

BACKUP/RECOVERY/ARCHIVING	■
CLUSTERING	■
CONSOLIDATION	■
DATABASE	■
MANAGEMENT/UTILITIES	■
MESSAGING	■
VIRTUALIZATION	■



#### CUSTOMER PROFILE

Selection.com provides employers with background checks, including education and credentials verification, as well as employment and criminal histories.

[www.selection.com](http://www.selection.com)

#### CHALLENGE

Selection.com wanted to accommodate business growth, simplify IT management, and ensure customers consistent access to information by deploying a scalable, cost-effective, and unified storage environment integrated with a virtualized server environment

#### SOLUTION

The company deployed Dell™ PowerVault™ integrated network attached storage (NAS) systems to create a mirrored storage environment with unified application and file data, and installed Dell PowerEdge™ servers to build a virtualized server environment

#### BENEFITS

The new Dell infrastructure helps the company accommodate business growth, simplify IT, and improve data protection and availability; Selection.com anticipates that the total costs of the PowerVault systems will be approximately 84 percent less than the competing systems Selection.com evaluated

# Strategic Storage

The Dell PowerVault NX1950 provides the reliable storage needed by a rapidly growing company while saving approximately 84 percent of total costs over competing systems

The growing demand by employers for information about job candidates has created a strong market for companies that conduct background checks. Selection.com is capitalizing on that demand by providing employers with essential information on candidates through character reference reports, civil records research, criminal histories, and education and employment verification.

The Selection.com IT infrastructure is an essential component to the company's operations. "We are in the business of providing potential employers with anytime access to information. Our services must be quick and reliable," says Jeff Glenn, CIO of Selection.com. "Our customers count on us to help them hire the best people. And our goal is to deliver the best turnaround times in the industry."

#### Selection.com needs a new storage architecture to support rapid growth

While the company's existing Dell/EMC CX300 storage area network (SAN) worked well when the company was small, several years of 20 percent growth compelled the IT department to explore new storage options. "We needed to upgrade our storage environment to accommodate the growth of our business," says Glenn. "At the same time, we wanted to set up a second data center for disaster recovery. But we realized that staying with a Fibre Channel-based storage system would be too costly. So we decided to reevaluate our entire approach to storage."



**“The Dell PowerVault NX1950 storage system delivers a high level of performance within our budget. It has all the functionality we need at only 16 percent of the total cost of some of the comparable Fibre Channel storage systems we considered.”**

— **Jeff Glenn**, CIO, Selection.com

The company's IT infrastructure was based primarily on Dell products, and Glenn was confident that Dell could offer the best technology and the greatest return on the company's storage investment. "We have a very successful relationship with Dell," Glenn says. "We knew that Dell would help us find the best solution."

### **Dell PowerVault NX1950 helps Selection.com save 84 percent over Fibre Channel**

The Dell sales team recommended that Glenn deploy a Dell PowerVault NX1950 integrated network attached storage (NAS) system in both its primary and secondary data centers. The PowerVault NX1950 is an easily scalable, unified storage system that helps simplify IT management and maximize the performance of servers by storing both application data and file data in a single system.

Glenn anticipates that the PowerVault NX1950 will deliver significantly lower total costs of ownership compared with competing systems. "The acquisition costs are much lower than some comparable Fibre Channel systems, especially when you factor in the support, peripheral software, hardware, and cabling required for Fibre Channel," says Glenn.

Besides a lower acquisition cost, the PowerVault NX1950 can help minimize ongoing management costs by enabling administrators to work with familiar TCP/IP networks and Ethernet components. "With iSCSI, our IT staff doesn't have to learn to deploy and manage specialized Fibre Channel equipment," says Glenn. "We project that the PowerVault NX1950 will save our IT staff 200 hours per year."

Taking into account all of those savings, Glenn projects that the NX1950 will save his company a total of approximately 84 percent over three years compared with the Fibre Channel systems his team evaluated. "The Dell PowerVault NX1950 storage system delivers a high level of performance within our budget," says Glenn. "It has all the functionality we need at only 16 percent of the total cost of some of the comparable Fibre Channel storage systems we considered."

### **Dell Deployment Services and familiar technology reduce deployment time to one day**

With help from Dell Remote Setup Assistance, an offering of Dell Deployment Services, the Selection.com IT team was able to deploy the PowerVault NX1950 at its primary site in just one day. "It might have taken

us almost a week to set up the system if we hadn't been able to work with the Dell Enterprise Expert Center," says Glenn. "Using the WebEx online conferencing system, Dell technicians walked us through all the setup steps and helped us understand the inner workings of the system, including the Microsoft Distributed File System (DFS) and the iSCSI interfaces."

The ability to use the company's existing Ethernet network also saved installation time compared with Fibre Channel storage. "Connecting servers to the PowerVault NX1950 over our existing LAN was much easier than using specialized Fibre Channel connections," says Glenn. "The Dell configuration wizard and Dell Support helped us get the system up and running quickly."

### **iSCSI technology and Windows Unified Data Storage Server simplify data replication**

The Selection.com IT team plans to install the second Dell PowerVault NX1950 storage system at a remote disaster recovery site to help protect data and enhance availability of information for its customers. "Providing consistent access to information is essential for remaining competitive," says Glenn. "By creating an off-site mirrored storage environment, we expect to significantly reduce the risk of interrupted access or data loss."

The close integration of the Dell storage system and Microsoft® software has helped the Selection.com IT staff to optimize the replication process between the two data centers. The PowerVault NX1950 system's Microsoft Windows® Unified Data Storage Server operating system enables Glenn's staff to pick the replication techniques that fits their needs. "We can use the Microsoft DFS to help protect data and improve availability of information for customers by maintaining identical files at our primary and secondary data centers," says Glenn. "In addition, the remote access capability of Windows Unified Data Storage Server gives us convenient administrative control over the replication process without having to be present at the data center."

### **The Dell PowerVault MD3000 expansion array offers an easy way to scale storage**

As part of the Dell PowerVault NX1950 storage system, the PowerVault MD3000 expansion array is capable of housing up to 15 disk drives in a single 3U rack enclosure. The PowerVault MD3000 can be scaled up to



13.5 TB by simply adding up to two additional expansion enclosures. “We currently store 4.5 TB of data on the PowerVault MD3000, but we know that we can always add capacity as needed without disrupting operations,” says Glenn. “The PowerVault MD3000 has enough space to handle our needs for several years to come.”

### **Dell PowerEdge blade servers provide the foundation for a virtualized environment**

In addition to expanding the company’s storage capacity, the IT team created a virtualized server environment to help lower server costs and enhance the flexibility of IT to respond to changing business needs. “By virtualizing our server environment, we can provide a consolidated, flexible environment to test and deploy new applications easily,” says Glenn. “We also have been able to retire a number of older, slower servers. Now we have a faster, more manageable platform, and we’ve achieved those improvements without having to expand the power and cooling capabilities for our data center.”

Glenn’s team is converting 35 physical servers to just 2 Dell PowerEdge blade server racks, each with 8 high-performance, high-density blade servers, running Microsoft Virtual Server 2005 software. Initially, the virtualized environment is hosting the company’s Web servers, test environment, and application servers, including Microsoft Exchange Server 2007 and Windows SharePoint® Server. Over time, the IT staff plans to migrate as many applications as possible to the virtualized environment.

Maintaining high application availability has become much easier with the blade architecture in a virtualized environment. “It used to take us a day to rebuild a server if there was a failure—now it takes just minutes,” says Glenn. “If we lose a blade, we just restart the application on a different blade and replace the failed blade with a spare. It takes almost

no staff time now. Blade servers and virtualization are an ideal solution for boosting availability and dramatically reducing administrative time.”

The integration of Dell systems and Microsoft software has also helped reduce the time and effort to manage the IT infrastructure. The IT team uses Microsoft Systems Center Virtual Machine Manager to help maintain that high availability of services for customers. “The Virtual Machine Manager makes it easy to move an application from one physical server to another without affecting users,” says Glenn. “By assigning the right computing resources to each application, we can maintain quick response times for our customers.”

The Dell PowerVault NX1950 unified storage systems fit right in to the virtualized server environment. “We use the PowerVault NX1950 for both traditional file shares and some higher-level application needs, such as our virtual servers,” says Glenn. “By moving our Microsoft Exchange Server onto the PowerVault NX1950 in the future we will be able to optimize server processing while letting the PowerVault NX1950 handle storage workloads. We see the PowerVault NX1950 as a great complement to virtualized server environments.”

### **The Dell infrastructure helps Selection.com simplify IT and better serve customers**

The new Dell hardware will help improve the scalability, resiliency, and flexibility of the Selection.com IT infrastructure. “The PowerVault NX1950 is a cost-effective, easily scalable storage system that will enable our business to keep pace with the demand for information about job candidates. And with a mirrored storage environment, we can help give our customers consistent access to that growing pool of information,” says Glenn. “At the same time, the virtualized server environment will help give our IT group the flexibility to quickly respond to changing business needs.”



Thanks to the assistance from Dell, our IT group has become an even more powerful strategic tool for our company's success."

— Jeff Glenn, CIO, Selection.com

The standards-based design of Dell products helps simplify the data center, reducing administrative skill requirements and improving productivity. "We have used existing skills to manage the PowerVault NX1950 storage systems and the virtualized PowerEdge blade servers," says Glenn. "As a result, we can spend more time focusing on how IT can further the company's long-term business objectives and less time on just keeping things working."

Ultimately, the cost savings and productivity improvements will help Selection.com increase its competitiveness. "We can now work on the upgrades and improvements that our customers have requested without having to increase our IT staff. So, far we've freed up half a person's time to work on those requests," says Glenn. "Thanks to the assistance from Dell, our IT group has become an even more powerful strategic tool for our company's success."

## HOW IT WORKS

### HARDWARE:

- Dell™ PowerVault™ NX1950 unified network storage system
- Dell PowerVault MD3000 expansion array
- Dell PowerEdge™ 1855 servers with Intel® Xeon® processors

### SOFTWARE:

- Microsoft® Distributed File System
- Microsoft SharePoint®
- Microsoft Systems Center Virtual Machine Manager
- Microsoft Virtual Server 2005 R2 SP1
- Microsoft Windows® Unified Data Storage Server

### SERVICES:

- Dell Deployment Services



**Microsoft**



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