over-provision hardware, so we'd have enough capacity if we needed to failover any of our systems. Fast growth is a good problem to have—but we were tired of spending hundreds of thousands of capital dollars upfront and not utilizing all of that capacity for two or three years."

Excelitas had virtualized its environment using the VMware vSphere hypervisor, and was relying on a 3-tier storage and server environment with EMC, NetApp, HP Proliant servers and HP-UX based HP9000 systems. "Due to a series of acquisitions, we ended up with a lot of dissimilar hardware," noted Ersoni. "Sometimes we standardized the new environments, but it often made sense to continue to use the newly acquired systems. As a result, managing the heterogeneous, 3-tier environment was very complex and time-consuming for our IT team."

CHOOSING NUTANIX

Ersoni and his team began the search for a new storage and server platform in 2014. "I had been watching Nutanix for quite a while, and I liked what I was seeing," he admitted. "Nutanix is displacing all of the traditional thinking on stand-alone storage arrays with a hyperconverged storage, network, and server infrastructure solution. The more we looked at what Nutanix was doing, it made even more sense. We asked for a demo box to see how the systems performed in our environment, and the rest is history."

Excelitas purchased the Nutanix Xtreme Computing Platform (XCP) NX-1000, NX-3000, NX-6000, and NX-8000 series, which have now been deployed at nine Excelitas locations across Canada, the United States, and Europe. "We made the decision to move to Nutanix primarily for benefits our end users don't even know about—nor should they," explained Ersoni. "From a user perspective, IT infrastructure should be like electricity: you just flip a switch and the lights go on. Our job in IT is to optimize all of our infrastructure and applications in the background, so everything runs efficiently and cost-effectively. Nutanix enables us to be the 'lights always on' guys."

"Ever since we put the first Nutanix systems into place, we've never looked back. We will continue to add more nodes on a regular basis. Nutanix is a true partner in every sense of the word."

- Robert Ersoni, Vice President of IT Infrastructure & Security, Excelitas





EARLY ADOPTERS OF VIRTUALIZATION AND HYPERCONVERGED SYSTEMS

Excelitas virtualized all of its business-critical workloads more than five years ago. "We were early adopters when it comes to virtualization of our critical applications," Ersoni said. "It enables us to keep our applications portable, without having to worry about the underlying infrastructure. Virtualization also increases resiliency, data protection, and provides the ability to take snapshots our infrastructure for disaster recovery."

In addition to being early adopters of virtualization, Excelitas was quick to move to the new hyperconverged platform. "I had a boss that said 'you won't get fired for sticking with technology that worked in the past'—but you probably won't get promoted either," Ersoni said. "If I hadn't questioned the status quo, I never would have tried VMware or Nutanix. Both decisions were transformative for our organization.

RUNNING MULTIPLE WORKLOADS ON NUTANIX

Excelitas is now running mission-critical production workloads on the Nutanix systems, including its SAP ERP Suite, Microsoft SQL Server, Dynamic AX, Oracle/Hyperion Financial Planning Manager, MS Exchange with over 4,000 mailboxes, Microsoft Lync 2013, and various network services, including Windows Active Directory.

"Nutanix is now supporting our most critical VMs," noted Ersoni. "We are also using Nutanix to provide disaster recovery for our SAP environment, where SQL replication is taking place hourly from one Nutanix node in West Coast to our secondary production system on the East Coast."

Before moving its applications onto Nutanix, Excelitas had to over-provision its storage and server environment to ensure there was enough capacity for end users and disaster recovery. "We used to have to buy a 20 to 40 TB SAN upfront, and then add shelves year-over-year to accommodate growth. With Nutanix, I can just buy one node at a time without making huge upfront capital investments. It gives us the ability to start small and scale on demand. Nutanix dramatically simplifies the scaling story."

EASIER MANAGEMENT

The standardization of Nutanix XCP has made it easier to plan, deploy and manage all critical applications. "The simplicity of having one infrastructure platform to manage and support is hugely advantageous to us. This approach is vital as we continue to widen our global reach, it allows our stretched IT resources to accomplish more in less time," Ersoni said. "What really swung the decision to move to Nutanix is the high performance we get from the XCP systems, and the benefits we get from having a converged infrastructure as we scale our virtualized systems."

"We gained a lot of efficiency on the backend with Nutanix. Since the hyperconverged environment is streamlined from a connectivity perspective, it reduces management overhead and help us close the gap between IT resources and meeting business requirements. Our previous environment was very complex with all of the different systems and cabling. Our engineers were spending a lot of time managing the network, the storage arrays, and all of the server infrastructure—patching the systems and making sure everything was up-to-date. All of this complexity went away with the Nutanix solution. Their focus is now towards designing the environment to be more efficient and resilient, and identifying the right way to use our infrastructure to improve application performance and availability."

GAINING BETTER VISIBILITY WITH PRISM

"The Nutanix Prism management interface provides the level of visibility that I needed," noted Ersoni. "From an executive perspective, I don't have to know if we are utilizing 30% of our capacity or running low on memory, my team is responsible for tracking that. My job is to make sure the business units are getting what they need to make the company successful. But I must admit, I am still a techie at heart and I love to see what's going on in the environment. With just one click from the Prism dashboard, I can immediately see the overall health of the Nutanix environment. Several of our top executives are also quite interested in technology and want to know more about what's going on 'behind the curtain'. With Prism, the information I need to provide them is always at my fingertips."

Excelitas has a corporate IT management team that manages the centralized infrastructure, with several IT administrators working from each site. "That's the beauty of having Prism, it provides us with a lot of IT flexibility. We can manage the environment centrally, but we also have the ability to manage the systems locally."

SMALLER NUTANIX FOOTPRINT LEADS TO POWER AND COOLING SAVINGS

Nutanix also enabled Excelitas to reduce its datacenter footprint and power consumption. "We went from three full racks of equipment in our old environment, to just one fifth of a rack of Nutanix. This is a huge benefit for our data centers, especially in the locations where heat was an issue. All of those sites are much cooler now since Nutanix is much more energy-efficient."

NUTANIX AS A BUSINESS PARTNER

"With Nutanix, the level of engagement and commitment of support resources is consistent with a company that wants to be our partner, as opposed to one that's just trying to sell us boxes," said Ersoni. "The team is focused on making sure it's the right solution for the problem we are trying to solve, not just closing the deal. Overall, the engagement and ease of working with the Nutanix team has been fantastic."

"Nutanix is always there for us—not just during the design phase of the environment, but all the way through to the final deployment," Ersoni explained. "The initial handoff must have happened at some point, but I never noticed it. Nutanix works closely with all of my team members, no matter what time zone they are in. That's a big reason why we continue to work with Nutanix—the XCP technology is incredible and the level of support has been outstanding. Ever since we put the first Nutanix systems into place, we've never looked back. We will to continue to add more nodes on a regular basis. Nutanix is a true partner in every sense of the word."



Company

Excelitas Technologies Corp. is a global technology leader focused on delivering innovative, high-performance, marketdriven photonic solutions to meet the lighting, detection and other technology needs of global customers. From biomedical technology to research laboratory, safety and security, consumer, semiconductor, industrial, energy and environment, as well as defense and aerospace applications, Excelitas Technologies is committed to enabling our customers' success in their endmarkets. Excelitas Technologies has approximately 5,500 employees in North America, Europe and Asia, serving customers across the world.

Industry

Manufacturing

Business Needs

Needed a high performance storage and server platform that is highly available and easier to manage and scale for fast growing mission critical applications

Solution

Nutanix Xtreme Computing Platform (XCP): NX-1000, NX-3000, NX-6000, and NX-8000 Series

Benefits

- Eliminated the need to overprovision storage
- Obtained a 15x reduction in data center footprint
- Significantly reduced overhead needed to manage infrastructure

Nutanix delivers invisible infrastructure for next-generation enterprise computing, elevating IT to focus on the applications and services that power their business. The company's software-driven Xtreme Computing Platform natively converges compute, virtualization and storage into a single solution to drive simplicity in the datacenter. Using Nutanix, customers benefit from predictable performance, linear scalability and cloud-like infrastructure consumption. Learn more at www.nutanix.com or follow us on Twitter@nutanix.

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