

Tintri VMstore System is the Perfect Fit for Collingwood General and Marine Hospital



Canadian Hospital Greatly Enhances VDI Performance and Increases Storage Density by Moving from VMware vSAN to Tintri Storage

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Industry

- Healthcare

Geography

- Ontario, Canada

Virtualization environment

- VMware vSphere
- VMware Horizon
- Traditional storage: Dell EqualLogic and VMware vSAN storage systems

VM profile

- VMware virtual desktops and all enterprise servers

Key challenges

- Virtual desktop logins were taking several minutes. Wanted to find a new solution to increase storage performance and capacity, while reducing IT complexity.
- Small team of 3 network engineers supporting nearly 700 users

Tintri solution

- Tintri VMstore system

Primary use case

- Virtual desktop applications for all of CGMH's doctors, nurses, and healthcare staff

Business benefits

- Reduced virtual desktop logins from minutes to seconds
- Obtained 16x reduction in storage using Tintri de-duplication feature
- Eliminated one hour per day of storage management
- Gained the ability to perform upgrades and maintenance non-disruptively during production hours

IT Challenges

The Collingwood General and Marine Hospital (CGMH) was founded in 1887 as an eight-bed facility in the community of Collingwood, Ontario, 90 minutes north of Toronto. CGMH now serves more than 60,000 permanent residents and 3.5 million annual visitors in Ontario from its 73-bed hospital.

Prior to Tintri, CGMH was running VMware vSphere, connected to Dell EqualLogic SAN storage systems, with Dell network switches on a 10 GB network. CGMH was also using VMware vSAN storage for its VMware Horizon VDI environment. The 220 concurrent virtual desktops are used by the Hospital's nurses, physicians, and support staff to access patient records and other medical applications.

"One of our biggest challenges was trying to reduce the excessive virtual desktop login times," explained James Lethbridge, network engineer at Collingwood General and Marine Hospital. "It took several painstaking minutes for our clinicians to log in or reconnect to their desktops whenever they moved to a new patient room or device, disrupting their workflow. We were also running out of storage capacity, since there was no de-dupe feature with our EqualLogic systems. And finally, we were experiencing stability issues in our VMware vSAN environment."

CGMH's IT team wanted to find a solution that would be easier to manage, provide de-duplication functionality, and improve the stability and performance of the virtual desktops. "Another problem with our VDI desktop environment was that we had to perform all desktop management functions during the middle of the night, since those processes were heavily impacting our desktop users during production hours," added Tim Shaw, network engineer at Collingwood General and Marine Hospital.

Solution

James Lethbridge, network engineer at CGMH, had previously used Tintri storage systems at another company before joining the Hospital's IT team. "We performed a lot of testing on Tintri and a couple of other vendors to determine the best storage systems for that virtual environment," he explained. "The only solution that even came close to meeting our requirements was Tintri."

“The Tintri system has far exceeded all of our expectations. Any new servers or systems that we deploy will take advantage of the Tintri platform for sure.”

David Butcher, Network Engineer, Collingwood General and Marine Hospital

Results

Faster Deployment

After the successful 30-day POC, CGMH purchased a Tintri VMstore system to run its VDI and server environments. “The Tintri deployment went very quickly,” noted Lethbridge. “Our previous storage environment was much more complex. When we originally transitioned to vSAN, we had to take all of the servers down to perform the install, there were multiple volumes to configure, we had to implement new HBAs, provision all of the drives, set up the storage pools, and many other configurations.”

Better Performance

The new Tintri system has been in production for three months at Collingswood Hospital. “A lot of our end users have already noticed a huge difference in the speed of their virtual desktops,” Shaw said. “Our healthcare workers can now access their desktops 10 times faster on Tintri than on our previous vSAN storage. The faster logins are enabling our healthcare workers to be much more productive, improving the care we give to all of our patients.”

16x Savings Using Tintri De-Dupe

Tintri VMstore is the industry’s first storage appliance designed exclusively for VMs, allowing enterprises to significantly broaden their virtual deployments. Sophisticated data placement technology combined with inline deduplication and compression allows Tintri to deliver flash-level performance for all VMs. “We’ve obtained 16x in capacity savings by using Tintri’s de-dupe feature,” Butcher reported. “We went from 26 TB of data, down to just 1.5 TB of storage on our Tintri VMstore system.”

Management Simplicity

“We used to spend an hour or more every day just managing the VMware vSAN storage systems,” Lethbridge said. “To be honest, I was hesitant to touch those systems because I was sure I would break something. I like to look at the Tintri console every now and then just to look at performance, but there’s no day-to-day management required. Tintri made storage management as easy as it should be. You just set it and forget it.”

Tintri has also enabled CGMH’s IT staff to manage the storage systems during regular clinic hours. “We used to have to find a quiet time to push out upgrades, do any provisioning, or refresh the virtual desktop pools,” noted Butcher. “Tintri has allowed us to perform all of these IT tasks during production hours, which our technicians really love. The only thing we wait on now is the customization on the desktops, but those delays are not Tintri-related.”

Smaller Footprint and Less Power

“By using the Tintri de-dupe feature, we have obtained a lot more capacity in the same footprint,” explained Shaw. “If we had stayed on the EqualLogic platform, we would’ve had to buy another Dell system to meet our capacity needs. We will have a lot of footprint and power savings going forward, because Tintri gives us much more room for expansion on the system we just purchased.”

Excellent Tintri Tech Support

“Tintri provided excellent support during the POC,” Butcher shared. “We called them several times when we were testing failover and other great Tintri features. Whenever we call the support line, we get a knowledgeable technician on the phone immediately, rather than sitting in a call queue or going through multiple tiers of support like we do with many of our other technology vendors.”

Future Plans

Lethbridge and the CGMH IT team are now looking at additional ways to expand the Tintri footprint. “As we move forward, we may get into DR using the Tintri systems. We will also be bringing on more healthcare partners into our virtual desktop environment in the next year. With Tintri, it will be very easy to deploy more desktops. The Tintri VMstore system has far exceeded all of our expectations. Any new servers or systems that we deploy will take advantage of the Tintri platform for sure,” concluded Lethbridge.

