



"HP LeftHand SANs provide the scalability and flexibility to support our growth. So, our employees can spend their time meeting our customers' needs, rather than worrying about what kind of technology we have running behind the scenes."

- Jim Savage, Chief Information Officer, Gaylor Inc.

Industry: Electrical construction services

Solution: HP LeftHand SANs

Objective:

Upgrade IT infrastructure for greater flexibility and scalability to support business growth

Approach:

Install HP LeftHand SANs in two geographically separate TLS.NET data centers

Business technology improvements:

- Enhanced storage flexibility and scalability
- Simplified storage administration
- Support for VMware virtualized server environment
- Enables storage allocation adjustment "on the fly"
- Additional layer of redundancy and business continuity

Business outcomes:

- Simplified administration reduces management cost
- Scalable storage supports continued high rate of business growth
- Flexible storage enables fast response to changing business environment

Growth powers IT upgrade

Headquartered in Carmel, Indiana, Gaylor Inc. is an electrical contractor with offices across the country – and the capability to meet virtually any electrical construction need. Experiencing 20-30 percent annual revenue growth, Gaylor sought to upgrade its technology infrastructure to support and maintain this expansion.

"Historically, we relied on physical servers with direct attached storage," says Jim Savage, Gaylor's Chief Information Officer. "But in order to maintain our growth, we needed a solution that would provide us with more flexibility and scalability. We wanted to give our server and data storage infrastructure a real overhaul."

A key part of the overhaul was an economical, feature rich storage solution. "We are a mid-size company," says Savage, "and we needed to find a cost effective way to implement virtualization. We had past experience using iSCSI SANs (storage area networks) for backup. When we looked at HP LeftHand SANs, we liked the price and functionality, and the fact that the system was easy to use and to administer. The HP LeftHand licensing model was also very easy to understand. HP was the right fit for us all around."

HP LeftHand SANs energize storage solution

Gaylor turned to TLS.NET Inc. – an Indiana-based provider of telecommunications and information technology consulting services – to help transform its business technology infrastructure. "TLS took the time to understand what our company's challenges were, and then crafted a solution that was unique to our needs," says Savage. "We were very impressed with their consultative approach."

Customer solution at a glance

Install HP LeftHand SANs in two geographically separate TLS.NET data center

Primary applications

 Storage for mission-critical applications running in a VMware virtualized environment

Primary hardware

- HP LeftHand SANs
- HP ProLiant DL380 G5 servers

Primary software

- HP SAN/iQ Software
- VMware ESX Server 3.5
- Microsoft Windows® Server 2003/2008
- CentOS Linux
- Microsoft Exchange Server 2007
- Microsoft SQL Server 2005

Why HP?

- · Long-term user of HP technology
- Storage solution complements infrastructure virtualization strategy
- Combination of cost, functionality and ease of management of HP LeftHand SANs

As part of the overall solution, Gaylor maintains two physically separated HP LeftHand SANs located at TLS.NET data centers in Indiana: Indianapolis and Columbus. The combination of the HP LeftHand SANs clustering capability, as well as Network RAID and Remote Copy give Gaylor a redundant, disaster tolerant system.

Savage explains that Gaylor's technology environment must support everything they do, including financial applications, construction industry ERP (enterprise resource planning) system, file and print, web servers and Microsoft® Exchange 2007 e-mail. "We are pretty much entirely an HP shop," says Savage. "The servers that the HP LeftHand SANs support are HP ProLiant rack-mount servers."

HP LeftHand SANs provide easy-to-deploy and easy-to-manage storage for mission-critical applications like Microsoft SQL and Microsoft Exchange, which were virtualized using VMware software. "If you're going to implement a virtualized server environment, you need to have the right storage infrastructure," says Savage. "HP LeftHand SANs provide that piece of the puzzle for us."

The thin provisioning feature of the HP SAN/ iQ Software reduces storage acquisition cost by allocating storage space only as data is actually written to a volume, thus allowing users to purchase additional storage capacity only when they actually need it. The Snapshots feature reduces administrative cost by creating point-in-time snapshots that make data backup and restore simple and fast.

Wired to meet flexible, scalable demands – now and in the future

For Gaylor, the ease of administration of the HP LeftHand SANs helps ensure that scalability is no longer an issue. "The process of acquiring another storage array and adding it to the existing HP LeftHand SAN cluster at our primary data center took minutes, literally," says Savage. "It was a very simple procedure."

This flexibility makes Gaylor more nimble in an ever-changing business environment. "Suppose we're launching a new branch in six months, and need to be able to provide the server and storage infrastructure to support it," said Savage. "Well, VMware lets me provision new virtual machines in a matter of minutes. HP lets me adjust storage on the fly to accommodate those virtual machines – while providing a layer of redundancy and business continuity. Having that kind of speed and responsiveness is key for a business like ours, which has grown from a small, local company to a nationwide operation in a relatively short time."

Concludes Savage, "At this point, I think the writing's on the wall: virtualization is the way of the future. As our business continues to grow, we are going to continue to expand our VMware and HP storage infrastructure. The interactions between those two solutions are going to be the foundation of our server and data storage infrastructure going forward."

About Gaylor, Inc.

Founded by John Gaylor in 1984, Gaylor Inc. is a full-service electrical contractor with 10 offices. The company (www.gaylor.com) has grown consistently by responding to changes in technology and the market, building experience executing large and small projects in industries from power transmission to nanotechnology, and following the motto: "Large or small, simple or complex...if it involves electricity, we're the company for you."



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