

Streamlining data backup and speeding eDiscovery

Customer profile



Company	George Jon
Industry	Technology
Country	United States
Website	georgejon.com

Products

- Dell Storage PS Series
- Dell Storage SC Series
- Dell Networking switches
- Dell PowerEdge blade servers
- Dell PowerEdge FX2 server chassis
- Dell PowerEdge VRTX
- Dell PowerEdge rack servers
- Dell SonicWALL NSA Series firewalls
- Dell LiteSpeed for SQL Server
- Dell Rapid Recovery
- Dell vRanger

Technology challenge

George Jon needed to address its customers' needs for faster, more reliable data backup and indexing.

Solution

The organization started using a Dell Storage PS Series vSphere vCenter™ plug-in that enables the VMware® vSphere® Virtual Volumes™ (VVOL) management and integration framework.

George Jon is a Chicago-based organization that deploys, maintains and monitors hardware infrastructures that support software for eDiscovery — the electronic identification, collection and storage of legal information. George Jon supports infrastructures for popular eDiscovery platforms such as Relativity, LAW PreDiscovery, and Nuix, which are used by more than 400 global organizations.

One of the largest Dell Premier Partners in the United States, George Jon standardizes on Dell technologies, including Dell PowerEdge servers, the Dell PowerEdge FX2 server chassis, Dell PowerEdge VRTX, Dell Rapid Recovery backup and recovery software, and Dell Storage SC Series and PS Series arrays. George Jon also uses Dell Networking S60 switches, taking advantage of their extreme buffering capabilities of close to 2GB to enable the company's iSCSI storage arrays to scale. The company also uses Dell Networking S6000 switches to support 10GbE PS Series customer deployments.

Additionally, George Jon uses Dell vRanger software for high-speed backup and recovery of clients' VMware and physical Windows Server environments, and Dell LiteSpeed for SQL Server for high-speed SQL Server backup, compression and restore.

The company has specifically developed expertise in integrating Dell Storage with VMware® vSphere® virtualization software. "We're definitely a big Dell Storage PS Series shop," says George Nedwick, the company's owner and principal architect. "The PS Series fits very well in eDiscovery, because eDiscovery providers never know how much data they need tomorrow. They only know what they need today. The PS Series gives us the ability to scale and always be two steps ahead of our customers' storage requirements." George Jon also relies on Dell SonicWALL NSA Series firewalls

to protect its customers' environments, enable secure access and allow an easy-to-manage global firewall for all its customers.

Increasingly, George Jon has sought to respond to the challenges its customers face with large data sets. "Our customers need to support millions of small data files, each one up to 25K in size," says Nedwick. "When you have that many files, the metadata chokes most backup applications for customers with NTFS and Windows environments." Although George Jon usually addresses this problem by using Dell Rapid Recovery, there are instances where the company cannot use that solution. "Rapid Recovery works with Windows file servers, and we sometimes have customers who use other technologies," Nedwick says. In addition, many of George Jon's customers who use the kCura® Relativity® eDiscovery platform occasionally needed to perform time-consuming, full-text SQL indexing.

"The PS Series gives us the ability to scale and always be two steps ahead of our customers' storage requirements."

George Nedwick, company owner and principal architect, George Jon





Dell Storage PS



Dell Storage SC

To address these issues, the company began taking advantage of VMware vSphere Virtual Volumes™ (VVOL), a management and integration framework for SAN environments. VVOL encapsulates virtual disks and other virtual machine (VM) files and natively stores them on a storage array, eliminating the need for a file system. This allows data services and placement to occur at the individual VM level. The Dell Storage PS Series includes a vSphere Web Client plug-in, as part of a Host Integration Tools suite for VMware, which enables the VVOL feature.

Business Benefits

- **Streamlines data backups**

George Jon is using the Dell Storage PS Series plug-in and VVOL to streamline backups for customers with large data sets. “We can use the Dell Storage PS Series plug-in and VMware, along with Dell vRanger, to virtualize and easily back up customer files,” says Jon Biggs, senior infrastructure engineer, George Jon. “We can still give those customers strong backup performance even when we don’t have the luxury of using Dell Rapid Recovery for some reason.” The company also continues to utilize Rapid Recovery for continuous block-level protection of data files, along with Dell vRanger to protect non-data drives and VM configuration.

- **Speeds eDiscovery indexing with on-demand cloning**

The organization is also testing the use of on-demand VVOL cloning to enable faster indexing with eDiscovery tools for information workflow and litigation. Using VVOL rapid cloning, George Jon can temporarily deploy additional Elasticsearch client and data nodes to increase indexing speeds. “We’re planning to run a scaled-down version of the Hadoop big data framework, which has multiple data nodes and indexes stored on different shards,” Biggs says. “When those indexes run low on space, we can use the VVOL rapid cloning feature to fire up new nodes quickly and give customers more capacity instantly.”

- **Provides better visibility into virtual environments**

George Jon also has the ability to view more detailed per virtual disk metrics PS Series SAN HQ product, and the company can view VMs directly from within the PS Series SAN HQ management and reporting tool. “We can get a much better view into individual VMs using PS Series SAN HQ, which improves our ability to troubleshoot customer environments,” says Biggs. “We can easily see how each VM is performing, instead of only being able to see the data store as a whole.”

- **Enables more flexible storage and cluster design**

The company’s vSphere cluster designs are also benefiting from the reduction in iSCSI connection count. “The VVOL Protocol Endpoint feature has helped us when we had to worry about the number of iSCSI connections,” Biggs says. “For example, we had an environment with 20 VMware servers, all connected to storage volumes. And we had 20 LUNs on the storage pool, which overloaded our connection count. When using VVOL, all iSCSI connections are to the Protocol Endpoint, regardless of the number of volumes used, dramatically reducing those connections. As a result, we could scale new VMware clusters larger without having to spend time separating everything out.”

George Jon plans to continue to expand its use of VVOL alongside the Dell Storage PS Series. “Our relationship with Dell gives us the ability to create amazing, scalable solutions for our customers, and the support we get from Dell on all those products is great,” says Nedwick. “We’re looking forward to seeing how we can use our Dell solutions to help meet our customers’ challenges.”

For further information go to: Dell.com/Storage | Dell.com/CustomerStories

View the full George Jon Case Study [here](#)

