EnvisionRxOptions

EMC VSPEX Proven Infrastructure supports explosive growth, provides competitive advantage

ESSENTIALS

Industry

Healthcare

Company Size

800 employees in six offices

Business Challenges

- Extreme sales growth—288 percent over three years— required more IOPS than existing infrastructure could provide

- Infrastructure could not support applications as they grew

Solutions

- EMC VSPEX Proven Infrastructure: EMC VNX unified storage, VMware vSphere, Cisco UCS Blade Servers

- EMC Avamar

- EMC RecoverPoint

- VMware vCenter Site Recovery Manager

- Microsoft SQL Server, Microsoft SharePoint, and Microsoft Exchange

OVERVIEW

Founded in 2001, Envision Pharmaceutical Services (EnvisionRxOptions) provides full-service, integrated pharmacy benefit management (PBM), including network-pharmacy claims processing, a mail-order service for prescription home delivery, and many other PBM services. Based in Twinsburg, Ohio, EnvisionRxOptions has more than 800 employees and offices in Fort Lauderdale and Tampa, Florida; Canton, Ohio; and El Dorado Hills, California.

BUSINESS CHALLENGES

As a result of a transparent pricing model that passes on to members any discounts received from pharmaceutical manufacturers, EnvisionRxOptions has experienced 288 percent sales growth over three years—placing it on the Inc. 500|5000 List of America's Fastest-Growing Private Companies.

"In IT, we view our role as a facilitator of growth," says Nakul Kapadia, vice president of IT, EnvisionRxOptions. "That means more than just keeping up. We need to stay ahead of the growth curve by putting systems in place that will drive the business."

To support this growth, the company's computing environment is now 95 percent virtualized with more than 200 virtual machines (VMs) running key Microsoft applications such as Microsoft SQL Server, Microsoft SharePoint, and Microsoft Exchange. These core applications support critical back-office functions such as order entry and billing. In addition, the company's websites are virtualized and the call center is supported by a virtualized desktop accessed by thin clients.

Previously, these applications ran on Dell blade servers and Dell EqualLogic SAN arrays. In order to enable continued virtualization and support ongoing growth, EnvisionRxOptions needed to migrate its data center to an IT infrastructure that would better support critical functions such as application backup, recovery, and replication.

"As our SQL Server, SharePoint, and Exchange applications grew, they were demanding more resources than the current systems could handle. Plus, our storage systems were not perceived by potential large clients as enterprise-grade," Kapadia explains.

SOLUTIONS

After evaluating several solutions, including NetApp FlexPod, EnvisionRxOptions chose the EMC® VSPEX™ Proven Infrastructure. Supplied by EMC partner, Advizex Technologies, VSPEX provides EnvisionRXOptions with a best-of-breed environment for storage, virtualization, networking, and data protection.

"When evaluating an infrastructure on which to run a critical environment, it is important to rely on trusted, innovative, and best-of-breed leaders in the IT infrastructure field and adopt those vendors' best practices," explains Dave Bearer, senior storage/server engineer at EnvisionRxOptions.

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- Reduced remote office backup times from 48 hours once a week to a few minutes every day
- Provided the ability to completely restore applications and data to a point only 30 seconds prior to incident
- Scaled to support ongoing application expansion as company grows

He continues, "The solution must also be able to scale quickly and easily without taking outages. The VSPEX solution meets those expectations."

EnvisionRxOptions has installed a VSPEX in its main data center, with another at the company's new remote secondary site for disaster recovery (DR). Each VSPEX infrastructure integrates VMware® vSphere™ virtualization and Cisco UCS blade servers with an EMC VNX® unified storage system—all connected via Cisco Nexus Switches.

EnvisionRxOptions utilizes EMC RecoverPoint® and VMware vCenter™ Site Recovery Manager (SRM) for replication between data centers. EMC Avamar® deduplication backup software and system protects the VMware environment and two of EnvisionRxOptions' remote offices as well as the new remote data center.

The VSPEX Proven Infrastructure provides the framework for a virtualized SAN, facilitated by Fibre Channel connectivity to the VNX systems. The result is a high-performance, scalable environment to support EnvisionRxOptions' applications as they grow with the business.

"To support ongoing growth, we're committed to adopting the most reliable, secure, and redundant systems possible—and we knew we could exceed our goals with EMC," Kapadia says. "Compared to other vendors we evaluated, EMC has put many years of research and development into SAN technology."

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Vice President of IT at EnvisionRxOptions

PROTECTING CRITICAL APPLICATIONS AND DATA

EnvisionRxOptions was an early adopter of Avamar to provide data backup for the company's remote offices. Before Avamar, the company could only back up its California office once a week using an inefficient and vulnerable tape-based process, and a typical remote office backup would take an entire weekend to run. Now, using Avamar and its source-based deduplication, the company is able to back up its California and Florida offices nightly in about 30 minutes, with the data automatically replicated to the DR site.

Avamar leverages VMware vSphere Changed Block Tracking for image-level backups, enabling EnvisionRxOptions to rapidly restore a VM by delivering only the needed blocks from the last backup to the current state of the VM.

"The technology behind Changed Block Tracking for data restores is something that's unique to Avamar; plus, there simply are no solutions out there that will perform deduplication on the source side," says Kapadia. "With so little data actually crossing the network, the backup performance is off the charts."

PROVIDING PEACE OF MIND FOR INTERNAL CUSTOMERS

In the current configuration, EnvisionRxOptions uses Avamar to back up Tier 3 applications—support systems such as HR, reporting, and others. Mission-critical and customer facing Tier 1 applications such as web applications, databases, and email—as well as Tier 2 applications such as FTP, Microsoft SharePoint, and accounting systems—are replicated by vCenter SRM.

Previously the company could only replicate its SANs twice a day, making its recovery point objective (RPO) up to 12 hours. Now with the adoption of RecoverPoint, which takes a snapshot of the data and generates multiple recovery points to restore applications instantly to a specific point in time, the RPO is as little as 30 seconds prior to the incident.

"The powerful combination of SRM, RecoverPoint, and Avamar provides comprehensive data protection and virtually guarantees that we can restore any data in a matter of minutes," Kapadia notes. "It's a huge benefit, but it's a secret we try to keep from our end users since we try teach them to be careful with their files!"

He adds, "In all seriousness, our customers expect an always-on, always-up environment. Instead of three nines, we strive for active-active data centers that deliver continuous, 100-percent availability. With VMware and EMC, we're able to meet this goal."

A POWERFUL COMPETITIVE ADVANTAGE

Moving forward, Kapadia and his team have plans to provision some data center functions, such as storage, in the cloud via the VMware vCloud® Suite.

"Our company's growth is so extreme and volatile that we need to have maximum flexibility to support it. The ability to spin up VMs either on our VSPEX or in the cloud will give us a hybrid approach that will let us respond nimbly as new requirements arise," he says.

EnvisionRxOptions believes that EMC-powered virtual IT infrastructure gives the company a competitive edge when it is being considered by potential new clients.

"Our board has made a significant financial commitment to adopting best-of-breed technologies that are scalable, redundant, secure, and reliable. Customers that are evaluating which PBM to choose see that we've been able to create this environment in a short time period, and it's definitely helped our company win bigger contracts," Kapadia remarks. "Coupled with our transparent pricing model, our EMC environment provides a large competitive advantage."

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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