HP LeftHand SANs put to the test at Los Angeles Mission College; earn high marks





"With the combination of flexibility, ease of use and affordability, HP LeftHand SANs are tough to beat. This solution has definitely lived up to my expectations."

- Hanh Tran, IT Manager, Los Angeles Mission College

Industry: Education

Solution: HP LeftHand

SANs

Objective:

Consolidated storage solution with enhanced data protection

Approach:

HP LeftHand SANs for scalable, consolidated storage, with built-in Snapshots and data protection features

Business technology improvements:

- Consolidated data into a storage area network (SAN)
- Simplified storage management
- Easily scaled out storage solution
- Increased level of data accessibility and availability
- Improved backup and restore efficiency with Snapshots

Business outcomes:

- Scalable storage solution lets college keep up with the continuously growing demand for data storage capacity
- Cost effective storage solution is easy to deploy and scale
- Ease of management saves staff time
- Cluster architecture improves availability and disaster tolerance

More and more data in the curriculum

Los Angeles Mission College (LAMC) is a Southern California-based community college with approximately 10,000 students and 550 full-time and part-time faculty/staff members. Like many educational institutions, LAMC found that its storage needs were growing every year as they successfully facilitate accommodations for everything from student records

and staff and faculty e-mail, to scanned images of financial aid data and registration records.

LAMC's reliance on individual storage islands made it difficult to effectively manage and scale storage to meet growing needs; it also increased the complexity of backup and recovery operations. "We knew that we needed to move to some type of consolidated storage solution, but we wanted to make sure we picked the right one," says Hanh Tran, an IT manager at LAMC.

Experience is a great teacher

"I was concerned about making the right decision," Tran explains, "because I had been there before. I had a bad experience with a NetApp SAN at an earlier job. The costs were high, and the interface was not user friendly. So when I came here, I wanted to find a better solution. When I saw the HP LeftHand SANs demo, I knew this was the solution for me and the right solution for my business."

HP LeftHand SANs provide the perfect solution for LAMC, allowing the school to pool all of its data into a single SAN that they can easily manage from a central location. Explains Tran, "Our SAN had to be easy for my staff to manage – that was an absolute requirement. That's why HP LeftHand SANs were such a perfect choice. The solution is painless to deploy and easy to scale, the interface is simpler than NetApp's and – on top of that – it's very cost-effective."

With more than 8 TB (terabytes) capacity, the HP LeftHand SANs give LAMC consolidated storage for its ever-expanding data needs. In the SAN's distributed clustered architecture, each storage node contains its own controller, adding more nodes increases performance and redundancy along with storage capacity, eliminating performance bottlenecks associated with legacy SAN technologies.

"Thanks to HP LeftHand SANs," says Tran, "we've definitely seen an increase in data accessibility and

Customer solution at a glance

HP LeftHand SANs

Primary applications

- Staff and faculty e-mail
- Student records
- Document imaging

Primary hardware

- HP LeftHand SANs on HP ProLiant DL380 G4 Storage Servers and industry-standard x86 servers
- HP BladeSystem c3000 enclosure
- 8 HP ProLiant BL465c G5 server blades

Primary software

- HP SAN/iQ Software
- HP Systems Insight Manager
- Microsoft Windows® Server 2000 and 2003
- Microsoft Exchange Server 2003
- Microsoft SQL Server 2005
- ImageNow document imaging software

Why HP?

- Economy of iSCSI-based solution
- Superior data protection features of HP LeftHand SANs
- Scalability of HP LeftHand SANs
- Commitment to HP technology and services throughout the college

performance on both our LAN and WAN." For example, time required to recover lost data after an outage of an e-mail or SQL server has dropped by more than 90 percent. "Before, it would take four to six hours to recover the data. Now, with the data residing on HP LeftHand SANs, recovery takes 10 to 15 minutes."

Just as important, features built into HP SAN/iQ Software help LAMC protect data and keep it highly available. Data replication provides an additional layer of data protection by replicating data between clusters. The Snapshots feature (point-in-time copies of data in a given volume) ensures a capacity-efficient backup and recovery process. The Remote Copy feature provides space saving remote copies of data for backups and disaster recovery. "I definitely sleep much better at night now that we have HP LeftHand SANs managing our data," said Tran.

HP LeftHand SANs provide storage support for the college's critical applications, including the database behind the Microsoft® Exchange e-mail system for staff and faculty. LAMC relies on the HP LeftHand SANs to store all of its Microsoft SQL Server 2005 databases, including its student records database. The college's ImageNow document imaging system also relies on the HP LeftHand SANs. "All the student records and admissions records are in the imaging system now," says Tran. "We have no more paper!"

HP is more than just the big SAN on campus

The HP LeftHand SAN Solution fits right in at LAMC, where virtually all the technology infrastructure is based on HP products and services. LAMC relies on HP servers to support business critical applications. For instance, student record applications run on an HP BladeSystem c3000 enclosure with eight server blades, with the student records database on their HP LeftHand SANs.

"All our technology solutions are HP – from desktops, laptops and servers to printers," says Tran. "Having a single platform makes everything easier to manage. HP also provides a single source for software to

manage and monitor everything. We love HP Systems Insight Manager. The interface is user friendly. Also, since SIM is pro-active, we get an e-mail if there is something about to go wrong. We rely on it."

Earning an advanced degree in efficiency

HP LeftHand SANs deliver increased efficiency and reduced management costs for LAMC. "HP LeftHand SANs make it easy to re-configure storage," says Tran, "which saves a lot of management time when my staff needs to make changes to respond to changing demands."

Tran also emphasizes that HP LeftHand SANs make managing servers easier: "Previously, if we needed to update or replace a server with attached storage, we would have to re-build the entire server – including all the data on it. With HP LeftHand SANs, all the data is on the SAN, separate from the servers. So, we can add a new server without touching the data. The time spent to replace an old server decreased from six hours to two hours." At the same time, the HP SAN/iQ Software Thin Provisioning feature helps use storage capacity most efficiently by allocating only the amount of storage that is actually needed by the application, and only when it is needed.

"In the future, we plan to move even more of our critical administration data onto our HP LeftHand SANs," concludes Tran. "Based on the results we've experienced so far, we want to utilize the SAN as much as possible. Our next step will be to set up a cluster in another building and use the replication capability built into LeftHand SANs to replicate to a different cluster in a different building."

About Los Angeles Mission College

Located in Sylmar, California, Los Angeles Mission College (www.lamission.edu) provides accessible, affordable, high-quality learning opportunities in a culturally and intellectually supportive environment, serving the educational needs of California's San Fernando Valley. Throughout its 30-year history, community support and involvement have been among Mission College's most valued resources.



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