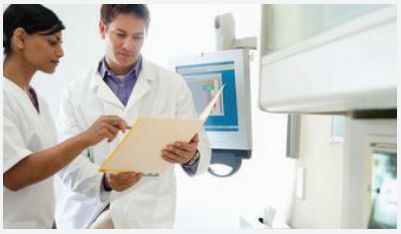
WATERTOWN REGIONAL MEDICAL CENTER

To drive storage performance and integration, this hospital turned to EMC VNX and EMC RecoverPoint for affordable, high performance unified storage



ESSENTIALS

Challenges

Integration, performance, and redundancy

Solutions

- EMC NetWorker
- Local & Remote Protection Suites
- FAST Suite
- EMC VNX Series
- EMC RecoverPoint
- VMware

Key benefits

- Integrated next-generation unified storage—significantly increases data performance and availability
- FLASH 1st: 50 percent performance improvement with Flash and FAST
- Three percent Flash, pinned to MEDITECH, is running 70-80 percent of I/Os
- Integrated with MEDITECH, the health care information application
- Flash drives further enhance performance for critical data and applications
- Reliable integrated backup and replication processes—savings of up to $75,000
- Minimizes backup windows—from 16 hrs to 9 hrs
- RPO of only seconds with RecoverPoint
- Integrated VMware technology—maximizes data storage utilization for cost-efficiencies
- EMC Unisphere™—for easy infrastructure management
- Future proofed/scalable—to handle ever growing data storage requirements

OVERVIEW

Watertown Regional Medical Center, located in Watertown, Wisconsin, has been proud to serve the local region of Dodge and Jefferson Counties for more than 100 years. Now in partnership with the University of Wisconsin, the hospital continues to maintain its focus on quality patient care.

Watertown Regional's IT infrastructure and software underpins the patient-focused vision of the hospital. MEDITECH, the specialized health care information application, provides the backbone for patient-related data—data that is used by clinicians, nurses, and staff to ensure the delivery of quality care.

THE CHALLENGE

To reinforce a commitment to quality patient care, Mark Pieper, Watertown Regional's Information Systems Technology Manager, made the decision to employ new state-of-the-art unified data storage and replication technologies. However, Pieper had very precise requirements.

"When we searched for a storage solution for our critical data, it was important that we purchase a quality brand that would provide the data protection we needed," states Pieper. "As a MEDITECH user, it was also critical that any solution integrate effectively with that system."

Pieper and his staff were also determined to find a solution that would deliver increased performance, reliability, and ease of management compared to the hospital's legacy system. Initially, the hospital did not consider EMC data storage solutions.

"We really didn't look at EMC at first because we thought we were too small for them," Pieper explains. "We also thought they were going to be too expensive and didn't have a solution that little guys like us could afford."

Following a discovery process, Pieper soon found that the EMC VNX™ Series met the hospital's exact specifications.

THE SOLUTION: EMC VNX SERIES AND EMC RECOVERPOINT

Watertown Regional Hospital has installed two next generation EMC VNX unified data storage platforms, at its production and disaster recovery sites, and is using EMC RecoverPoint to replicate between them. The EMC VNX Series offers significant benefits including fully-integrated VMware® capabilities and replication technologies, easy and quick infrastructure and data storage management, high performance levels, cost effectiveness, and future-proofing through its easy-to-upgrade design and scalability.

"When EMC came in, they not only met our budgets, but gave us many things we previously didn't think we could afford," Pieper says.

As an example of the added value that EMC provides, Pieper cites the implementation process, which was included in the budget.

"EMC implemented the new storage solution, and from delivery of the equipment to going live with the data, it took only six or seven weeks," relays Pieper. "I thought that was phenomenal. EMC's project management was awesome and I can't say enough about how efficient it was."

Critical to the successful VNX and RecoverPoint implementations was EMC's experience with MEDITECH.

"EMC works with MEDITECH on a daily basis and knows how to run it," says Pieper. "That was icing on the cake. EMC went to MEDITECH and gave them our specs to size and configure VNX to support it, then EMC optimized VNX to run the MEDITECH solution."

HIGH PERFORMANCE WITH VNX AND FLASH DRIVES

The hospital's EMC VNX easily outperforms Watertown's legacy solution.

"We are, I think, the first hospital in the country running our MEDITECH system completely on Solid State Flash drives," Pieper states, "It's awesome to do that."

Integrated Flash drive technologies provide exceptional data availability and performance for critical applications.

"I can see our MEDITECH data moving much faster, enabling clinicians and staff to serve patients better through high levels of data availability," Pieper notes. "The VNX Series is a high-end solution in a small package, price-wise. However, the way it handles through the controllers and back-end, it's more like a high-end product. With the new VNX, we're getting all these high-end tools all incorporated with performance, expandability, and upgradability. The VNX is perfect for us."

RELIABLE BACKUP PERFORMANCE

Pieper is also highly complimentary about EMC NetWorker® for backup and replication.

"One of the benefits that we've already seen is a fall in our backup window," says Pieper. "One of our legacy servers took 16 hours to back up. It's down to 9 hours now."

Watertown Regional employs EMC RecoverPoint to facilitate data replication and disaster recovery.

"There are no charts in the hospital whatsoever, so any data, including lab results, are in our VNX," Pieper explains. "Data availability needs to be quick and consistent, and with our replication capabilities, we are now covered in the event of a disaster."

Pieper's implementation of a secondary data center has also increased replication and backup performance.

"We have another site across the road from our hospital, and we have installed a VNX there too," he explains. "We're replicating all of our data there with RecoverPoint, and we're doing our backups off of that secondary data."

"Before we went live with VNX, we were backing up to tapes once a night, so if we had a major disaster, we could have lost up to 24 hours or more of critical data," Pieper adds. "Years ago that might have been okay because we didn't have much patient data, but now we have much more, so a loss of that nature would be completely unacceptable. With RecoverPoint and our dual VNX's, we're working to get that down to zero. That makes me, as well as our CEO, sleep better at night."

THE SIGNIFICANT BENEFITS OF INTEGRATED VMWARE TECHNOLOGY

Pieper and the hospital have been long time users of VMware and virtualization technology. VMware, integrated into VNX, provides even better performance and increased storage utilization.

"We're probably 90 to 95 percent virtualized on all of our servers, and the integration of VMware and VNX has made life easy," says Pieper. "When we moved to the VNX, data migration took just a couple of days and there was absolutely no interruption to the end user. That's huge."

VMware and virtualization have also provided the hospital with significant cost efficiencies.

"We had been concerned about our data storage space, and we were actually looking at expanding our server room," says Pieper. "In a hospital, space is at a premium and very expensive. Since virtualizing, the great benefit is we don't have to expand that server room. In fact, within a couple of weeks I'll be removing an entire rack."

EASY TO MANAGE, COST EFFECTIVE

For Pieper's IT department, ease of management is critical.

"It's only me and four others, and we provide all of the help desk support, infrastructure management and administration, upgrades, etcetera—all of the hardware side of things, including security," says Pieper. "My network administrator tells me that managing the storage system is simple since everything is in one spot. When he went through the training, he commented on the user-friendly interface and its intuitive nature. It requires less time to administer, and the built-in tools give us greater flexibility."

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MARK PIEPER
INFORMATION SYSTEMS TECHNOLOGY MANAGER
WATERTOWN REGIONAL MEDICAL CENTER

FUTURE PROOFING TO CONSERVE CAPITAL AND HANDLE BIG DATA

With the purchase of the VNX Series, Pieper has helped to minimize future IT capital outlays.

"I don't want to buy something this year and have to replace it in three year's time," he explains. "The VNX really gives us a lot of options as far as additional features and upgrades to what we have currently. I think we'll be keeping it around for a long time. Its ability to upgrade will help us to conserve budgets, and budgets are tight all over."

"The nice thing about the VNX Series is the ability to add more storage to it, and add EMC Data Domain® deduplication, EMC VPLEX™, and a lot of other options," adds Pieper. "Down the road, we can upgrade processors or controllers. Data growth is going to keep going. MEDITECH has already told us their new platform is going to probably require 3 to 4 times the data storage capacity due to new regulatory requirements, but with EMC VNX, we're all set."

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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