

### Customer Profile:



American Land Lease develops innovative, resort-style communities for active adults. The company is structured as a real estate investment trust (REIT), with over 7,500 operational home sites in more than 30 communities throughout the United States. They support 30 field locations across the country with a hardened data center and a headquarters location in Clearwater, Florida – which is right in the middle of the “hurricane alley.” American Land Lease (NYSE: ANL) is a New York Stock Exchange publicly traded company.



“The D-Link DSN-3200 iSCSI SAN is the perfect solution for a small to medium-sized company that has enterprise business continuity needs. . . It’s the first credible 1-15TB platform out there that can do this.”

- Stephen Ames, President  
Virtualization Performance

## American Land Lease and Virtualization Performance Implement Virtual Storage Solution Featuring D-Link DSN-3200 iSCSI SAN

### The Challenge

Weather, regulatory requirements and data availability needs forced American Land Lease to consider a solid backup and disaster recovery system. Although the company is not particularly large, as a publicly traded company they needed to meet Sarbanes-Oxley reporting requirements for regulators, auditors and shareholders. Brutal hurricane seasons also got them thinking about backup, disaster recovery and business continuity. Any data loss or system availability interruption could severely cripple their nationwide operations.



D-Link VAR Virtualization Performance ([www.virtualizationperformance.com](http://www.virtualizationperformance.com)) was brought in to assess their options and recommend solutions. “Loss of data due to power outages, hurricanes or worse was a major concern,” said Virtualization Performance president, Steve Ames.

Other business needs that are not related to weather also factored in. These include system performance and availability, speed, remotely delivering applications to field users and allowing users to work from anywhere. A platform that allows them to scale in the future as they grow was also a factor that contributed to their decision.

A robust backup and disaster recovery system would support those types of situations. American Land Lease understood the ramifications of not addressing the problem. “Their real challenge was determining how to solve the problem at a reasonable price, with a solution that’s appropriately suited to their needs,” said Ames.

The company could have deployed a completely identical, separate configuration of their production network at another location. They would then need a tightly managed and meticulously rehearsed backup process to ensure practical success. Another option would be to port their applications to another host natively. That would also prove incredibly difficult and time consuming.

Given unlimited resources, American Land Lease could have hired an enterprise SAN vendor. They

would have spent a fortune on professional services and unneeded features. Those types of enterprise vendors typically sell complicated solutions that require large-scale professional services that have long install times and difficult and painful integration processes. That wasn’t an option however, for a company of their size and budget.

### The Solution

Virtualization Performance suggested a simple and cost-effective solution with D-Link and VMware. They migrated American Land Lease’s servers to the data center and run them on VMware ESX and D-Link DSN-3200 SAN. This allowed them to be in a hardened data center, improve performance and easily failover to the disaster recovery site.



*VMware provides backup and failover capability for American Land Lease*

“Since the virtual machine file is portable, they can easily move it to any host,” said Ames. “That’s a capability which is really unique to virtualization.”

The solution combines American Land Lease’s standard servers with a D-Link xStack switch and DSN-3200 iSCSI SAN at their data center with another D-Link DSN-3200 iSCSI SAN at their disaster recovery site. They manage sales, accounting, email and database systems as logically separate virtual machines in the VMware ESX environment. DSN-3200 alone improves performance dramatically, while VMware provides previously unattainable backup and failover capability.

The DSN-3200 uses existing Ethernet networks, so there’s no investment in costly Fibre Channel infrastructure required. By avoiding Fibre Channel, the iSCSI SAN reduces the per-Gigabyte cost of storage

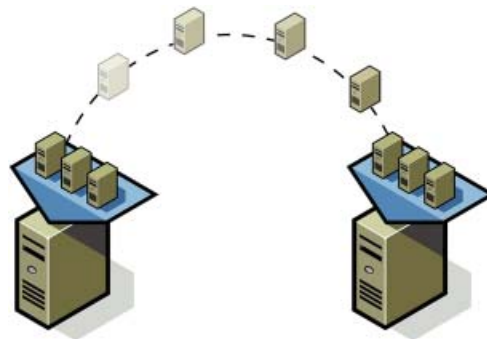
## Business Class Network Storage



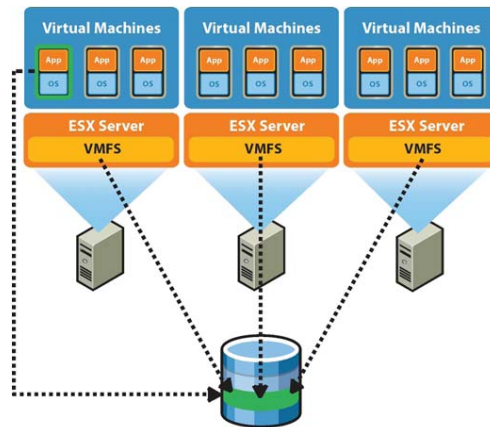
DSN-3200-10 - 8x1GbE iSCSI  
SAN Array, 15 Bays, 3U

- Integrated iSCSI System-on-a-Chip (SoC) Solution that can Handle over 80,000 I/Os per Second
- Eight 1GbE Ports
- 15TB Capacity with 1TB Hard Drives (Supports Higher Capacity Drives as They Are Introduced)
- Embedded Disk Controller Supporting RAID Levels 0, 1, 1+0, and 5

significantly. The unit's 10Gbit iSCSI System-on-a-Chip (SoC) handles over 80,000 I/Os per second and is capable of supporting 15TB raw capacity using 1TB hard drives. With the I/O controller and processing in the DSN-3200 itself, American Land Lease avoids the performance degradation of solutions that place processing demands on data center servers or remote storage array systems.



Failover



Shared Storage

"Since American Land Lease can quickly failover to the disaster recovery site without any data loss, they satisfy data security, business continuity, and regulatory requirements at once," said Ames. If the primary data center is unavailable, their entire enterprise can be up and running with the same exact systems at the disaster recovery site very quickly.

"The DSN 3200 is the perfect solution for a small to medium-sized company that has some enterprise business continuity needs," said Ames. "They can get it done at a reasonable price and still meet data availability, back-up and regulatory compliance requirements. It's the first credible platform out there that can do this. Plus, it's rather simple to set up in comparison to some of the other alternatives out there."

### Results with a Smile

The total solution met all of American Land Lease's requirements and then some. Out of the box, the DSN-3200 is twice as fast as direct attached storage. They can easily migrate their applications and systems to the disaster recovery site. The solution is simple to administer, and the users are totally satisfied.

### Looking Forward

American Land Lease is exploring Virtual Desktop Infrastructure (VDI) options with their VMware implementation. VDI offers companies all the benefits of terminal services coupled with the flexibility of PCs. "With VMware in the data center and the remote DSN 3200 it's now very easy for them to take that next step and provide virtual desktops to users," said Ames. Without this solution in place, they would have to start from scratch (at a big cost). Realistically, they couldn't even begin to contemplate a project like this without centralized storage in place.



Contact Virtualization Performance to find out how you can implement a backup and disaster recovery solution with D-Link and VMware. Visit [www.virtualizationperformance.com](http://www.virtualizationperformance.com) or call 1-866-496-4560.