Adapting at the speed of style with HP server and storage blades

Speeding electronic orders by sixfold while offering 99.99% uptime with HP servers and storage



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Enrico Bozzetti, IT manager, Excelled
 Sheepskin & Leather

Objective

Eliminate ordering bottlenecks while boosting availability to enable growth

Approach

Create a clustered environment for Oracle Database 10g R2 using HP Converged Infrastructure technologies including ProLiant G6 server blades and HP StorageWorks storage blades in a single HP BladeSystem c3000 enclosure

IT improvements

- Sixfold faster electronic data interchange (EDI) processing
- 99.99% uptime, with 60–120 hours of planned downtime eliminated
- Saving 40 hours per month through remote server management
- 60% faster storage provisioning

Business benefits

- Eliminates electronic order bottlenecks
- Faster report generation
- 20% year-over-year data growth supported by an IT staff of two
- Near 60% projected savings on power and cooling in five years vs. rack server solution
- 15% sales increase from new product lines and increased orders from retailers



Fashion forward

Wandering the clothing aisles at a major department store can be like an adventure through your various personality traits. Do I go conservative and safe, or am I in the mood for an of-the-moment fashion statement? A good way to do both is by drifting over to the leather goods section, where the sleek and supple jackets are timelessly cool.

Though department stores do a great job of merchandising and marketing the end product, creating these works of self expression is left to experts such as Excelled Sheepskin & Leather, a New Jersey-based designer and manufacturer of leather fashions that has built itself a solid reputation in the



HP customer case study: HP ProLiant BL460c G6 server blades

HP StorageWorks storage blades

Industry: manufacturing

About Excelled Sheepskin & Leather Coat Corporation

Excelled Sheepskin & Leather Coat Corporation (www. excelled.com) is a New Jersey-based manufacturer of clothing providing house brand designs and finished products for major retailers such as Macy's, JC Penney, Nordstrom, Saks Fifth Avenue, and Kohl's. Recently, the manufacturer launched its own clothing line and e-commerce site which generates \$10 million in business annually.



business over the past 83 years. Manufacturing for Macy's, JC Penney, Chaps by Ralph Lauren, Columbia Sportswear, and other national retailers, the company regularly fills thousands of orders per season to keep store shelves stocked.

And those orders are growing. Because of the seasonal nature of leather apparel, Excelled Sheepskin decided to broaden its product line by offering cotton, wool, nylon, and PVC clothing as well. The move was a smart one, giving the manufacturer's designs year-round appeal with retailers.

But with the number of products growing and the volume of orders increasing, Excelled Sheepskin hit a brick wall with its old order-processing system last year. "We never know when a retailer is going to transmit a big order with us, so we have to be ready 24x7," explains Enrico Bozzetti, IT manager for Excelled Sheepskin & Leather. Like many manufacturers, Excelled Sheepskin receives these orders through electronic data interchange (EDI), a process that allows Bozzetti to receive not just a record of the transactions but also quantities, product UPC numbers, payments, and shipping and receiving information.

Growing pains

"When JC Penney transmits an EDI to us, they could be replenishing products or ordering a new line for 1,500 different stores," Bozzetti says. "So the system accepts these massive transactions that their computers are sending directly to our computers, and the system is actually creating all the logistics for the order in real time. For instance, 500 purchase orders will be shipped to Secaucus, NJ, and each box will have a serial number, so that when it gets scanned on arrival, the warehouse will know it's headed for the JC Penney in downtown New York City, or the Jersey shore, or wherever it's supposed to go."

Excelled Sheepskin was relying on older-generation HP servers to power its Oracle database solution. But the system was buckling under the volume of new EDI orders being brought in by the company's expanded product line.

Something had to be done last year when Bozzetti's system was taking so long to receive the EDIs that the company was getting complaints from retailers. "It was taking our system more than a half hour to process large orders, and that's really too long," Bozzetti explains. "Customers were noticing there was a bottleneck here, and we knew we needed a better way to manage these orders in a timely fashion if we were going to continue to grow."

"We were experiencing downtime whenever we needed to install updates or patches. Now, with our HP BladeSystem cluster, we've got 99.99% uptime."

— Enrico Bozzetti, IT manager, Excelled Sheepskin & Leather

A business in a BladeSystem chassis

Bozzetti knew his company needed a solution that offered scalable growth and high availability in order to take advantage of new business opportunities. After months of perusing the latest marketing materials and white papers from IBM, Dell, and HP, Bozzetti concluded an HP BladeSystem was the best way to solve his business and IT problems.

"We've relied on HP servers for years," Bozzetti says. "Six years ago, we bought DL580 servers, which were the best solution on the market for us at the time. This time around, we concluded that HP has the best solution yet again with its BladeSystem servers and storage."

To offer more responsive service to its customers and end users, Excelled Sheepskin deployed HP ProLiant BL460c G6 server blades and HP StorageWorks X1800sb and SB40c storage blades. Together in an HP BladeSystem c3000 Enclosure, they power an Oracle Database 10g R2 with the Real Application Clusters (RAC) option. The company also uses HP ProCurve GbE2c switches to power its Ethernet network.

By consolidating onto HP server blades inside a power-managed BladeSystem c3000 Enclosure instead of pursuing a clustered environment on a standard rack server architecture, Excelled Sheepskin expects to save nearly 60% over five years on power and cooling costs.¹

99.99% uptime

Oracle RAC recognizes the servers and storage present on the network and performs load balancing and data mirroring for high availability, giving Bozzetti and team the ability to be more efficient and responsive. "Now we have two instances of the same system, so when a customer sends us a huge EDI order, Oracle RAC determines the processing needs of that order and will route new requests to another machine," Bozzetti explains.

The solution is boosting availability during high-traffic periods while giving Bozzetti the flexibility to perform maintenance without bringing the system down. "Before, we were experiencing downtime whenever we needed to install Microsoft® Windows® updates or Oracle patches, and we'd need to take the system down for four to five hours at night or on weekends," Bozzetti says. "If it was something urgent, we'd have to inconvenience our users and customers and stop the whole company, which happened three to four times a year, at a cost of \$6,000 to \$10,000 if the outage was during the busy September through February season."

Now, with the ability to perform maintenance on one node while traffic is routed to different machines within a cluster, Bozzetti and team can keep their environment up to date without sacrificing performance. "With our HP BladeSystem cluster, we've got 99.99% uptime," Bozzetti explains.

Sixfold faster EDI transactions

With the ability to run its Oracle database in a clustered environment, Excelled Sheepskin now has the bandwidth to process massive orders without placing undue strain on the system. "Before, it could take up to a half hour to process a large EDI," Bozzetti says. "Now with a clustered Oracle environment on our HP BL460c server blades, those orders are processed sixfold faster in under five minutes."

The exponential improvement in speed means Excelled Sheepskin & Leather can grow as fast as the popularity of its products allows. And with HP Integrated Lights-Out (iLO) management software, Bozzetti and team have visibility into the health of their system and the ability to perform diagnostics and reboots, all from a remote console.

"It's big for us to be able to manage our systems remotely, because we're based out of New Jersey and the data center is in Kewanee, Illinois, about three hours outside Chicago," Bozzetti explains. "It's not the easiest place to get to because we have to fly into O'Hare and we drive three hours to this site. And now we no longer have to visit the site to manage our servers."

It's helping Bozzetti and team reclaim 40 hours per month, which they can now use to keep pace with increased orders from Excelled Sheepskin's growing product lines.

Saving on storage while supporting 20% annual data growth

By deploying HP StorageWorks storage blades in the HP BladeSystem c3000 Enclosure, Bozzetti created an iSCSI SAN to provide a consolidated solution scalable enough to accommodate Excelled Sheepskin & Leather's average data growth of 20% each year. "The HP StorageWorks storage blades save us \$8,000 to \$10,000 yearly over the cost of direct attached storage," says Bozzetti.

The HP StorageWorks X1800sb network storage blades and the SB40c storage blades—which can house up to six SAS or SATA hard drives—offer data mirroring in the Oracle RAC environment, using Oracle's automatic storage management. "If I have to do maintenance on the SAN, I can take one of the drives down, and Oracle knows to take the data from the other drive," Bozzetti explains. "When they are both up, Oracle is mirroring data between them. We have full data redundancy inside the blade chassis."

And provisioning new storage is as easy as adding new blades to the chassis. "We just added six 300-gigabyte drives on the SAN by dropping them onto the SB40c inside the blade chassis," Bozzetti says. "And if we run out of room in our current blade

Solution at a glance

Hardware

- HP ProLiant BL460c G6 server blades
- HP BladeSystem c3000 Enclosure
- HP StorageWorks X1800sb Network Storage Blades
- HP StorageWorks SB40c Storage Blades
- HP ProCurve switches

Software

- HP Integrated Lights-Out (iLO)
- Oracle Database 10g R2 with Real Application Clusters (RAC) option
- A2000 ERP system

Operating system

• Oracle Enterprise Linux 5.5

chassis, we can expand to another one. We probably save between 8 and 10 hours for each expansion of storage with the new solution. Provisioning new storage is 60% faster than it was."

It is a situation Excelled Sheepskin & Leather may find itself in soon if things keep going their way. The company recently launched an e-commerce website that already brings in \$10 million in revenues annually, and a new line of clothing called Rogue Sportswear, which has found favor with Grammy Award-winning hip hop artists The Black Eyed Peas.

"We've been all over the news—we've really lucked out that the Hollywood types have started wearing our Rogue line," Bozzetti says. "We're growing fast, so we need to know we're going to be going with the best technology. We've got a great track record with HP, from their products to their support."

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