

AEROSPEC

Leveraging simple, efficient, and affordable EMC VNXe and VMware solutions to make quantum gains in data access and availability



ESSENTIALS

Challenges:

- Data access and reliability
- Redundant data

Solutions:

- EMC VNXe
- VMware

Key benefits

- A single unified storage solution protects information and makes it easily accessible from any application
- Information access is now two times faster
- Storage utilization has improved by 75 percent
- Provisioning storage and creating virtual machines can be done in under one minute
- Ongoing server and storage management time has been reduced by 80 percent
- Scalability can be leveraged to meet future requirements
- Exceptional ROI: pays for itself in one year

Established 29 years ago, AeroSpec (www.aerospecinc.com) designs, develops, and manufactures a wide range of automated and semi-automated production equipment for manufacturing processes. With a staff of 45 professionals, AeroSpec's "sought after" status as a preferred provider can be attributed to its strong focus on customer service, technical excellence, and quality.

AeroSpec's constant focus on excellence drives all processes: from pre-sales to design, to the development of turnkey solutions that improve the quality and cost-effectiveness of its customers' production capabilities.

"We pride ourselves on fully understanding our customers' business requirements, and build solutions that exceed their expectations," says Erich Becker, AeroSpec's director of Information Systems. "Our bigger competitors don't offer this level of service. Nothing leaves our building without meeting stringent quality standards."

THE CHALLENGES: DATA ACCESS AND RELIABILITY

AeroSpec's IT department was looking at making improvements in three areas: seamless data access, improved data availability, and eliminating data redundancy.

"Our existing IT configuration included a rack of servers and direct attached storage in which each server had its own unique storage," explains Becker. "Data availability, data redundancy, and backup processes were always potential problems that I was worried about. AeroSpec is a 'lean engineering' company. We have hundreds of thousands of digital engineering drawings on our old racked system, and data access and performance is everything. If we have a data outage, if data is slow to access, or not available at all, we cannot provide our engineers, manufacturing staff, and customers with the service levels that we promise. All of that can be costly to the company."

Becker, working with EMC Partner PC Connection, came up with a great solution: EMC® VNXe™ unified storage and VMware® virtualization solutions.

"We had a relationship with PC Connection and talked to them exclusively," Becker notes. "They recognized that we had not previously implemented either a SAN or virtual machines and they took that into consideration. We worked together and they then came back to us with an EMC solution that matched our needs. A solution that both PC Connection and EMC stood behind."

Becker took the proposal to AeroSpec's senior management.

“The approval came when I stated: ‘We build cutting-edge production equipment of the highest quality for our customers. We need to upgrade our IT technology, so why would we invest in anything less for our needs?’ I pointed out that EMC is used by some of the largest data centers in our area, and the EMC logo is everywhere. They agreed with my recommendation and we moved forward to implementation,” says Becker.

THE SOLUTION: EMC VNXe

Designed for the IT generalists in small and medium size businesses, the VNXe series provides a simple, application-centric approach to managing storage, and facilitates complete storage consolidation.

At the “click of a button,” customers utilize advanced functionality that has the best practices for VMware and Microsoft Hyper-V™ embedded within the storage itself. With application wizards, VNXe makes the intricacies of file deduplication, file compression, thin provisioning, and local/remote replication transparent to the user. VNXe simplifies storage management, improves utilization, helps customers lower their storage acquisition cost by up to 50 percent, and addresses inadequate backup and protection.

“We looked closely at VNXe and chose it because of its outstanding integration with VMware,” says Becker. “By using both products, VNXe and VMware, we made quantum gains in the efficiency of our IT infrastructure.”

INTUITIVE INSTALLATION AND DEPLOYMENT

While Becker had limited experience in virtual machine or SAN technologies, he noted that VNXe’s built-in VMware best practices and its intuitive Graphical User Interface made it quick and easy to provision storage for virtual machines.

“I installed everything—servers, VNXe, and VMware, and got it all up and running by myself over a two-week period of evenings and weekends,” states Becker. “That included data migration. I did it a piece at a time, and ran the older system in parallel until I was finished. We had no downtime or loss of production.”

“I started using VNXe as a novice, and had never worked with VMware, but the way that VNXe and VMware interact—and the assistance provided by the Wizards—made everything easy,” Becker adds. “Whether setting up a new virtual machine or provisioning storage with the VNXe, the Wizards simply ask you native language questions and with a few clicks of the mouse you are done. It’s that simple. In the old days, if we wanted to create a new test environment, we might have to order a new server and direct attached storage, then provision and deploy it. This could take weeks. With VNXe and VMware, I can create a test environment in a minute. That has saved us a ton of time and we no longer have to purchase new equipment.”

VNXE: THE BENEFITS OF QUALITY

Becker points out that VNXe reinforces AeroSpec’s commitment to quality.

“VNXe provides a number of benefits,” he says. “It’s twice as fast as our direct attached storage, and it allows me to maximize the utilization of storage space intelligently and as I require.”

SPEED AND PERFORMANCE

“With our critical applications virtualized across our new farm of servers and all VNXe-based information shareable to the virtual machines, our data availability and performance is twice as fast as our older systems. Plus it is much easier to manage,” says Becker.

AVAILABILITY

“VNXe is designed to have no single point of failure,” explains Becker. “That coupled with virtualizing our servers creates an environment that is highly available. This is vastly different than our old approach of dedicated servers with direct attached storage. If a server’s motherboard went down, or a disk drive failed, information access stopped. I love the flexibility of the EMC solution. VNXe looks like a cloud. I can easily move data around, and it was the solution’s highly available architecture that interested us in this in the first place. Things can always fail, but with VNXe there’s always a backup. We simply don’t have any downtime.”

STORAGE UTILIZATION

“We are seeing a 75 percent increase in storage utilization because we are using VNXe Thin Provisioning,” Becker notes. “VNXe allows me to easily allocate, or over-allocate, storage. However, VNXe automatically knows what we need for any data storage requirement, and makes unused storage available. All I have to do to use Thin Provisioning is to click a button. I didn’t have to learn the detailed technology behind it. I didn’t have to get into a command line or learn complex algorithms. VNXe’s Graphical User Interface makes it easy to use, particularly for a visually-oriented person like me.”

REDUCED OPERATIONAL COSTS

“With a completely virtualized environment, the time dedicated to ongoing storage and server management has been reduced by 80 percent,” says Becker. “With VNXe and VMware I can provision storage and create virtual machines in under one minute. Couple that with VNXe’s approach of aligning storage management with applications by embedding storage and application best practices into the user interface and we can complete everyday administrative tasks much more quickly.

EXCEPTIONAL ROI

“EMC VNXe will allow us to get payback in a year,” Becker relays. “Ease of use, quick access to critical data, and dramatic increases in application performance—all of this has helped us to save time and money.”

“Based on our research, we knew that the new information virtualization and consolidated technologies would help our business. We wanted to make a quantum leap in efficiency and we loved the fact that VNXe and VMware worked extremely well together. We tore out our old IT infrastructure and have replaced every single component of it with multicore servers, VMware, and EMC VNXe. By doing this we have dramatically cut operating costs and increased reliability, and data access is now twice as fast as before.”

ERICH BECKER, DIRECTOR OF INFORMATION SYSTEMS
AEROSPEC

FUTURE PROOF

“EMC VNXe provides AeroSpec with scalable technology that will meet our company’s future IT needs,” Becker says. “We’re currently managing about 1.5 TB’s of data, and I know that we’ll eventually have to add storage capacity to the VNXe to meet our growing data requirements. With VNXe, all you have to do is purchase more disks, and add them into the storage pool. It’s easy to do.”

ENDORSEMENT FOR EMC VNXE

Becker highly recommends EMC VNXe to other small and mid-size businesses for a wide range of reasons.

“Compared to our old IT infrastructure, VNXe is a dramatic upgrade,” he says. “In the past, I have bought solutions that looked good on paper but didn’t always work as expected. EMC VNXe exceeded my expectations; it does exactly what the literature said it would do and at a very attractive price. VNXe provides us with the speed and data availability that our growing business demands.”

“At AeroSpec, quality comes first and we require the same focus on quality from our IT vendors,” concludes Becker. “We partnered with EMC and PC Connection because they also believe in quality, and that’s a great testament to VNXe, EMC, and its partners. We established a relationship that I’m sure will be there for many years to come.”

CONTACT US

To learn more about how EMC products, services, and solutions can help solve your business and IT challenges, contact your local representative or authorized reseller—or visit us at www.EMC.com.

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