

# CIANBRO CHOOSES DELL EMC VXBLOCK SYSTEM TO DRIVE PROJECTS USING INNOVATIVE DIGITAL TECHNOLOGIES

## CIANBRO CORPORATION

### INDUSTRY

- Heavy construction

### SIZE

- Privately held construction and construction services company
- One of the top 30 employee stock ownership plan (ESOP) general contractors in the U.S.
- Operations in more than 40 states

## Challenges

- Aging IT infrastructure
- Desire to use IT to create innovative solutions and run leaner
- Need to upgrade production data center together with DR site

## Solutions

- Dell EMC VxBlock System 350 with Dell EMC Unity 300F All-Flash array
- VMware vSphere, virtualizing 98% of its environment
- Dell EMC VxRail Appliance

## Results

- Deployment of the VxBlock System in just three days
- Improved performance with processes that used to take two to three hours, now finishing in as little as 20 minutes
- More predictable, leaner operations costs
- Simplified management of routine tasks, allowing more time for creating innovative solutions and delivering business value
- Single-source support, eliminating finger-pointing



Founded in 1949 by four Cianchette brothers, Cianbro has grown into one of the largest privately held, 100% employee-owned construction companies in the U.S. Operating in more than 40 states and employing over 4,000 team members, Cianbro provides construction services and builds a wide variety of projects, including civil, structural, mechanical, and electrical—as well as offers instrumentation, fabrication, and coating services. The company can operate in different capacities with experience in construction management, design-build, construction manager/general contractor, and engineer, procure, construct (EPC) methods—in addition to the customary design-bid-build approach. Headquartered in Pittsfield, Maine, Cianbro is dedicated to consistently completing its work safely, on schedule, and within budget—regardless of the model used.

## The Challenge: an aging it infrastructure and a need for technology innovation

Like many businesses, Cianbro was faced with a rapidly aging IT infrastructure consisting of rack-based HP servers and spinning-disk SAN storage. Budget constraints had postponed investments in upgrades a number of times; so much of Cianbro's hardware was nearing end of life. The data center was also almost out of usable rack space.

At the same time, the company was seeking deeper integration of technology into its business. Construction companies have long relied on specialized heavy equipment and skilled craftsmen, with IT traditionally taking a back seat. Aware of rapidly emerging opportunities to use technology in its construction business in innovative ways—from computer-aided design (CAD) and 3D modeling to drones for surveying or inspections to smart hardhats with head-up displays and augmented-reality capabilities, Cianbro knew that it was critical to modernize its data center.

Adding to its technical challenges, the company's executive team and board of directors worried that Cianbro's largely tape-based backup and recovery solution was no longer adequate for a business of its size and complexity.

"Interestingly, the data center upgrade was not the original driving factor in this effort," said Ryan Deppe, Network Operations Supervisor for Cianbro. "There was concern that if something happened to our corporate data center, it might take weeks or months to rebuild everything. We soon realized that to create a true disaster-recovery (DR) solution, we needed to update our production data center with the latest technologies as well."

### The Solution: VxBlock System

After reviewing a number of converged and hyper-converged infrastructure options, Cianbro chose the Dell EMC VxBlock System 350 with a Dell EMC Unity 300F All-Flash storage array.

"Installing the converged VxBlock System allowed us to take a ten-year step forward in technology with a single purchase," Deppe commented. "By using the VxBlock System to transform our data center, we now have the ability to deploy new solutions in hours as opposed to weeks. This enables us to better support customers and end users, and drive increased business value."

Cianbro transitioned all of its workloads from the old HP servers and local SAN storage onto the VxBlock System. The new environment is approximately 98% virtualized—using VMware vSphere software to replace the multiple hypervisors the company had relied on—with a total of approximately 200 virtual machines (VMs).

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– Ryan Deppe, Network Operations Supervisor, Cianbro Corporation

All of the company's applications—those in production and under development—have been consolidated onto the Dell EMC Unity All-Flash array, providing a significantly improved experience for developers as well as end users. This includes Microsoft's SQL Server, SharePoint, and a variety of back-office applications. In addition, the company runs custom-designed ERP and materials management solutions on the VxBlock System designed to meet the specific requirements of construction firms.

The newly created DR site, situated in a colocation facility more than 1,800 miles away in the Midwest, runs on a hyper-converged-infrastructure Dell EMC VxRail Appliance.

### Deploying the VxBlock System within days

Because the VxBlock System was pre-integrated, tested, and certified in a Dell EMC factory before arriving at Cianbro's data center, the system was fully deployed and ready for production workloads within just three days. Dell EMC deployment and installation team worked closely with Deppe and his team of four during the process. Cianbro then started moving production workloads and development environments to the VxBlock System, with the entire migration complete within two months.

## The Results: faster processes, predictable costs, and strategic advantages

With technology today playing such a large and wide-ranging role in the construction business, Deppe and his team are increasingly supporting field personnel as much as back-office staff.

“Ten years ago, everyone relied on paper drawings,” explained Deppe. “Now, the vast majority of our projects are highly digitized. So, driving uptime has become critical for us. In addition, with operations across the country, we’re built more on a ‘follow the sun’ model, so our systems and services have to be available 24x7.”

Since the implementation of the VxBlock System powered infrastructure, Cianbro has received a number of significant benefits:

- **Eye-opening performance gains**—A long list of key processes are being completed at accelerated rates. A payroll-processing run that used to require two to three hours to finish, necessitating staff to stay late, now takes only about 20 minutes. The first time the process was run, it was so fast that the staff thought the system had malfunctioned! Other reports that used to take around 15 minutes, are now completed in two minutes or less.
- **Leaner costs**—Before migrating to the VxBlock System, expiring warranties and overlapping service agreements associated with the old multivendor infrastructure made it difficult to contain operations costs. The exceptional reliability of the Vxblock System and the flexible support for growth of Dell EMC Vscale Architecture have ensured predictable, leaner costs that help IT stay within budget.

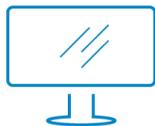
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- **Simplified management paves way to create greater value**—With its new VxBlock System, Deppe and his team spend less time managing the system, leaving more time to deliver business value for the firm. This has also helped the IT team avoid being seen as a cost center, and instead as a value provider.
- **Single-source support**—Finally, should Cianbro need support for its VxBlock System, it now has a single source for support: Dell EMC, with one number to call and Dell EMC’s deserved reputation for truly personalized, proactive service, and an array of support offerings for a satisfying experience.

“When we developed our requirements document, it was a pretty long list,” Deppe remarked. “But after working with our Dell EMC account team and our partner, Winslow Technology Group, and choosing the VxBlock System, we found that every box was checked. My staff and I were very pleased, and Cianbro’s management team was extremely impressed.

“In addition, we’re excited about the recent merger between Dell and EMC,” he continued. “With Dell and EMC becoming an unmatched one-stop shop, they’re simply better together. From our vantage point, Dell EMC is the premier provider of any information technology we’re likely to need.”



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