



NOL-TEC SYSTEMS MODERNIZES IT

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INDUSTRY

Material Handling/Control Systems

LOCATION

Lino Lakes, Minnesota

KEY CHALLENGES

- Replace aging infrastructure and legacy data center designs
- Build an agile IT organization to deliver better services to the business
- Improve network security and reduce the risk of a breach
- Simplify endpoint management and improve end-user experiences

SOLUTION

With aging equipment in its data center, Nol-Tec Systems needed to get ahead of the curve and prepare for new challenges coming at the business. The company decided to modernize IT with VMware Cloud Foundation™, an integrated software platform that provides a complete set of software-defined services for compute (VMware vSphere®), storage (VMware vSAN™), and network virtualization (VMware NSX® Data Center) with cloud management and monitoring (VMware vRealize® Suite). The company is also looking to deploy VMware Workspace ONE® to give employees integrated digital workspaces.

As industry continues to transform the world with new advances and conveniences, it's critical to continually respond to potential environmental impacts. Nol-Tec Systems helps companies worldwide bring their industrial processes into the 21st century and keep communities safer by controlling emissions and making sure potentially hazardous materials are handled properly. For years, Nol-Tec ran a lean IT team, using VMware vSphere to enable two administrators to manage its entire infrastructure. However, as servers, storage, and networking equipment aged, the company sought greater resiliency, flexibility, and visibility. Nol-Tec also wants to give traveling employees more secure digital workspaces so they can better serve clients worldwide.

With procurement assistance from CDW and deployment services from VMware Professional Services, Nol-Tec deployed VMware Cloud Foundation in just 3.5 days to enable a fully automated private cloud based on a VMware Validated Design™.

Founded in 1983, Nol-Tec Systems is a global leader in process systems engineering with nearly 100 employees. Nol-Tec provides custom solutions, aligning with manufacturers, materials processors, and electrical generators to deliver the highest quality material handling and control solutions.

The Challenge

Nol-Tec serves customers around the world in diverse industries, including pharmaceutical, tire and rubber, and food. Often, Nol-Tec designs and assembles industrial equipment before shipping it to customer sites, making it critical for IT to provide high availability for engineering, manufacturing, supply chain, and customer relationship management (CRM) applications. With aging infrastructure in its data center and hardware coming off of support, Nol-Tec wanted to modernize IT so it could continue to provide the same excellent services without adding substantial headcount to its team. It also wanted to improve its security posture and reduce risk using network micro-segmentation.

“We wanted to empower IT to more proactively address business needs and be less in the mode of reacting to system issues,” says Dustin Plank, IT manager at Nol-Tec Systems. “We needed an integrated solution that would simplify our IT infrastructure, save us time in patching and maintenance, and bring us forward from our aging data center technologies.”

“With VMware Cloud Foundation, the time to implement the system is very quick. SDDC Manager makes deployment faster and simpler, with just a click of a button.”

DUSTIN PLANK
IT MANAGER
NOL-TEC SYSTEMS

BUSINESS BENEFITS

- Deploys 7x faster—3.5 days versus 5 weeks to install separate products
- Centralizes management and enhances visibility across servers, storage, and network
- Automates lifecycle management, freeing IT team from tedious patching and upgrades
- Helps ensure software interoperability and consistent configuration with a validated design
- Enhances network security with micro-segmentation

The Solution

Plank worked with top executives at Nol-Tec to establish a three-year plan for IT transformation that would culminate in moving production to a private cloud at a colocation facility, using onsite legacy hosts only for backup and basic test/dev functions. With the goal of building a software-defined data center (SDDC), Nol-Tec considered integrated infrastructure solutions from several vendors, including VMware and HPE.

Nol-Tec chose VMware Cloud Foundation, an integrated software solution that provides everything the company needs to build and manage a fully automated private or hybrid cloud. A VMware Validated Design helps ensure software interoperability and consistent configuration between the virtualized servers (vSphere), storage (vSAN), and network (NSX Data Center). vRealize Suite provides cloud management and monitoring capabilities, while VMware SDDC Manager simplifies deployment and lifecycle management. Using commodity hardware for virtualized storage reduces costs and improves scalability, while security is enhanced with vSphere encryption, vSAN encryption, and NSX Data Center micro-segmentation.

“Initially, I thought VMware Cloud Foundation might be too much for a company of our size, but I quickly realized that it solved everything that we needed to do,” says Plank. “Instead of just getting hosts and some storage, we also got network micro-segmentation to keep our systems more secure and safe, along with complete lifecycle management capabilities.”

To achieve faster time to value, Nol-Tec enlisted CDW, a VMware HCI Partner of the Year, to size and procure the solution. It also engaged VMware Professional Services to perform a fast and smooth migration to VMware Cloud Foundation on four all-flash Cisco UCS vSAN ReadyNodes, with 14TB of storage per host.

“As a small IT shop, we don’t have the luxury of spending weeks or months to deploy,” says Plank. “With VMware Cloud Foundation, the time to implement the system is very quick. SDDC Manager makes deployment faster and simpler, with just a click of a button. Our experience with CDW and VMware Professional Services was wonderful. We deployed the whole stack in just three-and-a-half days. If we had decided to install separate products ourselves, it would have taken five weeks.”

Nol-Tec is now looking at VMware Workspace ONE to simplify endpoint management across mobile and desktop, and give traveling employees access to any app on any device. “We expect Workspace ONE to change the game for our employees, allowing them to be much more flexible in how they work,” says Plank.

VMWARE FOOTPRINT

- VMware Cloud Foundation
- vSphere 6.5
- vSAN
- NSX Data Center
- vRealize Suite
- SDDC Manager

APPLICATIONS VIRTUALIZED

Engineering, CAD, ERP, unified communications, file server and directory server applications

PLATFORM

Cisco UCS vSAN ReadyNodes (all-flash, 4 nodes, 70 VMs)

PARTNER

CDW

Business Results and Benefits

With VMware Cloud Foundation as a foundation for growth, Nol-Tec benefits from centralized infrastructure management and enhanced operations visibility, all with a familiar VMware interface. Automated lifecycle management frees IT staff from time-consuming patching and upgrades, giving them more time to work on new services and innovate to solve business problems. Network security policies are more robust and granular, giving Nol-Tec additional protection against threats. Moreover, the cost of VMware Cloud Foundation was less than the alternative of replacing old hardware and software, and continuing to operate with outdated processes.

“Since moving to VMware Cloud Foundation, the excitement we have in our IT department is tenfold what it used to be,” says Plank. “We can upgrade or expand the entire system in a matter of hours or days, instead of it taking us several weeks. Having VMware Cloud Foundation has made us more strategic and forward-thinking. As Nol-Tec grows, IT can now be more proactive for the business.”

As the company looks to digital workspaces supported by Workspace ONE, the goal is to enable traveling engineers with a choice of device and to be more flexible and efficient in how they serve customers worldwide, while IT staff can save time on endpoint management.

“We are an international company, and Nol-Tec sends engineers all over the world to work for our customers,” says Plank. “Workspace ONE would give them everything they need to be productive from wherever they are.”

Looking Ahead

In addition to adopting Workspace ONE, Nol-Tec soon plans to expand its VMware Cloud Foundation environment, add more vSAN ReadyNodes to specifically support VMware Horizon®, and use Horizon to give employees access to complete virtual desktops, using NSX Data Center to enable fast and more secure networking with security policies that follow virtual desktops.

“By using Workspace ONE, Horizon, and VMware Cloud Foundation together, we’ll be able to give our engineers the most convenient and secure means to run their apps and workloads from anywhere,” says Plank. “We’re also looking forward to using VMware solutions such as AppDefense to further secure our environment.”

