

INSURING ONLINE SALES

Safeway Insurance uses Dell EqualLogic™ PS Series storage arrays to increase I/O performance for a critical SQL Server application by 20 percent



Accidents happen, fenders get bent, and car repairs can be expensive. These are just a few of the reasons why automobile insurance remains a necessity. And with the advent of online sales, competition among auto insurance providers is more intense than ever. Safeway Insurance has succeeded in this highly competitive environment by bolstering its traditional insurance agency-based sales model with an online presence that makes doing business fast and easy for the independent agents who help guide customers to the best policies. In fact, Web-based sales have helped make Safeway Insurance the largest privately held auto insurance group in the country.

SOLUTIONS

- BACKUP/RECOVERY/ARCHIVING
- DATABASE
- VIRTUALIZATION



CUSTOMER PROFILE

COUNTRY: United States

INDUSTRY: Insurance

FOUNDED: 1959

NUMBER OF EMPLOYEES: 450

WEB ADDRESS: www.safewayinsurance.com

CHALLENGE

A storage I/O bottleneck hampered the performance of Safeway Insurance's online application for independent insurance agents, undermining sales efforts.

SOLUTION

A Dell EqualLogic PS Series storage area network (SAN) enabled Safeway to eliminate the bottleneck, add new capabilities to the online application, and reduce storage administration time.

BENEFITS

Get IT Faster

- Intuitive PS Series management interface and intelligent software reduces array deployment time to approximately 30 minutes

Run IT Better

- PS Series arrays provide up to a 20 percent increase in SQL Server® I/O performance
- Online application performance complaints shrink 99 percent with the PS Series
- New SAN reduces storage administration from five hours per week to near zero
- Flexible SAN and tiered storage help improve utilization

Grow IT Smarter

- PS Series auto-snapshot feature facilitates new remote disaster recovery site





“THE DELL EQUALLOGIC SAN GIVES US THE PERFORMANCE AND FLEXIBILITY TO KEEP UP WITH THE DEMANDS OF OUR ONLINE TOOLS AND ULTIMATELY HELP AGENTS TO INCREASE THEIR SALES.”

Michael Leather, network services manager, Safeway Insurance

The independent insurance agents who generate business for Safeway can connect to the company's Web site and get nearly instantaneous ratings for their customers. Once an independent agent decides that Safeway is the best fit for a customer, the agent can simply click an icon to upload customer information to Safeway and apply for coverage. "That information automatically populates an electronic form in our system, saving the agent valuable time," says Michael Leather, Safeway's network services manager. "Agents know they have a lot of choices for insurance, and eliminating paperwork with our online service helps to keep them coming back."

SAFEWAY TRACES APPLICATION PERFORMANCE PROBLEMS TO A STORAGE BOTTLENECK

Safeway's IT team was on high alert when the online system was deployed, knowing that thousands of agents across the company's

eight-state service area were depending on it. As traffic ramped up, the IT team began to see performance problems. "Agents complained of slow response," says Leather. "That's important in our business, because agents can simply go to another company's site where they don't have to wait. We stopped what we were doing in the IT department and started troubleshooting."

The IT team examined the network and application for signs of trouble, but ultimately discovered that the problem was a storage I/O bottleneck. The company's online application is backed up by a database cluster running Microsoft® SQL Server 2005, which the team had connected to a direct attach storage array. The array was becoming overwhelmed by the demands of the interactive and highly I/O intensive application. "As agents enter information on-screen to obtain a rating, the application validates each line they enter," explains Leather. "They don't have to submit the

HOW IT WORKS

HARDWARE

- Dell™ EqualLogic™ 7 PS Series arrays, each with SAS or SATA

SOFTWARE

- Microsoft® Exchange Server 2003
- Microsoft SQL Server™ 2005
- VMware® ESX Server

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entire request to find out whether they missed something and have to start over. That's great for our users, but each one of those validations is a separate database transaction requiring I/O.”

Leather's team evaluated several options for improving storage performance, including dividing the database storage onto separate direct attached arrays, but decided to deploy a SAN. “We knew that a virtualized SAN would give us more flexibility to grow, but we were worried about adding too much complexity,” says Leather. “We only have five people on staff to take care of the IT infrastructure, including all of the networking and storage. We couldn't take on anything that was going to become a full-time job.”

SAFEWAY CHOOSES EQUALLOGIC ISCSI SAN FOR PERFORMANCE AND EASE OF USE

One of Safeway's office equipment vendors suggested that the IT team consider looking at EqualLogic for SAN storage. “The EqualLogic representatives brought an array with them to our data center, set it up, and loaned it to us for a few weeks to try out,” says Leather. “It was ready for our performance testing in less than 30 minutes. I was impressed right from the start with how easy it was to set up and manage the PS Series—an important requirement with our limited IT staff.”

The IT team tested arrays from two other vendors, neither of which offered loaners—the team had to purchase the other vendors' products and write a contract reserving the right to return them if not satisfied. “We tested all the arrays using commercially available I/O metering software, and chose the EqualLogic PS Series,” says Leather. “It not only gave us the performance we were looking for, but it was also the simplest to use. One of the other vendors had to send a team out to our site three different times to get its system working properly.”

The PS Series iSCSI SAN was an economical choice as well. “The infrastructure was all there and ready to go for iSCSI because we already had an Ethernet LAN and switches in place,” says Leather. “If we had gone with a Fibre Channel SAN, we would have had to purchase new fiber switches and run fiber-optic cable.”

DELL EQUALLOGIC PS SERIES ARRAYS HELP SAFEWAY SCALE EASILY FOR GROWTH

As Safeway's business volume has continued to increase, Leather's team has been able to easily add more PS Series arrays to accommodate the growth. Today, the team has PS Series arrays deployed throughout the enterprise. “We are running seven arrays in three different storage groups, with a total available capacity of 13.5 TB,” says Leather. “In addition to the live SQL database environment for our Web-based applications, we have another array at a new remote disaster recovery site, and five more for the rest of the IT infrastructure.”

PS SERIES SATA ARRAYS PROVIDED UP TO A 20 PERCENT INCREASE IN I/O PERFORMANCE

Performance of Safeway's online application has improved since the IT team shifted from direct attach storage to the SATA-based PS Series SAN. “We have witnessed up to a 20 percent increase in I/O performance for our SQL Server with the PS Series,” says Leather. “That improvement has helped to speed up response time for our online application, which is vital to our business. If we have poor performance, we're not selling insurance.” Since the initial deployment, Safeway has deployed Dell EqualLogic SAS arrays to further boost performance for their critical applications.

SLOW PERFORMANCE COMPLAINTS REDUCED BY 99 PERCENT WITH PS SERIES

The increased I/O performance that Safeway has experienced with the PS Series arrays translates to a better experience for people using the Web site. “Even though we have expanded the functionality for online transactions, complaints of slow performance have dropped by 99 percent,” says Leather. “Instead of complaints, we are receiving compliments from agents who routinely log on to write new business, look up information, or make policy changes.”

NEW SAN REDUCES STORAGE ADMINISTRATION FROM FIVE HOURS PER WEEK TO NEAR ZERO

Leather's team has also noticed a drop in maintenance and administration time since installing the Dell EqualLogic SAN. “We went from an average of five hours a week to virtually nothing at all,” says Leather. “When we had direct attached storage, we spent a lot of IT personnel time responding to application performance trouble tickets that turned out to be storage-related. Now if a performance issue comes up, we know the Dell storage arrays are fine, without any question.”

BUILT-IN PS SERIES SOFTWARE REDUCES DEPLOYMENT TIME TO APPROXIMATELY 30 MINUTES

Ease of deployment also saves time for the IT staff. “Each time we introduce a new array into our SAN, it only takes about half an hour to deploy. We just unpack it, put it in the rack, and turn it on,” says Leather. “The Dell EqualLogic SAN comes with software tools that auto-discover the new array and walk you through the initialization and configuration process. Then the software automatically spreads the data across the SAN including the new unit. With features like that, we're saving IT staff time and haven't had to add any personnel for storage administration.”

TIERED STORAGE LETS SAFEWAY CUSTOMIZE SAN TO MEET BUSINESS NEEDS

The Dell EqualLogic SAN improves utilization compared to Safeway's previous, direct attach storage by load-balancing among the PS Series arrays. The Safeway IT team also uses tiered storage to make more efficient use of storage resources and optimize their storage investments for capacity or performance according to application demand.

The team has implemented a VMware® Server environment with Microsoft Exchange, file-sharing, and archiving servers connected to a group of five PS Series arrays. "We are using two storage tiers in this group, with RAID 5 and RAID 50 formats and two different drive speeds," explains Leather. "The intelligence built into the PS Series array software can distribute data into the different drive pools based on factors such as the application and frequency of use."

SIMPLIFIED MANAGEMENT ENABLES IT STAFF TO FOCUS ON STRATEGIC PROJECTS

The ease of management and time savings provided by the Dell EqualLogic PS Series arrays has enabled IT staff members to focus on more strategic tasks. For example, the staff recently established an off-site storage facility and has plans to make it the company's disaster recovery

site. The team plans to use the Auto-Replication feature in the PS Series arrays to replicate data to the remote site every five minutes. "Another new project is designed to strengthen our Web site," says Leather. "We are working toward implementing a common, unified online interface for independent agents and our internal sales support people. Spending less time managing storage and servers is letting us do more to grow our business."

Leather is confident that the Dell EqualLogic PS Series SAN will enable Safeway to continue adding new services for its customers and agents. "Unlike insurance companies that sell directly to the customer, Safeway Insurance relies primarily on independent insurance agents across the United States to recommend and sell our policies," says Leather. "We have updated that sales model for the digital age by providing agents with powerful online tools. The Dell EqualLogic SAN gives us the performance and flexibility to keep up with the demands of our online tools and ultimately help agents to increase their sales."

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