Halton Healthcare Leverages Modern Data Center Technology to Take Healthcare Into the Future

Teknicor HEALTHCARE

Halton Healthcare GEORGETOWN · MILTON · OAKVILLE

DELL EMC

vmware®

VCE

"Technology transformation is enabling us to support our vision of exemplary patient experiences."

"Halton Healthcare's leadership has invested in IT and data as strategic assets and it is paying off. That investment includes working with the best partners in the industry—such as Teknicor, Dell EMC, VCE, VMware and Cisco. We are very well positioned for the present and the future."

"Working with Teknicor, we were able to take a very strategic approach. Specifically, our up-front strategy and planning were used to put in place a new disaster recovery strategy and a successful hospital move plan."

Sandy Saggar, CIO,
Halton Healthcare

Joe Walsh, Senior Systems Admin,
Halton Healthcare

Cam Yates, Manager, ICT Operations
and Security, Halton Healthcare

Zero downtime during complex migration to new hospital

◆ Seamless migration of 400+ servers & 4000 Exchange mailboxes

◆ Day-to-day operations and disaster recovery scenarios will fully support RTOs thanks to dual data centers

Improved patient care and unified experience with large-scale rollout of VDI and SSO

◆ 5-10 minutes saved per day per clinician

◆ Fewer interruptions to clinical workflows

Scalability and standardization to fully support future growth needs

◆ Single support number to call

◆ Storage, network and compute capacity in place for today and tomorrow

Results

Synopsis

Halton Healthcare has taken the lead in technology transformation with the implementation of a state-of-the-art IT infrastructure that significantly streamlines hospital processes and supports clinical and administrative needs. The solution also serves as a technology showcase, with Halton Healthcare hosting hospitals from across the province and beyond, who come to see its transformative technology in action. Halton Healthcare partnered with Teknicor in developing the comprehensive solution, which features technology from industry leaders Dell EMC, VCE, VMware and Cisco.

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Challenge

A renowned community healthcare provider, Halton Healthcare offers three hospital sites—Oakville, Milton and Georgetown, Ontario. With a combined total of 600 beds they currently serve about 400,000 residents. With its communities rapidly growing and hospital services continuing to expand, CIO Sandy Saggar knew that enabling technologies could help improve healthcare delivery and hospital administration and workflows. "We knew that technology could enable the best care possible for the patients in our communities," he said. With the growing needs of the community and a new hospital site set to open, the organization had to plan for a migration of all their systems from their legacy hospital site to their new hospital site without impacting patient care. The idea was to get all systems running at the new hospital site well before the opening of the new hospital facility with no disruption to patient care.

To help develop a strategy for this state-of-the-art enabling technology, Halton Healthcare turned to Teknicor, a complete solution integrator and authorized integrator for MEDITECH. Starting with an analysis of the existing environment, Teknicor worked with Halton Healthcare to build out the technology vision, architecture and supporting financial analysis, keeping the focus on performance, standardization, scalability and compatibility with the MEDITECH electronic health record (EHR) used across the hospital for all patient information, as well as other critical hospital applications.

Solution

The solution implemented at Halton Healthcare is built around three key elements: 1) a converged infrastructure, based on two VCE Vblock systems, 2) data protection/disaster recovery via Dell EMC Data Domain protection storage and Dell EMC NetWorker backup and recovery software, and 3) VMware's Horizon Enterprise virtual desktop infrastructure (VDI) solution.

Capitalizing on Teknicor's and Dell EMC's expertise with converged infrastructure, the VCE Vblocks are set up as primary and secondary data systems, at different hospital sites. The dual datacenter solution ensures the highest levels of data protection, and also enables a wide range of testing and data recovery options, which reduces the likelihood of downtime impact to clinicians and patients, even during migrations and servicing. The new data protection solution leverages disk based backup appliances in two geographically dispersed data centers, representing a major improvement over the previous tape-only solution.

Halton Healthcare's decision to implement VDI (marking one of the largest VDI rollouts to date in Canada) has made it significantly easier for clinicians to attend to their patients. With 600 daily virtual desktop sessions, and future capacity to grow, the Horizon Enterprise application gives physicians and staff access to their desktops, applications and information on any device, as they roam from room to room and floor to floor within the hospital sites to care for patients, or even from their external offices or homes.

Results

The project involved a complex migration of systems from the legacy hospital site to the new hospital site, with no room for error. Over 400 servers were involved, including 4,000 Exchange mailboxes and implementation of an email archiving solution. The transition was carried out seamlessly as a result of careful planning, deep hands-on experience and extensive quality control. "Thanks to the implementation team's careful planning, our move was accomplished with zero downtime and no impact to patient care," noted Saggar.

Beyond the success of the migration, the biggest impact of Halton Healthcare's new technology has been on patient care. "We are providing our physicians and staff with single sign-on access within the hospital and a unified experience as they roam through the medical units, or even on their mobile devices and at home," said Saggar. This level of access to information supports informed and streamlined patient care. It also significantly minimizes distractions when clinicians are providing care for patients. Single sign-on is estimated to save them each five to ten minutes per day. This allows physicians and staff to spend more time with patients.

For CIO Saggar, optimizing data security was also key. When it comes to ensuring network availability, hospitals have critical needs, and the Dell EMC solutions now in place fully support Halton Healthcare's recovery time objectives (RTOs). "Partnering with Teknicor and Dell EMC for data protection and continuous availability has allowed me to sleep better at night," said Saggar.

The solution is also set up to simplify support. A single phone number for all support, across all applications, departments and hospital sites, makes it easy for Halton Healthcare's IT staff to get answers. The dual data center configuration and standardization across the three sites provides systems availability and stability. Teknicor provides support services on an ongoing basis, and the collaboration with Teknicor continues to guide Halton Healthcare's technological evolution.

"Working with Teknicor and their best-of-breed partners, Dell EMC, VCE, VMware and Cisco has been fundamental to realizing our vision. We've successfully increased the availability, scalability and standardization of our technologies to support continued growth and an improved stakeholder experience—for patients and their families, physicians, staff and volunteers" concluded Saggar.