



BETTER BUSINESS RESULTS FROM SIMPLIFIED IT

Charlotte Pipe and Foundry streamlines IT management and improves service levels at eight distributed locations while reducing costs and hardware needs



Manufacturing

United States

Business needs

Charlotte Pipe and Foundry wanted to ensure round-the-clock availability of data and applications for internal customers at its eight business locations while reducing the effort of deploying and managing physical servers. The company also hoped to separate its manufacturing and business office networks.

Solutions at a glance

- [Dell EMC VxRail Appliance](#)
- [Dell EMC Avamar](#)
- [Dell EMC Data Domain](#)

Business results

- Replaces server deployment at distributed locations with virtual expansion
- Supports separation of manufacturing and office networks
- Facilitates smooth system upgrades
- Enables simple, fast and efficient companywide backups from one central console

9+

Lowers TCO with 1 hyper-converged appliance replacing up to 10 servers



Improves

service delivery to internal customers



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Server Administrator, Charlotte Pipe and Foundry

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Charlotte Pipe and Foundry, a fast-growing manufacturer of cast iron and PVC pipe used in construction, operates eight locations across the United States. The company’s IT department supports the infrastructure that facilitates production and all other business processes.

IT managers looked for a better way to run operations instead of by provisioning and managing servers at remote locations. Rodney Barnhardt, server administrator at Charlotte Pipe and Foundry, says, “We saw that hyper-convergence would give us the ability to put virtual machines in an all-in-one appliance and separate the networks. At the same time, application users could have a portal to manage their servers on either network.”

Enabling virtualization with VMware to replace physical servers, Charlotte Pipe chose the Dell EMC VxRail 60 Appliance for hyper-converged infrastructure powered by Intel® Xeon® processors. “We could deploy Dell EMC VxRail in less than an hour and create our virtual environment,” says Barnhardt. “VxRail 60 supports 1GB networking, which competitors at the time did not.”

At Charlotte Pipe, Dell EMC VxRail works in conjunction with Dell EMC Data Protection, including Dell EMC Avamar deduplication backup software and Dell EMC Data Domain protection storage. Several proprietary applications, Microsoft SQL Server and the Windows domain controller run on VxRail.

The company generated several noteworthy outcomes with its hyper-converged technology, including:

- 1 | Increased service levels.** Says Barnhardt, “Virtualizing with Dell EMC VxRail improved our ability to deliver services to internal customers. We can quickly spin up new servers without buying and installing more hardware.”
- 2 | Lower total cost of ownership (TCO).** “We minimize TCO by using Dell EMC VxRail to reduce the number of physical servers at remote locations,” notes Barnhardt. “We also save electrical costs and rack space because 2 two-rack-unit appliances can take the place of up to 10 one-rack-unit servers.”
- 3 | Secure network separation.** “VxRail enables us to deploy systems that communicate with only the manufacturing network and that we can manage without letting network traffic pass from the office network to the production network,” says Barnhardt.
- 4 | Easy scalability.** States Barnhardt, “Instead of deploying as many as 10 servers at a location, we can expand in a virtual environment. If an application needs more memory or storage, we can add that on the fly.”
- 5 | Simple upgrades.** “Upgrades are greatly simplified with VxRail,” Barnhardt declares. “Our most recent software upgrade went to production without any disruption.”
- 6 | Streamlined data protection.** “We simplified backup management with image-level backups at our locations,” says Barnhardt. “We can back up and restore any environment from a central console.”

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