HOLY NAME MEDICAL CENTER SAFEGUARDS CRITICAL HEALTH-CARE APPLICATIONS WITH VBLOCK™ INFRASTRUCTURE PLATFORMS

Executive Summary

About Holy Name Medical Center
Holy Name Medical Center in Teaneck, N.J., has provided the communities of northern New Jersey with compassionate medical and nursing care since 1925. Founded by the Sisters of Saint Joseph of Peace, Holy Name has evolved into a comprehensive 361-bed acute-care Medical Center with more than 900 physicians representing 35 medical specialties.

Challenge

- Medical Center expansion straining data center space
- Inadequate disaster-recovery capabilities

Solution

- Vblock™ Infrastructure Platforms

Results

- Accelerated delivery of critical applications supporting patient care
- Hundreds of thousands of dollars of costs saved, targeted for potential emergency-room system upgrade
- Reduced application recovery from days to under an hour
- Driving expansion of private and public cloud strategy

Challenge

Following years of steady expansion, Holy Name faced the prospect of its data center running out of physical space and power and cooling resources. Holy Name's lean staff could not deploy applications fast enough. And its existing tape-backup infrastructure was an inadequate disaster-recovery solution at best.

With Vblock™ Infrastructure Platforms, Holy Name now has a factory-integrated, converged infrastructure that enables the Medical Center to grow without limits, all while ensuring 24/7 availability of medical and administrative services.

"The old way of procuring and installing physical infrastructure was simply not compatible with the pace of a modern health-care facility like ours," says Frank Marano, Systems Infrastructure Director at Holy Name Medical Center. "It could take weeks to roll out applications, which held us back from providing our physicians and nurses with the capabilities they needed to maximize patient care."

Solution

Holy Name implemented Vblock Infrastructure Platforms from VCE. The Vblock platforms are comprised of Cisco Unified Computing System (UCS) blade servers, Cisco networking components, EMC VNX unified storage, and VMware vSphere virtualization. Using EMC RecoverPoint remote data protection and VMware vCenter Site Recovery Manager (SRM) solutions, Holy Name replicates the Vblock platforms between its production and disaster-recovery sites.

To optimize efficiency, Holy Name relies on Vblock platform technologies, including EMC Fully Automated Storage Tiering for Virtual Pools (FAST VP) and FAST Cache, as well as Flash, SAS, and near-line SAS drives comprising EMC VNX unified storage. For streamlined management, Holy Name uses VMware vCenter Operations Management Suite and EMC Unified Infrastructure Manager (UIM).

"We looked at Dell's Virtual Integrated System, but it didn't have much of a track record," says Marano. "We liked that Vblock platforms are fully tested and certified, and there have been many successful implementations in health care."

Computer Design and Integration (CDI), the reseller and systems integrator, and VCE Professional Services worked with Holy Name to deploy the Vblock platforms in just two weeks.

Vblock platforms run a wide range of Holy Name's critical clinical applications, including Oracle PeopleSoft and McKesson financial and material management solutions Four Rivers biomed and maintenance ticket system, HealthPay payment processor, McKesson IntelliShelf supply management software, Microsoft SQL Server, Lotus Notes, and Raiser's Edge foundation software. Holy Name also plans to move its Xcelera cardiology PACS to the Vblock platforms.

Results

Accelerating server deployment from weeks to minutes
Since implementing the Vblock platforms, Holy Name has been rolling out new applications dramatically faster with little burden on its IT staff.

"In the past, it took two or three weeks just to get the hardware in, and then another couple of days to configure and deploy the application," recalls Marano. "Now, using templates provided with the Vblock platform's VMware vCenter software, we can deploy virtual servers in minutes and have new applications running in a day. We can meet almost any deadline to ensure we're supporting the latest technologies and services."

Marano also values the automated storage tiering in Vblock platforms. "FAST will manage where VMs are stored based on workload and without requiring any hands-on work by our staff," Marano comments. "We're getting our users the best possible performance and making the most efficient use of our storage capacity."

Saving hundreds of thousands of dollars in capital expense
With its 100 percent virtualized Vblock platform, Holy Name realized significant cost avoidance and expects ongoing operational saving.

"We avoided spending hundreds of thousands of dollars for new UPS systems because the Vblock platforms pack so much more power in less space," reports Marano. "We're hoping not to have to purchase another physical server for years, which should save us a considerable amount.."

"With a couple of racks already eliminated, we eventually expect to reduce the data center footprint by 50 percent. The room is already running cooler, and we're definitely saving on power," indicates Marano.

Holy Name is also considering upgrading its emergency-room system. The health-care provider estimates saving $100,000 by virtualizing the new system with Vblock platforms should the project move forward.

Reducing recovery time from days to under an hour
Holy Name also improved availability and disaster recovery with Vblock platforms, avoiding disruptions to critical applications used to treat and care for patients.

"Before, when systems went down, physicians and nurses had to just wait for the server to come back up," notes Marano. "If the server was unrecoverable, then we'd have to restore everything from tape, which could take days. With RecoverPoint and SRM running on Vblock platforms, we can recover applications within an hour and not lose data."

According to Marano, the ability to fail back is equally important. “There are a lot of solutions out there that fail over to a backup data center, but very few that can fail back to the primary without a big hassle. That’s really only possible with Vblock platform technologies, like SRM and RecoverPoint.”

Maximizing virtualization to drive cloud expansion

As Marano eyes the future, he looks to leveraging virtualization to the fullest.

“We offer a public cloud service for bill paying,” he notes. “We’re also planning to virtualize everything possible as part of our private cloud strategy. And we’re considering desktop virtualization.

“Vblock platforms are ideal for taking our cloud strategy in any direction that will help us enhance IT service and efficiency and, ultimately, improve the care of our patients.”

About Holy Name Medical Center

Holy Name Medical Center is a fully accredited, not-for-profit healthcare facility based in Teaneck, New Jersey, with off-site locations throughout Bergen County. Founded and sponsored by the Sisters of St. Joseph of Peace in 1925, the comprehensive 361-bed medical center offers leading-edge medical practice and technology administered in an environment rooted in a tradition of compassion and respect for every patient. Holy Name provides high quality health care across a continuum that encompasses education, prevention, early intervention, comprehensive treatment options, rehabilitation and wellness maintenance—from pre-conception through end-of-life.

About CDI

Computer Design and Integration LLC provides comprehensive and innovative technology infrastructure services that solve complex business challenges. Recognized since 2000 as one of the top 500 IT solution providers in the United States, CDI’s strategic differentiation is its commitment to understanding its clients’ business processes and helping them advance their corporate strategies using technology with a particular focus on highly available data center solutions. Founded in 1995, more than 80 percent of its 500 customers hail from the financial services, pharmaceutical, health care, and media and entertainment industries. What’s more, a vast majority of these customer relationships are ongoing. CDI clients have confirmed that the company’s quality, customer service, and ability to complete projects on time and on budget are what keep them coming back.

ABOUT VCE

VCE, the Virtual Computing Environment Company formed by Cisco and EMC with investments from VMware and Intel, accelerates the adoption of converged infrastructure and cloud-based computing models that dramatically reduce the cost of IT while improving time to market for our customers. VCE, through the Vblock platform, delivers the industry’s first completely integrated IT offering with end-to-end vendor accountability. VCE’s prepackaged solutions are available through an extensive partner network, and cover horizontal applications, vertical industry offerings, and application development environments, allowing customers to focus on business innovation instead of integrating, validating and managing IT infrastructure.
For more information, go to www.vce.com.