EXTRA HOURS
FOR PATIENT CARE

Silver Cross Hospital achieves 100% application availability with virtualized desktops from Dell

CUSTOMER PROFILE
COUNTRY: Joliet, IL (USA)
INDUSTRY: Healthcare
FOUNDED: 1895
NUMBER OF EMPLOYEES: 1,895
WEB ADDRESS: www.silvercross.org

CHALLENGE
Silver Cross Hospital wanted to enhance caregiver productivity and streamline IT maintenance with a new architecture for its endpoints.

SOLUTION
The hospital deployed a Dell™ On-Demand Desktop Streaming solution using Dell OptiPlex™ desktops with Intel® vPro™ technology, Dell PowerEdge™ servers, and Symantec™ Workspace Corporate and Backup Exec™ software. Dell Global Infrastructure Consulting Services provided design and deployment help.

BENEFITS
RUN IT BETTER
• Approximately 20,000* hours a year reclaimed for patient care
• 100% availability of key applications on all workstations, up from 20%
• Applications rolled out in minutes instead of 80 staff hours
• PCs remotely secured and managed with Intel vPro technology
• Microsoft® Windows® system-wide updates in 1 hour—not practical before
• Recovery of data or storage system in minutes instead of an hour or more
Since 1895, Silver Cross Hospital, a non-profit organization, has grown from a 33-bed, two story hospital into a healthcare network featuring a 304-bed acute care hospital with a team of over 2,500 physicians, employees and volunteers.

“The Dell On-Demand Desktop Streaming Solution with Symantec Workspace Corporate is saving caregivers ten minutes a day in sign-on time. That’s approximately 20,000 hours a year that can be focused on patients instead of technology.”

Bill Bisch, Network Manager, Silver Cross Hospital

The hospital’s campus is located in Joliet, which is about 50 miles south of Chicago in Will County. In addition to the hospital, Silver Cross has developed an extensive ambulatory network throughout its region that includes eight satellite facilities and an array of outpatient diagnostic and treatment services.

100 TOP HOSPITAL
Silver Cross is setting the standard of care in its region. Through its commitment to clinical quality, attention to patient safety and dedication to details and personal service, Silver Cross has been named a Thomson Reuters Healthcare (formerly Solucient) 100 Top Hospitals National Award Winner for the past five consecutive years (2004-2008). Only 81 hospitals have won the award five or more times. Of those 81 hospitals, nine have won five years in a row. And, Silver Cross is the only hospital in Illinois that has won the 100 Top Hospitals National Award for the past five years.

It’s not an easy award to win. The 100 Top designation is based on objective data that measures excellence across all key areas including clinical outcomes, patient safety and efficiency of care.

So what’s behind the hospital’s success?

“The only way to find out is come and visit us, and you’ll be shocked at how nice the people are,” says Steve Davis, a PC Analyst for the hospital. “I’d say it all starts at the top here with defining the culture. And then clinical, customer service and financial goals have to be met. Results are computed and compared with other hospitals in the country. If we make the cut, we’re one of the 100 Top Hospitals.”

To further enhance the quality of care, however, there was an important IT challenge to solve.

SIMPLIFYING CARE
Technology at the hospital had become complicated. As doctors and other caregivers made their rounds, they would interact with applications on over 200 thin clients.

Caregivers found that using these workstations was a challenge. Each application required a user name and password, and when tasks were complete, the application needed to be closed for security reasons. The process was cumbersome and took precious time.

Most workstations didn’t have all the necessary resources. “The thin clients wouldn’t allow us to push out a number of the applications such as a Picture Archiving and Communication System (PACS), or our document imaging system,” says Brian Staniszewski, network team member. “Only some stations had certain applications such as PACS, and caregivers had to remember where to find them.”

The workstations were unreliable. “They would lose their domain connection occasionally,” says Bill Bisch, Network Manager. “And they were difficult to manage as systems. Just to fix a simple problem could take a member of the IT staff a half hour to an hour. With 200 workstations, we’re talking about a time waster.”

HOW IT WORKS

HARDWARE
• Dell™ OptiPlex™ 755 with Intel® Core™ 2 Duo processors and Intel vPro™ technology
• Dell PowerEdge™ 2950 III servers with Intel Xeon® E5205 processors

SOFTWARE
• Citrix® Provisioning Server for Desktops™ 5.0 Dell Edition
• Symantec™ Workspace Corporate
• Symantec Backup Exec™ 12.5
• Microsoft® Windows® Server 2003
• Microsoft Windows Vista™

SERVICES
• Dell Global Infrastructure Consulting Services
• Dell ProSupport
As a caregiver goes on rounds, the desktop delivers excellent energy efficiency. To make the virtual desktops portable, the Dell solution delivers several power management settings. The Dell team recommended a Dell Flexible Computing solution: four Dell PowerEdge 2950 servers running on Microsoft Windows Server 2003. They host the Dell Edition of Citrix Provisioning Server to stream virtual desktops. The Citrix solution is stored on a SAN and sent to Dell OptiPlex 755 FLX workstations located throughout the hospital. The On-Demand Desktop Streaming model has no hard disk and no local operating system on the desktop.

The Dell solution delivers several power saving advantages to Silver Cross. Energy Smart power management settings, enabled out of the Dell factory, mean the systems consume up to 54 percent less power than systems disabling power management. The systems have 80 percent efficient power supplies that are up to 10 to 12 percent more efficient than previous generation power supplies. And the energy-efficient Intel® Core™2 Duo processors deliver high performance with excellent energy efficiency.

To make the virtual desktops portable, yet secure, the solution incorporates Workspace Corporate software from Dell technology partner Symantec. Workspace Corporate creates a container around an individual’s authorized applications and data, enabling caregivers to sign in just by waving their hospital ID badge in front of a RFideas Sonar Detector in the system detects that the user has left and closes the session automatically.

**Freedom to Roam**

User data and application rights do not remain on the endpoint. However, if the user signs on to a different endpoint within a specified timeout period, the user’s desktop reappears just the way it was left. “Doctors just love the roaming capabilities,” Bisch says.

“Everything a doctor had opened at the last workstation is waiting at the next one.”

Additionally, IT client support is able to secure and manage all of the Dell OptiPlex workstations regardless of whether or not the PC is off, due to built-in Intel® vPro™ technology.

**More Time for Patients**

Since a caregiver’s custom desktop appears at every workstation, there’s no need to remember which workstations do or don’t have certain applications such as document imaging or PACS.

“A workstation before likely had only 20 percent of the five most needed applications,” Staniszewski observes. “Now it has 100 percent.”

The gain in productivity is substantial. “A conservative estimate is that the Dell On-Demand Desktop Streaming solution with Symantec Workspace Corporate saves caregivers five minutes a day in sign-on time,” Bisch notes. “With 1,000 caregivers accessing the system, that’s 40,000 hours a year that can be focused on patients instead of technology or passwords.”

One physician confirmed that five minutes a day saved per caregiver is conservative. “I probably spent about 60 minutes a day with the old solution finding the right workstation and signing on to the applications I needed,” says Lawrence E. Schilder, DO Director, Midwest Center for Hematology/Oncology, Assistant Professor of Clinical Medicine, Northwestern University Medical School. “What I like about the Dell Flexible Computing solution is that there is no more fumbling through multiple points of entry and remembering multiple passwords—or calling the help desk. I can now effortlessly access the medical images I need to advise patients. The new solution makes me more efficient and better able to provide patient care.”

“The nursing staff reports that single sign-on gives them the security advantage of having the computer screen go to standby, which protects patient information from inappropriate exposure, without losing their page in whatever data entry process they are working on,” says Teri Hoogerstra RN, BSN, ONC, Nurse Manager, Silver Cross Hospital. “The unit clerks especially love these advantages, as their job is primarily data entry with a lot of interruptions and distractions that impact their workflow, and so the benefits of Dell Flex Computing are magnified many times for their workflow.”

**IT Administration Done in Minutes, Not Weeks**

Inside the data center, the Dell/Symantec solution also simplifies IT administration. The IT team can now centrally maintain three desktop images for three different groups of users. “Once we assign a user to a particular group, they have access to that group’s applications,” Davis says. “We can also give a specific user unique access to an application and not have to worry that everybody else in that group has access. So this solution is extremely flexible.”

With only three desktop images to maintain, maintenance is faster. “Rolling out an application on 200 different endpoints used to take two people about a week—80 staff hours,” Bisch recalls. “Now one person can roll it out centrally in minutes.”

Similarly, updating Microsoft Windows or adding a printer used to take 10 to 15 minutes—at each endpoint. “You’d have to reboot the machine two or three times to get the process completed,” Davis observes. Now IT can perform a Windows update on the hospital’s three standard desktop images in an hour completely in the background—with no disruption to users.
SAVING STEPS WITH PROXIMITY AWARENESS
Symantec Workspace Corporate enables applications to be location-aware and automatically connect to the nearest printer. “Users are very happy,” Davis says. “And they can do whatever they want to do on their workstation without having to find one that has the application that they need.”

Security (moves-adds-changes) is enhanced. “I got a notice the other day that two people were leaving the hospital,” recalls Davis. “I was able to go into the Symantec Workspace Corporate administration console, and within two minutes they were blocked from the system. I can do this remotely. Before, I’d have to go to a console in the data center and open each application each user had access to, and then block that user. It would take five times as long.”

DELL AND SYMANTEC CONSULTING SERVICES DELIVER
“The consultants from Dell Global Infrastructure Consulting Services have been great,” Staniszewski observes. “They did whatever it took in design and deployment, and gave us very good knowledge transfer. So did Symantec Consulting Services. They were both extremely valuable and timely.”

Approximately three months after the solution was designed, it was deployed. “If we had done this project ourselves, without the consultants from Dell, it would have taken at least 50 percent longer,” Bisch notes.

Dell ProSupport helps keep the solution up and running.

More importantly, the hospital’s 1,000 caregivers now have more time for patient care, and the IT team has more time for innovation. And the winners in both cases are the patients.

1 1,000 clinicians save five minutes a day = 5,000 minutes/day = 167 hours/day * 250 working days/year per person = 20,000 hours/year

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