CUSTOMER SUCCESS CASE STUDY

LifeLink

EQUALLOGIC®
SIMPLIFYING NETWORKED STORAGE™

COMPANY:
Community service organization

INDUSTRY:
Healthcare

PLATFORM:
Microsoft® Windows Server™ 2003

APPLICATIONS:
VMware ESX Server™; Microsoft® Exchange, Microsoft SQL Server, Microsoft Solomon and Business Portal, Microsoft SharePoint®; Citrix®; custom-built clinical databases

CHALLENGES:
Providing business continuity and DR of critical transplant-related information to multiple locations; managing DR planning and implementation in hurricane zone

SOLUTION:
PS Series arrays in the primary data center and two remote sites providing consolidated virtual storage, snapshot-based backup and recovery, failover and DR; VMware provides server virtualization

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LIFELINK FOUNDATION BUILDS VIRTUAL DATA CENTER FOR CONTINUOUS OPERATIONS USING EQUALLOGIC® AND VMWARE®

LifeLink Foundation, based in Tampa, Florida, has 500 employees dedicated to the recovery and transplantation of organs and tissue. This non-profit, community service organization has multiple divisions, including three Organ Procurement Organizations in west central Florida, Georgia, Puerto Rico and the U.S. Virgin Islands; a Tissue Bank; Transplantation Immunology Laboratory; and the LifeLink HealthCare Institute, a unique physician group practice which provides comprehensive medical, surgical and transplant care.

The Tampa-based IS department is responsible for all information services at LifeLink Foundation locations – not an easy task when medical information is needed around the clock on an urgent basis and not-for-profit capital budgets are limited. With 90,000 people in the United States awaiting organ transplants and thousands more in need of tissue transplants, clinical databases must be available every minute of every day – lives actually depend on it. In addition, Tampa's geography makes the six-month hurricane season a constant consideration – each time a potential storm is on the horizon, all precautions must be in place for business continuity, data protection, and site failover.

BETTER PROTECTION REQUIRED

The need for more extensive disaster recovery (DR) prompted Vice President of Information Systems John Rhon to upgrade the IS environment. The primary data center is at LifeLink Foundation headquarters in Tampa, with Citrix® software managing access from remote offices. The infrastructure is Microsoft-centric, with more than 30 Windows® servers each with direct-attached storage (DAS). The Foundation's most important applications are Microsoft SQL Server-based clinical and operational databases related to transplantation and organ procurement. Other key Microsoft applications are Exchange for e-mail, Solomon and Business Portal financial applications, and SharePoint collaboration software. Before upgrading the infrastructure, each application had a dedicated server. The traditional way to implement DR was to deploy identically configured server pairs for failover – an inefficient, costly, and hard-to-manage arrangement.

DISASTER RECOVERY THROUGH VIRTUALIZATION

Rhon's plan was built around creating a virtual data center, including servers and storage. First, with aging servers needing replacement, he wanted to implement VMware

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– LifeLink's Vice President of Information Systems, John Rhon

ESX Server to create virtual servers, providing a more flexible environment to architect his DR solutions by eliminating dependencies on the underlying physical server hardware. At the same time, moving to a storage area network (SAN) would allow him to consolidate and virtualize storage as well, centralizing storage capacity otherwise trapped behind individual servers. Comments Rhon, "Being freed up from buying identically configured hardware makes disaster recovery planning and implementation much easier."

THE RIGHT STORAGE PLATFORM

Selecting a new storage platform was a strategic decision, as it would be an important part of LifeLink's plans for the future. Rhon first looked at traditional Fibre Channel (FC) solutions from EMC Corporation, but FC was quickly eliminated from consideration due to capital budget considerations. Next, Rhon evaluated iSCSI solutions from EqualLogic, Inc., LeftHand Networks Inc., Hewlett-Packard Company (HP), EMC Corporation, and Xiotech Corporation.

Rhon selected EqualLogic because of the advanced functionality built into the array, ease of use, and cost-effectiveness; none of the others' solutions could match the PS Series, and EMC® was recommending a Fibre Channel solution. The EqualLogic SAN would provide him with the storage consolidation, snapshots, and remote replication he was seeking, plus automation and simple management. Rhon was particularly pleased with the EqualLogic SAN because his Senior Network Administrator had the qualifications to implement this solution – with a Fibre Channel SAN solution, he would have needed to hire and train a dedicated network administrator.

FREEDOM FROM HARDWARE

Today, LifeLink Foundation is well on its way to Rhon's vision of a completely virtual data center. LifeLink's 12 aging production servers have been replaced with two larger HP servers, and VMware ESX Server has eliminated the "one application/one server" dependency. Virtual servers are quick to deploy, simple to manage, and easy to adapt to new applications. PS200Es installed at LifeLink headquarters and at the LifeLink Tissue Bank 15 miles away each employ snapshots locally to create and maintain instantly recoverable copies of the virtual servers and data sets. The PS Series' auto-replication is used to mirror the virtual servers and data sets between each site, enabling quick recovery at the remote site in case of a disaster.

VIRTUAL SERVERS AND STORAGE CREATE ADVANCED INFRASTRUCTURE

The benefits to LifeLink Foundation have been extremely positive. The production environment improved business continuity with DR and failover to the local remote site. Says Rhon, "Traditional disaster recovery would have added much more complexity to our environment – the EqualLogic/VMware solution gave us DR along with simplicity. We have to prepare every time a hurricane is on the horizon – now, we're better equipped should a strong storm hit the Tampa Bay area."

LifeLink Foundation plans to purchase a third PS Series array for the LifeLink of Georgia data center that will become another DR site; then, the three sites will be able to fail over to each other, providing a higher level of data protection and business continuity. In addition, once Boot from SAN capability is implemented with VMware ESX Server 3.0, Rhon will have a completely virtual data center, ensuring 24 x 7 operations for all locations.

Summarizes Rhon, "We're obviously implementing DR, server and storage virtualization solutions to support our critical mission. We had to develop a solution that would stand up to the rigors of our work and enable us to operate and have data available all the time. With EqualLogic, we get all of that, plus it was a straight forward, cost-effective implementation."

SIMPLIFYING NETWORKED STORAGE

EqualLogic PS Series solutions deliver the benefits of storage consolidation in an intelligent, enterprise-class storage system that is easy to install, manage and grow. Let us show you what simplifying networked storage can mean for your business, visit our web site at **www.equallogic.com**.

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